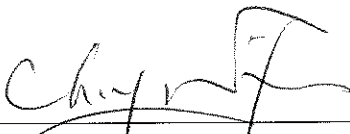


Build King (Zens) Engineering Ltd.

**Contract No. DC/2009/20
HATS Stage 2A – Demolition of
Chemically Enhanced Primary
Treatment Tanks and Associated
Facilities at Cyberport Sewage
Treatment Works**

**Monthly Environmental
Monitoring and Audit Report
February 2017**

(Version 1.0)

Certified By	 _____ (Environmental Team Leader)
--------------	--

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties

CINOTECH CONSULTANTS LTD

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CE/Harbour Area Treatment Scheme
Drainage Services Department
Sewage Services Branch
Harbour Area Treatment Scheme Division
5/F, Western Magistracy
2A Pokfulam Road, Hong Kong

Attn: Mr. Danny Tang

**Agreement No. CE 8/2009(EP) Harbour Area Treatment Scheme Stage 2A
Independent Environmental Checker for Construction Phase – Investigation**

Our Reference
GCB/AFK/DC/bw/
T261332/22.01/L-1169

**Contract No. DC/2009/20 – Demolition of Chemically Enhanced Primary
Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment
Works**

20/F AIA Kowloon Tower
Landmark East
100 How Ming Street
Kwun Tong
Kowloon
Hong Kong

Condition 4.4 – Monthly EM&A Report for February 2017 (no. 6) Version 1.0

9 March 2017

By Post

T +852 2828 5757
F +852 2827 1823
mottmac.hk

Dear Sir,

I refer to the captioned Monthly EM&A Report for February 2017 (version 1.0) submitted by ETL on 9 March 2017 via email. In accordance with Condition 4.4 of Environmental Permit No. EP-322/2008/G, I hereby verify the captioned Monthly EM&A Report.

Yours faithfully
for MOTT MACDONALD HONG KONG LIMITED



Dr. Anne F Kerr
Independent Environmental Checker
T +852 2828 5757
anne.kerr@mottmac.com

c.c.
Ove Arup & Partners HK Ltd.
Build King (Zens) Engineering Limited
Cinotech Consultants Ltd.

Mr. Ted Y F Tang
Mr. Alex Ng
Dr Priscilla Choy

Fax: 2370 4377
By email
By email

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ABBREVIATION AND ACRONYM

AL Levels	Action and Limit Levels
DSD	Drainage Services Department
E / ER	Engineer/Engineer's Representative
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring and Audit
EMIS	Environmental Mitigation Implementation Schedule
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
HATS 2A	Harbour Area Treatment Scheme Stage 2A
HVS	High Volume Sampler
IEC	Independent Environmental Checker
RE	Resident Engineer
RH	Relative Humidity
QA/QC	Quality Assurance / Quality Control
SLM	Sound Level Meter
WMP	Waste Management Plan

EXECUTIVE SUMMARY**Introduction**

1. This is the 6th Monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for DSD Contract No. DC/2009/20 “HATS Stage 2A – Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works” (The Project) which documents the key information of EM&A of Contract No. DC/2009/20 and environmental monitoring results from Contract DC/2009/24 HATS Stage 2A with same Environmental Permit (Permit No. EP-322/2008/G) for February 2017.
2. The site activities undertaken for in the reporting month included:
 - Backfilling works of wet well, Demolition of base slab of sludge dewatering building, Backfilling works of sludge holding tank, Demolition of wall of sludge holding tank.

Environmental Monitoring Works

3. The environmental monitoring works of the Project was conducted by the ET for the Contract: DC/2009/24 under HATS 2A with same Environmental Permit and in accordance with the EM&A Manual. The monitoring results were checked and reviewed. Site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
4. Summary of the non-compliance of the reporting month is tabulated in **Table I**.

Table I Summary Table for Non-compliance Recorded in the Reporting Month

Monitoring Station	Parameter	No. of Exceedance		No. of Exceedance Due to the Project		Action Taken
		Action Level	Limit Level	Action Level	Limit Level	
CM_CB1a	1-hr TSP	0	0	0	0	N/A
	24-hr TSP	0	0	0	0	N/A
M6a	Noise (Day Time)	0	0	0	0	N/A

1-hour TSP Monitoring

5. All 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

24-hour TSP Monitoring

6. The 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Construction Noise

7. All construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Environmental Licenses and Permits

8. Licenses/Permits granted to the Project include the Environmental Permit (EP), Water Discharge License and Registered as a Chemical Waste Producer for Cyberport PTW site.

Environmental Mitigation Implementation Schedule

9. According to the EIA Report Section 3.74, 4.56, 6.384, 9.154 and 13.44, air quality, noise, water quality, waste management and landscape and visual would be the key environmental issues and mitigation measures shall be implemented during the construction phase. Details of the implementation of mitigation measures are provided in the **Appendix F**.

Key Information in the Reporting Month

10. Summary of key information in the reporting month is tabulated in **Table II**.

Table II Summary Table for Key Information in the Reporting Month

Event	Event Details		Action Taken	Status	Remark
	Number	Nature			
Complaint received	0	---	N/A	N/A	---
Status of submissions under EP	1	Environmental Monitoring and Audit Monthly Report – January 2017	Submitted to EPD on 9 February 2017	No comment	---
Notifications of any summons & prosecutions received	0	---	N/A	N/A	---

Summary of Complaints and Prosecutions

11. No environmentally related summons, prosecutions or complaints were received for the Project in the reporting month.
12. There was no environmental prosecution or notification of summons received since the Project commencement. The Complaint Log is presented in **Appendix G**.

Future Key Issues:

13. Major site activities for the coming two months include:
- Backfilling works of sludge holding tank, Backfilling works of CEPT tank, Backfilling works of sludge dewatering building, Construction of Manhole Type I and installation of

DN700 pipe, Construction of U-channels and catch pit.

14. The environmental concerns in coming months are mainly on chemicals storage, surface run off, spillage of wastewater during rainstorm and dust generated from the construction works.

