

**Temporary Sewage Pumping Station  
Ancillary to Tung Chung Area 56 Public Housing Development**

**Monthly Environmental Audit Report No. 13  
(Covering the Period from 1 November 2015 to 30 November 2015)**

11 December 2015

Revision 00

Main Contractor



**HSIN新昌  
CHONG**

Independent Checker

**ATKINS**



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## **Executive Summary**

This monthly Environmental Audit Report is prepared for Temporary Sewage Pumping Station Ancillary to Tung Chung Area 56 Public Housing Development (hereafter referred to as “the Project”) for the Hong Kong Housing Authority (HA) of Hong Kong Special Administrative Region. The Project was awarded to Hsin Chong Construction Company Ltd. (hereafter referred to as “the Contractor”) and Atkins China Limited was appointed as the Independent Checker (IC) by the Contractor.

The Project is classified as a “Designated Project”, under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap 499). A Project Profile (Register No. PP-481/2013) was submitted for direct application of an Environmental Permit (EP) for the Project. The current EP (EP No: EP-452/2013) was issued on 6 June 2013. These documents are available through the EIA Ordinance Register. Site preparation works of the Project started on 14 November 2014 and the construction works of the Project commenced on 19 November 2014.

This is the thirteenth Monthly Environmental Audit Report for the Project which summaries the audit findings during the reporting period from 1 November 2015 to 30 November 2015.

## **Complaint Log**

There were no environmental complaints received during the reporting period.

## **Notifications of Summons and Successful Prosecutions**

There were no notifications of summons or prosecutions received during this reporting period.

## **Future Key Issues**

The future key issues include potential noise impact, air quality impact, water quality impact and waste management arising from the following construction activities to be undertaken in the upcoming month:

- Construction of beam and slab from footing to ground floor.



## 1 INTRODUCTION

### 1.1 Basic Project Information

- 1.1.1 This monthly Environmental Audit Report is prepared for Temporary Sewage Pumping Station Ancillary to Tung Chung Area 56 (hereafter referred to as “the Project”) for the Hong Kong Housing Authority (HA) of Hong Kong Special Administrative Region. The Project was awarded to Hsin Chong Construction Company Ltd. (hereafter referred to as “the Contractor”) and Atkins China Limited was appointed as the Independent Checker (IC) by the Contractor.
- 1.1.2 The Project is classified as a “Designated Project”, under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap 499). A Project Profile (Register No. PP-481/2013) was submitted for direct application of Environmental Permit (EP). The current EP (EP No: EP-452/2013) was issued on 6 June 2013. These documents are available through the EIA Ordinance Register. Site preparation works of the Project started on 14 November 2014 and the construction works of the Project commenced on 19 November 2014. The works areas of the Project and the Contract are shown in **Appendix A**.
- 1.1.3 A Temporary Sewage Pumping Station (TSPS) was proposed as an ancillary facility to the proposed Tung Chung Area 56 Public Housing Development, to collect the sewage solely from the Tung Chung Area 56 Public Housing Development only and discharge it to the existing public sewer at Ying Hei Road.
- 1.1.4 The proposed TSPS is an un-manned facility and is not considered as a sensitive use susceptible to the influence of to external potential environmentally polluting uses.
- 1.1.5 According to the Planning Department’s Tung Chung Town Centre Area Layout Plan No. L/I-TCTC/1E, a permanent sewage pumping station (SPS) will be provided in the Tung Chung Area 104 located to the northeast of the Tung Chung Area 56. Upon the intake of the population of Tung Chung Area 56 Public Housing Development, the TSPS is expected to provide a few years of service to the public housing development. Upon the commissioning of the permanent sewage pumping station in Tung Chung Area 104, sewage generated in Tung Chung Area 56 public housing development will be conveyed to SPS in Tung Chung Area 104 and the operation of the TSPS in Area 56 will be terminated. The infrastructure works including permanent foul water pipes and manhole to the permanent SPS in Tung Chung Area 104 is scheduled to be provided during the construction period of the Tung Chung Area 56 public housing development for ease of future transition operations. Thus the TSPS in Area 56 is of temporary nature.
- 1.1.6 This is the thirteenth Monthly Environmental Audit Report for the Project which summaries the audit findings during the reporting period from 1 November 2015 to 30 November 2015.



## 1.2 Project Organisation

1.2.1 The project organization structure and lines of communication with respect to the on-site environmental management structure is shown in **Appendix B**. The key personnel contact names and numbers are summarized in **Table 1.1**.