1. INTRODUCTION

Background

- 1.1 The Project ‘HATS Stage 2A – Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works’ with Contract No: DC/2009/20 mainly comprises the following major works:
- The construction of intercept chamber and flume channel and decommissioning of existing CEPT tanks at Cyberport Sewage Treatment Works.
- 1.2 The site area of the Project is located within the Cyberport Preliminary Treatment Works (PTW) site. The general location plan of the Project is shown in **Figure 1**.
- 1.3 The Project is under Harbour Area Treatment Scheme (HATS) Stage 2A and is a designated project (Register No. : AEIAR-121/2008). The updated environmental permit (Permit No. EP-322/2008/G) was issued on 9th May 2014 to the Drainage Services Department (hereinafter called DSD) as the Permit Holder.
- 1.4 Build King (Zens) Engineering Ltd (hereafter called Build King) was commissioned by the DSD to undertake the construction of the Contract No. DC/2009/20 “Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works”.
- 1.5 Cinotech Consultants Limited was commissioned by Build King to undertake the Environmental Monitoring and Audit (EM&A) works for the project and was appointed as the Environmental Team (ET) of the Project under Condition 2.1 of the EP.
- 1.6 The construction works were commenced on 12th September 2016.
- 1.7 The construction phase of EM&A programme of the Project commenced in September 2016.
- 1.8 This is the 6th monthly EM&A report summarizing the EM&A works conducted for the Project in February 2017.

Project Organizations

- 1.9 The contacts of the Project are shown in **Table 1.1** and the organization chart of ET for Contract is shown in **Figure 2**.

Table 1.1 Key Project Contacts

Party	Role	Name	Position	Phone No.
Drainage Services Department	Project Proponent	Mr. Vincent Y.K. Wong	Senior Engineer 2	2159 3406
Ove Arup & Partners Hong Kong Ltd	Engineer’s Representative	Mr. Ted Tang	Principal Resident Engineer	2370 4311
	Coordinator	Ms. Natalie Kwok	Resident Engineer	6794 8844

Party	Role	Name	Position	Phone No.
Cinotech	Environmental Team	Dr. Priscilla Choy	ET Leader	2151 2089
		Ms. Janet Wai	Project Coordinator & Audit Team Leader	2157 3879
Mott MacDonald	Independent Environmental Checker	Dr. Anne Kerr	Independent Environmental Checker	2828 5757
Build King (Zens) Engineering Ltd.	Contractor	Mr. Alex Ng	Site Agent	9811 9079
		Mr. K.M. Cheung	Environmental Officer	9200 3015

Construction Programme

1.10 The site activities undertaken in the reporting month included:

- Backfilling works of wet well, Demolition of base slab of sludge dewatering building, Backfilling works of sludge holding tank, Demolition of wall of sludge holding tank.

Summary of EM&A Requirements

1.11 The EM&A programme requires construction phase monitoring for air quality and construction noise, landscape and visual and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event Action Plans;
- Environmental mitigation measures, as recommended in the project EIA study final report; and
- Environmental requirements in contract documents.

1.12 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in **Section 4** of this report.

1.13 This report presents the monitoring results, observations, locations, equipment, period, for required monitoring parameter namely dust, noise levels, and audit works conducted for the Project in February 2017. For the methodology and QA/QC procedures of the monitoring parameters, please refer to the monthly report for the Contract DC/2009/24.

2. AIR QUALITY**Monitoring Requirements**

- 2.1 1-hour and 24-hour TSP monitoring were conducted to monitor the air quality. **Appendix A** shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Locations

- 2.2 One designated monitoring station, CM_CB1a, was selected for impact dust monitoring for the Project. **Table 2.1** describes the air quality monitoring locations and the responsible ETs who are carrying out the impact air quality monitoring. The monitoring locations which are also depicted in **Figure 1**.

Table 2.1 Locations for Air Quality Monitoring

Monitoring Station	Monitored by	Location of Measurement
CM_CB1a ⁽¹⁾	DC/2009/24	The Arcade, Cyberport

Remarks:

1: Refer to the monthly report of DC/2007/24, revision to the original monitoring location in EM&A Manual was made and was verified by IEC on 19 November 2009 and subsequently approved by EPD on 27 November 2009.

Monitoring Equipment

- 2.3 The details of the equipment used in the impact air monitoring programme could be referred to Section 2.3 of the monthly report of Contract No. DC/2009/24.

Monitoring Parameters, Frequency and Duration

- 2.4 **Table 2.2** summarizes the monitoring parameters and frequencies of impact dust monitoring for the whole construction period. The air quality monitoring schedules could be found in Appendix C in the monthly report for the Contract DC/2009/24.

Table 2.2 Impact Dust Monitoring Parameters, Frequency and Duration

Monitoring Station	Parameter	Period	Frequency
All monitoring locations	1-hour TSP	0700-1900 hrs	3 times/ every 6 days
	24-hour TSP	0000-2400 hrs	once in every 6 days

Monitoring Methodology and QA/QC Procedure

- 2.5 The monitoring methodology and QA/QC procedures are presented in the Section 2.5 – 2.22 of monthly report for Contract DC/2009/24.

Results and Observations

- 2.6 **Table 2.3** summarizes the monitoring results at CM_CB1a in the reporting month.

Table 2.3 Summary of 1-hour and 24-hour TSP Monitoring Result in Reporting

Month

Air Quality Monitoring Station	Average $\mu\text{g}/\text{m}^3$	Range $\mu\text{g}/\text{m}^3$	Action Level $\mu\text{g}/\text{m}^3$	Limit Level $\mu\text{g}/\text{m}^3$
1 hour TSP				
CM_CB1a	68	22-198	280	500
24 hours TSP				
CM_CB1a	91	75-102	178	260

- 2.7 The details of exceedances in the reporting month are presented in the Section 2.25 – 2.26 of the monthly report for DC/2009/24.
- 2.8 The detailed monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results could be referred to Appendix E of monthly report of Contract DC/2009/24.
- 2.9 All 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. Summary of exceedance is presented in **Appendix B**.
- 2.10 All 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. Summary of exceedance is presented in **Appendix B**.
- 2.11 The identified dust sources at the monitoring stations were mainly from sea traffic and road traffic.

3 NOISE**Monitoring Requirements**

- 3.1 One noise monitoring station, namely M6a was designated in the EM&A Manual for impact monitoring. **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

- 3.2 Noise monitoring was conducted at the designated monitoring station as listed in **Table 3.1**.

Table 3.1 Location of Noise Monitoring Stations

Monitoring Station	Monitored By	Location of Measurement
M6a ⁽¹⁾ (Cyberport PTW)	DC/2009/24	Aegean Terrace

Remark 1: Refer to the monthly report of DC/2007/24, revision to the original monitoring location in EM&A Manual was made and was verified by IEC on 19 November 2009 and subsequently approved by EPD on 27 November 2009.

Monitoring Equipment

- 3.3 The details of the equipment used in the impact noise monitoring programme could be referred to Section 3.4 of the monthly report of Contract No. DC/2009/24.

Monitoring Parameters, Frequency and Duration

- 3.4 **Table 3.2** summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedules could be found in Appendix C in the monthly report for the Contract DC/2009/24.
- 3.5 As advised by the Contractor, no construction work under Contract DC/2009/20 was conducted during the restricted hours in reporting month.

Table 3.2 Noise Monitoring Parameters, Frequency and Duration

Monitoring Stations	Parameter	Period	Frequency
M6a	$L_{eq}(30 \text{ min.})$ dB(A)	0700-1900 hrs. on normal weekdays	Once per week
	$L_{eq}(5 \text{ min.})$ dB(A)	During restricted hours	Weekly monitoring to be conducted during the construction works

Monitoring Methodology and QA/QC Procedures

- 3.6 The monitoring methodology and QA/QC procedure could be referring to the monthly reports for Contract DC/2009/24.

Results and Observations

- 3.7 **Table 3.3** summarizes the monitoring results at M6a in reporting month.

Table 3.3 Summary the Noise Monitoring Results in Reporting Month

For the time period 0700-1900 hrs. on weekdays		
Monitoring Station	Range, dB(A) L _{eq} (30 min.)	Limit Level, dB(A) L _{eq} (30 min.)
M6a	52-65 ⁽¹⁾	75.0

Remark: (1) Free-field measurement, +3dB correction.

- 3.8 The construction noise monitoring at the designated location was conducted by the ET of Contract: DC/2009/24 as scheduled in the reporting month. The monitoring results and graphical presentation are provided in Appendix F of the monthly report for Contract DC/2009/24.
- 3.9 No Action/Limit Level exceedance was recorded. Summary of exceedance is presented in **Appendix B**.
- 3.10 The major noise sources identified at the designated noise monitoring stations were from road traffic noise and sea traffic.

4 ENVIRONMENTAL AUDIT**Site Audits**

- 4.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 4.2 Environmental site audits were conducted on 3, 10, 17 and 24 February 2017. No non-compliance was observed during the site audits.
- 4.3 Site inspections were undertaken to ensure and check that the implementation and maintenance of mitigation measures for Air Quality, Noise, Water Quality, Waste Management, Landscape and Visual are being properly carried out in the reporting month in accordance to section 14.1 of the EM&A Manual. No non-compliance was observed during the site inspections.
- 4.4 The summaries of site audits are attached in **Appendix C**.

Review of Environmental Monitoring Procedures

- 4.5 The monitoring works conducted by the monitoring team of Contract DC/2009/24. The monitoring procedures were reviewed by its ETs.

Status of Environmental Licensing and Permitting

- 4.6 All permits/licenses obtained for the Contract DC/2009/20 are summarized in **Table 4.1**.

Table 4.1 Summary of Environmental Licensing and Permit Status for Contract DC/2009/20

Permit Number	Valid Period		Details	Status
	From	To		
Water Discharge License				
WT000261 44-2016	N/A	30/11/2021	Location: Cyberport PTW	Valid
Notification of Works Under APCO				
N/A	N/A	N/A	N/A	N/A
Registered Chemical Waste Producer				
5292-171- B2497-01	11/10/2016	N/A	Location: Cyberport PTW	Valid

Status of Waste Management

- 4.7 The amount of wastes generated by the activities of the Project in the reporting month is shown in **Appendix D**.

Implementation Status of Environmental Mitigation Measures

- 4.8 Details of the implementation of mitigation measures are provided in the **Appendix F**.

- 4.9 During the weekly environmental site inspections in the reporting period, no non-conformance was identified. The observations and recommendations for the Projects are summarized in **Table 4.2**.

Table 4.2 Observations and Recommendations of Site Audit

Parameters	Ref. Number	Observations	Follow Up Action
Water Quality	--	--	--
Air Quality	--	--	--
Waste/ Chemical Management	--	--	--
Noise	--	--	--
Landscape and Visual	--	--	--
Permit/ Licenses	--	--	--

Implementation Status of Event Action Plans

- 4.10 The Event Action Plans for air quality and noise are presented in **Appendix E**.

1-hr TSP

- 4.11 No Action/Limit Level exceedance was recorded.

24-hr TSP

- 4.12 No Action/Limit Level exceedance was recorded.

Construction Noise

- 4.13 No Action/Limit Level exceedance was recorded.

Landscape and Visual

- 4.14 No non-compliance was recorded.

Summary of Complaints and Prosecutions

- 4.15 No environmentally related summons, prosecutions or complaints were received for the Project in the reporting month.
- 4.16 There was no environmental prosecution or notification of summons since the Project commencement. The Complaint Log is presented in **Appendix G**.

5. FUTURE KEY ISSUES**Key Issues for the Coming Month**

5.1 Key environmental issues in the coming month include:

- Generation of dust from stockpiles of demolition materials, vehicle movement, loading and unloading dusty materials on-site;
- Noise nuisance from operation of equipment and machinery on-site;
- Provision well maintenance on the storage facilities of chemicals/fuel and chemical waste/waste oil on-site;
- Maintenance of de-silting facilities and drainage system such as U-channels;
- Formation of ponding water in site due to rain;
- Drainage system should be well designed and maintained to prevent flooding and silty water getting into the public area during and after rainstorm;
- Mosquito breeding due to the ponding water and stagnant water around the site areas;
- Silty surface runoff generated from the site area; and
- Silt and dust getting into the public area by the leaving site vehicles at the site exits without adequate wheel washing facilities.

Monitoring Schedule for the Next Month

5.2 The tentative environmental monitoring schedules for the next month could be found in the Appendix C of the monthly report of Contract DC/2009/24.

Construction Program for the Next Month

5.3 The tentative construction program is provided in **Appendix H**.

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 6.1 Environmental monitoring and audit works were performed in the reporting month and all monitoring results were checked and reviewed.

1-hour TSP Monitoring

- 6.2 All 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

24-hour TSP Monitoring

- 6.3 All 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Construction Noise Monitoring

- 6.4 All construction noise monitoring was conducted as scheduled in the reporting month. One Action Level exceedance was recorded.

Environmental Audit

- 6.5 Environmental site audits were conducted as weekly basis in the reporting month. No non-compliance was recorded.

Complaint and Prosecution

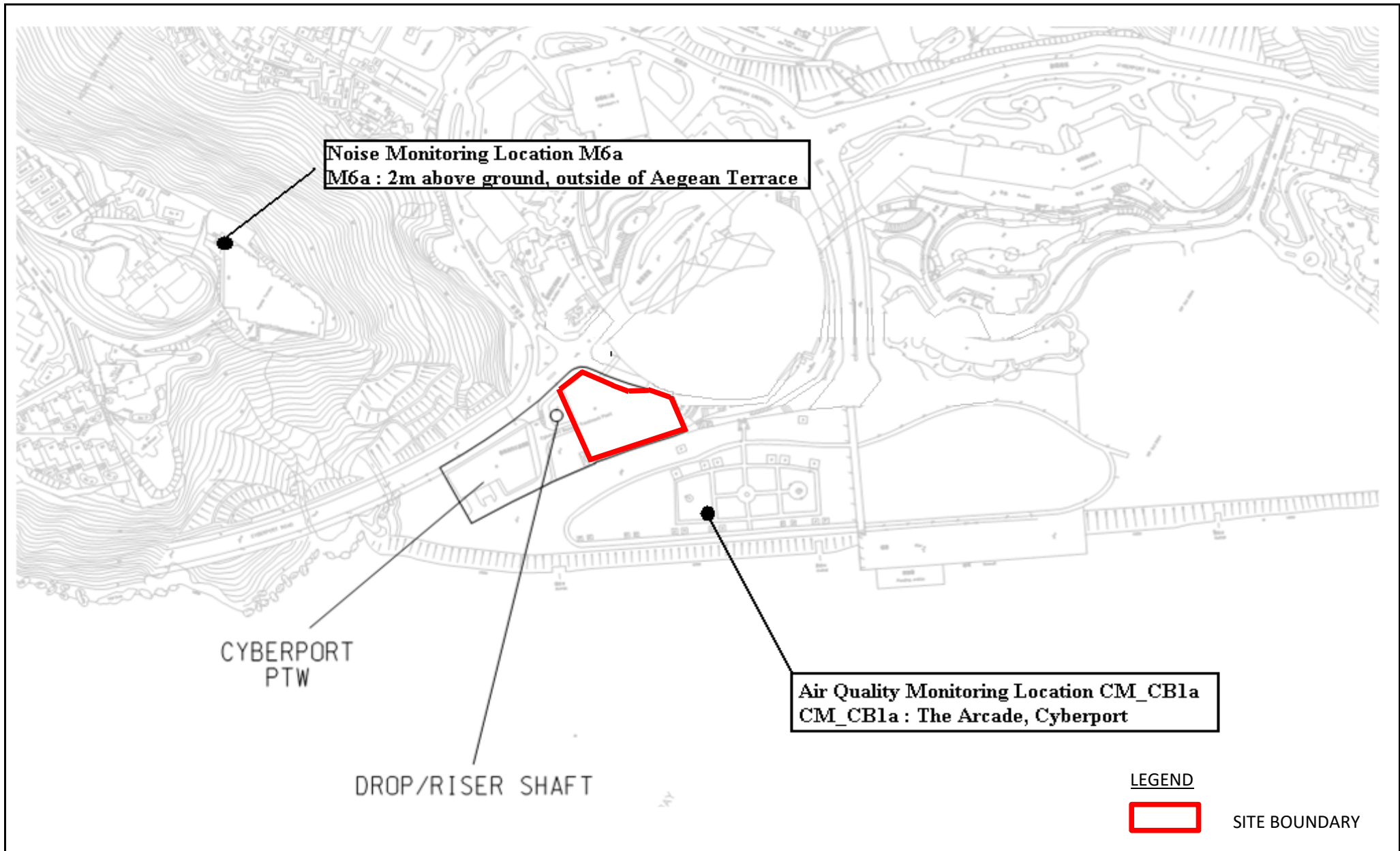
- 6.6 No environmentally related summons, prosecutions or complaints were received in the reporting month.

Recommendations

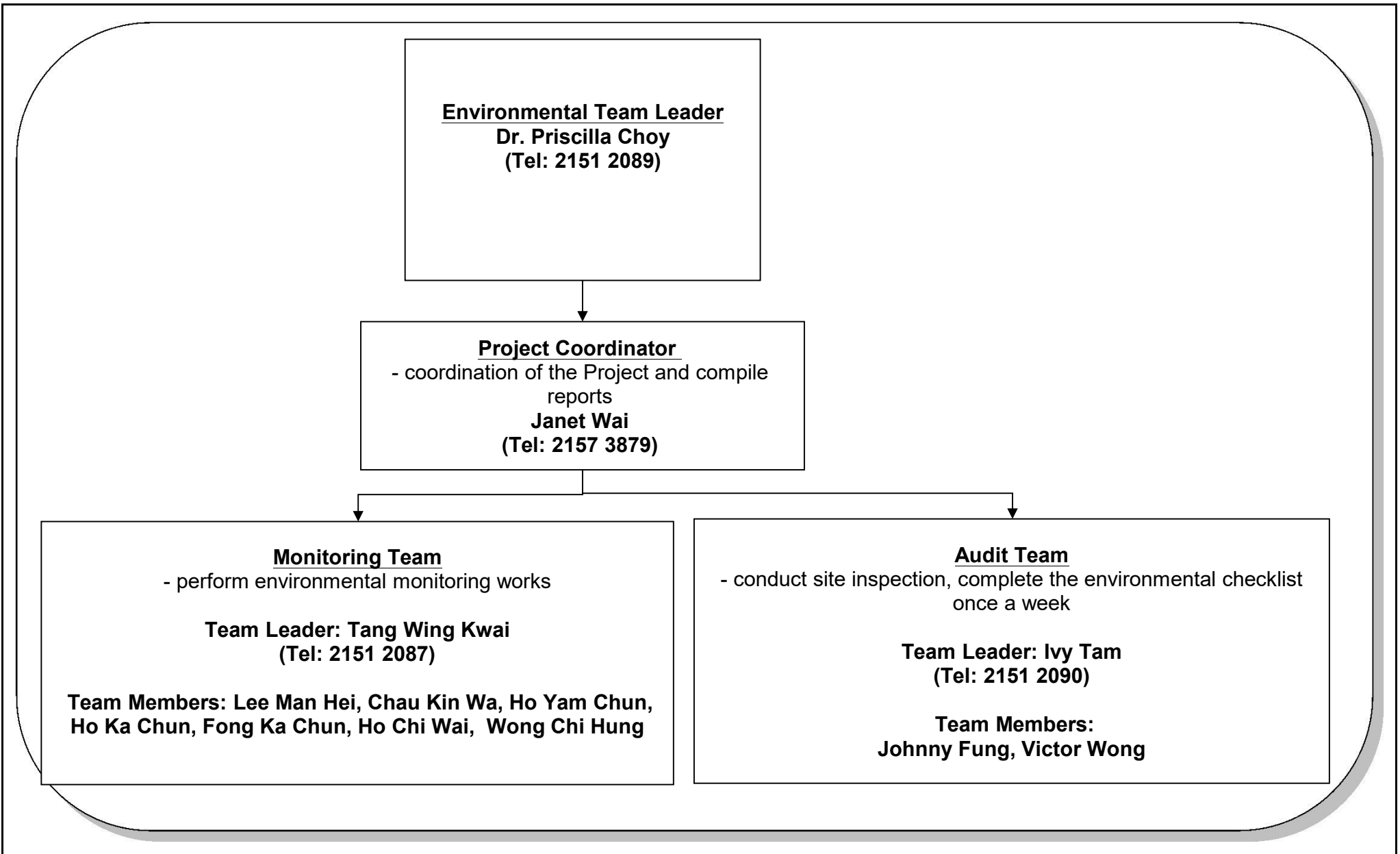
- 6.7 According to the environmental audit performed in the reporting month, the following recommendations were made:

N/A.

FIGURES



Title	Contract No: DC/2009/20	Scale	Project No.	CINOTECH
	HATS 2A - Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works	N.T.S	MA16041	
	General Location Plan of Cyberport PTW and Locations of Air Quality and Noise Monitoring Stations	Date	Figure	
		09/2016	1	



Title	Contract No. DC/2009/20 HATS Stage 2A – Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works ET's Organization Chart	Scale	N.T.S	Project No.	MA16041	CINOTECH
		Date	Sep-16	Figure	2	

**APPENDIX A
ACTION AND LIMIT LEVELS FOR AIR
QUALITY AND NOISE**

Appendix A Action and Limit Levels**Table A-1 Action and Limit Levels for 1-Hour TSP and 24-Hour TSP**

Monitoring Stations	Action Level ($\mu\text{g}/\text{m}^3$)		Limit Level ($\mu\text{g}/\text{m}^3$)	
	1-hour	24-hour	1-hour	24-hour
CM CB1a	280	178	500	260

Table A-2 Action and Limit Level for Construction Noise

Monitoring Stations	Time Period	Action Level	Limit Level in dB(A)
M6a	0700-1900 hours on normal weekdays	When one documented complaint is received	75 ⁽¹⁾

Remark: 1: 70dB(A) and 65 dB(A) for schools during normal teaching periods and school examination periods, respectively.

APPENDIX B
SUMMARY OF EXCEEDANCE

APPENDIX B – SUMMARY OF EXCEEDANCE

Reporting Month: February 2017

- a) Exceedance Report for 1-hr TSP (0)**
- b) Exceedance Report for 24-hr TSP (0)**
- c) Exceedance Report for Construction Noise on normal week days (0)**

**APPENDIX C
SITE AUDIT SUMMARY**

Contract No: DC/2009/20

HATS 2A - Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works

Record Summary of Environmental Site Inspection

Inspection Information

Checklist Reference Number	170203
Date	3 February 2017 (Friday)
Time	09:30 – 09:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>Part A - Water Quality</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Part B – Landscape and Visual</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Part C - Air Quality</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Part D – Noise</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Part E – Waste / Chemical Management</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Part F - Permit / Licenses</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Others</p> <ul style="list-style-type: none">• Follow-up on previous audit sessions: On previous audit session (Ref. No. 170125), all environmental deficiencies were improved by the Contractor. <p>Remark:</p> <ul style="list-style-type: none">• N/A	

	Name	Signature	Date
Recorded by	Janet Wai		3 February 2017
Checked by	Dr. Priscilla Choy		3 February 2017

Contract No: DC/2009/20

HATS 2A - Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works

Record Summary of Environmental Site Inspection

Inspection Information

Checklist Reference Number	170210
Date	10 February 2017 (Friday)
Time	09:15 – 09:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>Part A - Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Part B – Landscape and Visual</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Part C - Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Part D – Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Part E – Waste / Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Part F - Permit / Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Others</p> <ul style="list-style-type: none"> Follow-up on previous audit sessions: On previous audit session (Ref. No. 170203), all environmental deficiencies were improved by the Contractor. <p>Remark:</p> <ul style="list-style-type: none"> N/A 	

	Name	Signature	Date
Recorded by	Janet Wai		10 February 2017
Checked by	Dr. Priscilla Choy		10 February 2017

Contract No: DC/2009/20

HATS 2A - Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works

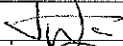

Record Summary of Environmental Site Inspection

Inspection Information

Checklist Reference Number	170217
Date	17 February 2017 (Friday)
Time	14:10 – 14:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>Part A - Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Part B – Landscape and Visual</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Part C - Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Part D – Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Part E – Waste / Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Part F - Permit / Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during the site inspection. <p>Others</p> <ul style="list-style-type: none"> Follow-up on previous audit sessions: On previous audit session (Ref. No. 170210), all environmental deficiencies were improved by the Contractor. <p>Remark:</p> <ul style="list-style-type: none"> N/A 	

	Name	Signature	Date
Recorded by	Janet Wai		17 February 2017
Checked by	Dr. Priscilla Choy		17 February 2017

Contract No: DC/2009/20

HATS 2A - Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works

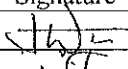

Record Summary of Environmental Site Inspection

Inspection Information

Checklist Reference Number	170224
Date	24 February 2017 (Friday)
Time	09:15 – 09:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>Part A - Water Quality</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Part B – Landscape and Visual</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Part C - Air Quality</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Part D – Noise</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Part E – Waste / Chemical Management</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Part F - Permit / Licenses</p> <ul style="list-style-type: none">• No environmental deficiency was identified during the site inspection. <p>Others</p> <ul style="list-style-type: none">• Follow-up on previous audit sessions: On previous audit session (Ref. No. 170217), all environmental deficiencies were improved by the Contractor. <p>Remark:</p> <ul style="list-style-type: none">• N/A	

	Name	Signature	Date
Recorded by	Janet Wai		24 February 2017
Checked by	Dr. Priscilla Choy		24 February 2017

**APPENDIX D
SUMMARY OF AMOUNT OF WASTE
GENERATED**

Name of Department: ~~ArchSD/CEDD/DSD/EMSD/HyD/WSD~~

Contract No.: DC/2009/20

Monthly Summary Waste Flow Table for 2016 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000ton)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
Jan											
Feb											
Mar											
Apr											
May											
June											
Sub-total											
July											
Aug											
Sept	0	0	0	0	0	0	25	0	0	0	0
Oct	0	0	0	0	0	0	40.1	0.2	0	0	0
Nov	0	0	0	0	0	0	163.69	0	0.2	0	0
Dec	0	0	1.0	0	0.104	0.06	129.27	0	0	0	0
Total	0	0	1.0	0	0.104	0.06	358.06	0.2	0.2	0	0

Name of Department: ~~ArchSD/CEDD/DSD/EMSD/HyD/WSD~~

Contract No.: DC/2009/20

Monthly Summary Waste Flow Table for 2017 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000ton)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
Jan	0	0	0.4	0	0	0	0	0	0	0	10.31
Feb	0	0	0.55	0	0.135	0	47.55	0	0	0	15.03
Mar											
Apr											
May											
June											
Sub-total											
July											
Aug											
Sept											
Oct											
Nov											
Dec											
Total	0	0	0.95	0	0.135	0	47.55	0.2	0.2	0	25.34

Forecast of Total Quantities of C&D Materials to be Generated from the Contract*										
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000ton)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
0	0	2.0	0	0.39	0.06	466.11	0.2	0.2	0	52.62

- Notes:
- (1) The performance targets are given in PS Clause 25.41 (14).
 - (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 - (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material

APPENDIX E
EVENT ACTION PLANS

APPENDIX E – Event / Action Plans

Table E-1 Event / Action Plan For Air Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by ET; 2. Check Contractor’s working method.	1. Notify Contractor.	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
2. Exceedance for two or more consecutive samples	1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial	1. Check monitoring data submitted by ET; 2. Check Contractor’s working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented	1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
	actions required; 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring			
LIMIT LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
2. Exceedance for two or more consecutive samples	1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 4. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 5. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated

Table E-2 Event / Action Plan For Construction Noise

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action Level being exceeded	<ol style="list-style-type: none"> 1. Notify ER, IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the IEC and Contractor on remedial measures required; 5. Increase monitoring frequency to check mitigation effectiveness 	<ol style="list-style-type: none"> 1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Advise the ER on the effectiveness of the proposed remedial measures 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to IEC and ER; 2. Implement noise mitigation proposals
Limit Level being exceeded	<ol style="list-style-type: none"> 1. Inform IEC, ER, Contractor and EPD; 2. Repeat measurements to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contractor's working procedures; 6. Discuss with the IEC, Contractor and ER on remedial measures required; 7. Assess effectiveness of 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC and ER within 3 working days of notification; 3. Implement the agreed proposals; 4. Submit further proposal if problem still not under control; 5. Stop the relevant portion of works as instructed by

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
	Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring		until the exceedance is abated	the ER until the exceedance is abated

**APPENDIX F
ENVIRONMENTAL MITIGATION
IMPLEMENTATION SCHEDULE (EMIS)**

APPENDIX F IMPLEMENTATION SCHEDULE OF ENVIRONMENTAL MITIGATION MEASURES (EMIS)

EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
A	Air Quality		
3.74	<p>Skip hoist for material transport should be totally enclosed by impervious sheeting.</p> <p>Vehicle washing facilities should be provided at every vehicle exit point.</p> <p>The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcore.</p> <p>Where a site boundary adjoins a road, streets or other areas accessible to the public, hoarding of not less than 2.4 m high from ground level should be provided along the entire length except for a site entrance or exit.</p> <p>Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.</p> <p>Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.</p> <p>Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs.</p> <p>Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.</p> <p>Imposition of speed controls for vehicles on unpaved site roads. Ten kilometers per hour is the recommended limit.</p> <p>Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the 3 sides.</p> <p>Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.</p>	All construction sites	<p>N/A</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>

EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
3.74	Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.	All construction sites	^
B	Airborne Noise		
4.56– 4.61	Use of quiet PME, movable barriers and acoustic mats.	All construction sites	^
4.67	Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.	All construction sites	^
	Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.		^
	Mobile plant, if any, shall be sited as far away from NSRs as possible.		^
	Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum.		^
4.67	Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.		All construction sites
	Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on-site construction activities.	^	
C	Water Quality		
6.349 to 6.375	Construction Site Runoff and General Construction Activities The mitigation measures as outlined in the ProPECC PN 1/94 Construction Site Drainage should be adopted where applicable.	All construction sites	^
6.376	Effluent Discharge There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the WPCO license which is under the ambit of regional office (RO) of EPD.		^

EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
	Minimum distances of 100 m should be maintained between the discharge points of construction site effluent and the existing saltwater intakes.		
6.377	<p>Accidental Spillage of Chemicals</p> <p>Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.</p>		^
6.378	Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.		^
6.379	<p>Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows:</p> <ul style="list-style-type: none"> • Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport. • Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents. • Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area. 		^
6.380	<p>Construction Works in Close Proximity of Storm Drains or Seafront:</p> <p>To minimize the potential water quality impacts from the construction works located at or near any watercourse, the practices outlined below should be adopted where applicable.</p> <ul style="list-style-type: none"> • The use of less or smaller construction plants may be specified to reduce the disturbance to the storm water courses or marine environment. • Temporary storage of materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from any water courses during carrying out of the construction works. • Stockpiling of construction materials and dusty materials should be covered and 	All construction sites	^

EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
	<p>located away from any water courses.</p> <ul style="list-style-type: none"> • Construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby water receivers. • Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the waterfront, where practicable. • Proper shoring may need to be erected in order to prevent soil/mud from slipping into the storm culvert or sea. 		
D	Waste Management		
9.107	<p>Reusable steel or concrete panel shutters, fencing and hoarding and signboard should be used as a preferred alternative to items made of wood, to minimize wastage of wood. Attention should be paid to WBTC No. 19/2001 - Metallic Site Hoardings and Signboards to reduce the amount of timber used on construction sites. Metallic alternatives to timber are readily available and should be used rather than new timber. Precast concrete units should be adopted wherever feasible to minimize the use of timber formwork.</p>	All construction sites	^
9.109	<p>All waste materials should be segregated into categories covering:</p> <ul style="list-style-type: none"> • excavated materials suitable for reuse on-site; • excavated materials suitable for public filling facilities; • remaining C&D waste for landfill; • chemical waste; and • general refuse for landfill. 	All construction sites	^
9.113	Sort C&D waste from demolition of existing facilities to recover recyclable portions such as metals.		^
	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.		^
	Encourage collection of aluminum cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force.		^
	Any unused chemicals or those with remaining functional capacity shall be recycled.		^
	Proper storage and site practices to minimize the potential for damage or contamination of construction materials.		^

EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
9.115	Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.		^
	Training of site personnel in proper waste management and chemical waste handling procedures.		^
9.115	Develop and provide toolbox talk for on-site sorting of C&D materials to enhance worker's awareness in handling, sorting, reuse and recycling of C&D materials.		^
	Provision of sufficient waste disposal points and regular collection of waste.		^
	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.		^
9.125	Bentonite slurries used in diaphragm wall construction should be reconditioned and reused wherever practicable. The disposal of residual used bentonite slurry should follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage".		All construction sites
9.131	Adequate number of portable toilets at temporary works areas or the PTWs to ensure that sewage from site staff would be properly collected.	^	
9.133	General refuse should be stored in enclosed bins, skips or compaction units separating from C&D material and disposed of at designated landfill.	^	
9.135	The recyclable component of the municipal waste generated by the workforce, such as aluminium cans, paper and cleansed plastic containers should be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste should be set up by the Contractor. The Contractor should also be responsible for arranging recycling companies to collect these materials.	^	
9.137	If chemical wastes are produced at the construction site, the Contractor would be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant,	^	

EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
	toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport and dispose of the chemical wastes, to either the approved Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.		
9.142	Prior to excavation of the marine deposit layer, the deposit should be tested in accordance with the ETWB TC(W) No. 34/2002 and the results should be presented in a Preliminary Sediment Quality Report. The marine deposit should be disposed of at the disposal site designated by the Marine Fill Committee (MFC) or Director of Environmental Protection (DEP) depending on the test results.		N/A
E	Terrestrial Ecology		
10.94	To implement effective noise mitigation measures as recommended in Section 4 of EIA.	All construction sites	N/A
10.95	Dust control practices such as regular watering, complete coverage of any aggregate or dusty material storage piles, and re-schedule of dusty activities during high-wind conditions as well as other measures recommended in Section 3 of EIA, should be implemented.		^
10.96	Fences/hoardings should be erected and installed along the boundary of the works areas.		N/A
10.97	Standard good site practices as suggested in Section 10 of EIA should be implemented.		N/A
10.98	Provision of proper drainage system and runoff control measures such as use of sand/silt traps, oil/grease separators, sedimentation tanks, etc.		^
F	Landscape and Visual		
Table 13.7	Topsoil, where identified, should be stripped and stored for re-use in the construction of the soft landscape works, where practical.	All construction sites	^
	Existing trees to be retained on site should be carefully protected during construction.		N/A
	Trees unavoidably affected by the works should be transplanted where practical.		N/A
	Compensatory tree planting should be provided to compensate for felled trees.		N/A
	Control of night-time lighting.		^

EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
Table 13.7	Erection of decorative screen hoarding compatible with the surrounding setting.	All construction sites	N/A
G	Marine Ecology		
11.137	To minimize the potential indirect impacts on water quality from construction site runoff and various construction activities, the practices outlined in ProPECC PN 1/94 Construction Site Drainage should be adopted.	All construction sites	^
H	Hazard to Life		
14A.201	Limiting use of cranes in terms of locations, lifting height, swing angle and setting up safety zone.	Exact location will be determined on construction site by the engineer	^

Remarks:	^ Compliance of mitigation measure;
	N/A Not Applicable;
	* Recommendation was made during site audit but improved/rectified by the contractor.
	# Recommendation was made during site audit and to be improved / rectified by the contractor.
	X Non-compliance of mitigation measure;
	● Non-compliance but rectified by the contractor;

**APPENDIX G
COMPLAINT LOG**

APPENDIX G – COMPLAINT LOG

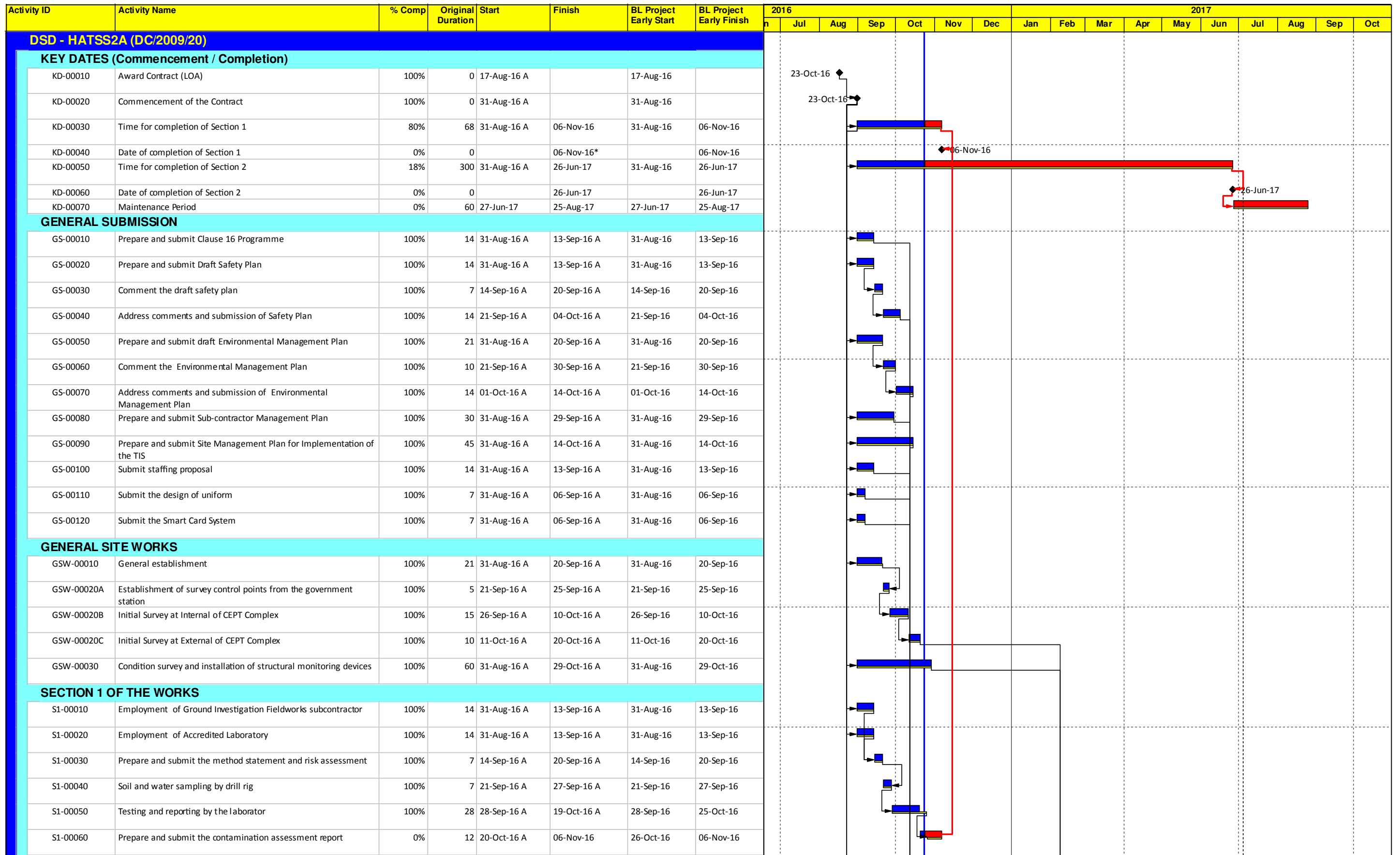
Reporting Month: February 2017

Cumulative complaints received:

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
N/A	N/A	N/A	N/A	N/A	N/A

Remarks: No environmental complaint was received in February 2017.

APPENDIX H
CONSTRUCTION PROGRAMME



Start Date: 17-Aug-16
 Finish Date: 25-Aug-17
 Data Date: 23-Oct-16
 Run Date: 03-Nov-16

- Primary Baseline
- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

DC/2009/20 - Harbour Area Treatment Scheme Stage 2A
 Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works
Update for the month of October 2016



Build King (ZENS) Civil Engineering Ltd.

Activity ID	Activity Name	% Comp	Original Duration	Start	Finish	BL Project Early Start	BL Project Early Finish	2016												2017						
								Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct			
SECTION 2 OF THE WORKS																										
S2-00010	Prepare and submit the Method Statement and Risk Assessment for Demolition Works	100%	30	31-Aug-16 A	29-Sep-16 A	31-Aug-16	29-Sep-16																			
S2-00020	Identification of existing E&M facilities for transfer or disposal	100%	20	31-Aug-16 A	19-Sep-16 A	31-Aug-16	19-Sep-16																			
S2-00030	Transfer or disposal of existing E&M facilities	100%	30	20-Sep-16 A	19-Oct-16 A	20-Sep-16	19-Oct-16																			
S2-00040A	Demolition of Alum Storage Tank	90%	12	10-Oct-16 A	24-Oct-16	20-Oct-16	31-Oct-16																			
S2-00040B	Demolition of Raw Sludge Storage Tank	90%	12	17-Oct-16 A	31-Oct-16	01-Nov-16	12-Nov-16																			
S2-00040C	Demolition of Sludge Dewatering Building	0%	12	01-Nov-16	12-Nov-16	13-Nov-16	24-Nov-16																			
S2-00040D	Demolition of Control Room	100%	12	17-Oct-16 A	22-Oct-16 A	25-Nov-16	06-Dec-16																			
S2-00040E	Demolition of CEPT Effluent Chamber	0%	12	13-Nov-16	24-Nov-16	07-Dec-16	18-Dec-16																			
S2-00040F	Demolition of Intermediate Pumping Station	0%	12	25-Nov-16	06-Dec-16	19-Dec-16	30-Dec-16																			
S2-00040G	Demolition of Effluent Chamber	0%	12	07-Dec-16	18-Dec-16	31-Dec-16	11-Jan-17																			
S2-00040H	Demolition of CEPT Tank	50%	12	17-Oct-16 A	04-Nov-16	12-Jan-17	23-Jan-17																			
S2-00040I	Demolition of Influent Channel	50%	12	17-Oct-16 A	04-Nov-16	24-Jan-17	04-Feb-17																			
S2-00040J	Demolition of Rapid Mixing Tank and Flocculation Tank	50%	12	17-Oct-16 A	04-Nov-16	05-Feb-17	16-Feb-17																			
S2-00050A	Backfill btw +4.200mPD to +6.800mPD of Alum Storage Tank, Raw Sludge Storage Tank & Sludge Dewatering Building	0%	15	19-Dec-16	02-Jan-17	17-Feb-17	03-Mar-17																			
S2-00050B	Backfill btw +4.200mPD to +6.800mPD of Control Room, CEPT Effluent Chamber and Intermediate Pumping Station	0%	15	03-Jan-17	17-Jan-17	04-Mar-17	18-Mar-17																			
S2-00050C	Backfill btw +4.200mPD to +6.800mPD of remaining areas	0%	15	18-Jan-17	01-Feb-17	19-Mar-17	02-Apr-17																			
S2-00055	Abandonment of disused pipe	0%	14	02-Feb-17	15-Feb-17	03-Apr-17	16-Apr-17																			
S2-00060A	ELS for the construction of foul manhole and laying of pipes	0%	10	02-Feb-17	11-Feb-17	03-Apr-17	12-Apr-17																			
S2-00060B	Pipe Laying	0%	7	12-Feb-17	18-Feb-17	13-Apr-17	19-Apr-17																			
S2-00060C	Manhole Construction	0%	10	19-Feb-17	28-Feb-17	20-Apr-17	29-Apr-17																			
S2-00060D	Testing	0%	4	01-Mar-17	04-Mar-17	30-Apr-17	03-May-17																			
S2-00060E	Backfilling after manhole construction and pipe laying	0%	14	05-Mar-17	18-Mar-17	04-May-17	17-May-17																			
S2-00070A	Construction of U-Channel	0%	40	02-Feb-17	13-Mar-17	03-Apr-17	12-May-17																			
S2-00070B	ELS for the construction of storm drainage that will connect CP3, CP4 and U-Channel	0%	10	02-Feb-17	11-Feb-17	03-Apr-17	12-Apr-17																			
S2-00070C	Pipe Laying	0%	7	12-Feb-17	18-Feb-17	13-Apr-17	19-Apr-17																			
S2-00070D	Manhole & Catch Pipe Construction	0%	14	19-Feb-17	04-Mar-17	20-Apr-17	03-May-17																			
S2-00070E	Testing	0%	4	05-Mar-17	08-Mar-17	04-May-17	07-May-17																			
S2-00070F	Backfilling works	0%	10	09-Mar-17	18-Mar-17	08-May-17	17-May-17																			
S2-00080A	Concrete Pavement	0%	33	19-Mar-17	20-Apr-17	18-May-17	19-Jun-17																			
S2-00080B	Application of Joint Sealant	0%	7	21-Apr-17	27-Apr-17	20-Jun-17	26-Jun-17																			

Start Date: 17-Aug-16
 Finish Date: 25-Aug-17
 Data Date: 23-Oct-16
 Run Date: 03-Nov-16

- ▬ Primary Baseline
- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work
- ◆ Milestone

DC/2009/20 - Harbour Area Treatment Scheme Stage 2A
 Demolition of Chemically Enhanced Primary Treatment Tanks and Associated Facilities at Cyberport Sewage Treatment Works
Update for the month of October 2016



Build King (ZENS) Civil Engineering Ltd.