**Table 1.1 Contact Information of Key Personnel**

Party	Position	Name	Telephone	Fax
Engineer or Engineer's Representative (Hong Kong Housing Authority)	Civil Engineer	Rachel Fung	2129 3709	2129 3095
Contractor (Hsin Chong Construction Company Ltd.)	Site Agent	Ivan Ho	9383 8280	3480 1791
	Environmental Manager	Billy Ha	6590 5606	
	Environmental Supervisor	Connie Cheng	9656 1417	
Independent Checker (Atkins China Limited)	Independent Checker	Ray Chow	2972 1305	2890 6343

## 1.3 Construction Programme

1.3.1 A copy of the Contractor's construction programme is provided in **Appendix C**.

## 1.4 Construction Works Undertaken During the Reporting Period

1.4.1 A summary of the construction activities undertaken during the reporting period is shown below:

- Construction of beam and slab from footing to ground floor.



## 2 ENVIRONMENTAL SITE AUDIT

### 2.1 Site Inspection

2.1.1 Site Inspections were carried out on a weekly basis to monitor the implementation of proper environmental protection and pollution control mitigation measures for the Project. During the reporting period, site inspections were carried out on 4, 10, 17 and 24 November 2015.

2.1.2 Observations raised during the site inspections and the follow up actions taken by the Contractor are described below.

Date of Inspection	Observation	Follow up Action
4 November 2015	1. A container for surface retarder was placed on bare soil and not stored inside a drip tray. 2. Stagnant water was observed inside concrete structure.	1. The container for surface retarder was removed from the site. 2. The stagnant water was removed.
10 November 2015	No observation was made during this inspection.	Nil
17 November 2015	A container for surface retarder was placed on bare soil and not stored inside a drip tray.	The container of surface retarder was removed from site.
24 November 2015	A container for petroleum product was placed on bare soil and not stored inside a drip tray.	The Contractor is recommended to provide a drip tray for the container.

2.1.3 The Contractor has rectified all observations as identified during environmental site inspections during the reporting month. Follow-up actions for the observations issued for the last inspection of the reporting month will be inspected during the next site inspection.

### 2.2 Advice on the Solid and Liquid Waste Management Status

2.2.1 The Contractor registered as a chemical waste producer for the Project. Sufficient numbers of receptacles were available for general refuse collection and sorting.

2.2.2 The monthly summary of waste flow table is detailed in **Appendix D**.

2.2.3 The Contractor was reminded that chemical waste containers should be properly treated and stored temporarily in a designated chemical waste storage area on site in accordance with the Code of Practise on the Packaging, Labelling and Storage of Chemical Wastes.

### 2.3 Environmental Licenses and Permits

2.3.1 The valid environmental licenses and permits during the reporting period are summarized in **Appendix E**.

### 2.4 Implementation Status of Environmental Mitigation Measures

2.4.1 In response to the site audit findings, the Contractors carried out corrective actions.



## 2.5 Summary of Complaints, Notification of Summons and Successful Prosecution

- 2.5.1 There were no complaints received during the reporting period.
- 2.5.2 No notification of summons and prosecution was received during the reporting period.
- 2.5.3 Statistics on environmental complaints, notifications of summons and successful prosecutions are summarized in **Appendix F**.





### 3 FUTURE KEY ISSUES

#### 3.1 Construction Programme for the Coming Months

3.1.1 According to the Contractor, the major construction activity for December 2015 includes:

- Construction of beam and slab from footing to ground floor.

#### 3.2 Environmental Site Inspection Schedule for the Coming Month

3.2.1 The tentative schedule for weekly site inspections for December 2015 is every Wednesday (i.e. 2, 9, 16, 23 and 30 December 2015).



## 4 CONCLUSION

### 4.1 Conclusions

- 4.1.1 Site preparation works of the Project started on 14 November 2014 and the construction works of the Project commenced on 19 November 2014.
- 4.1.2 The weekly site inspections were carried out on 4, 10, 17 and 24 November 2015. Recommendations on remedial actions were given to the Contractors for the deficiencies identified during the site inspections.
- 4.1.3 There were no environmental complaints received during the reporting period.
- 4.1.4 No notification of summons and successful prosecution were received during the reporting period.



## **APPENDIX A**

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### Location of the Project and the Contract



0 50 100 150 Meters

Tung Chung Bay

TEMPORARY SEWAGE PUMPING STATION

Area 104

Area 89

Tung Chung Area 56




Area 55b

Ying Hei Road

North Lantau Expressway

Man Tung Road

LEGEND

-  Temporary Sewage Pumping Station
-  Site Boundary of Tung Chung Area 56 Public Housing Development
-  500 m from Temporary Sewage Pumping Station

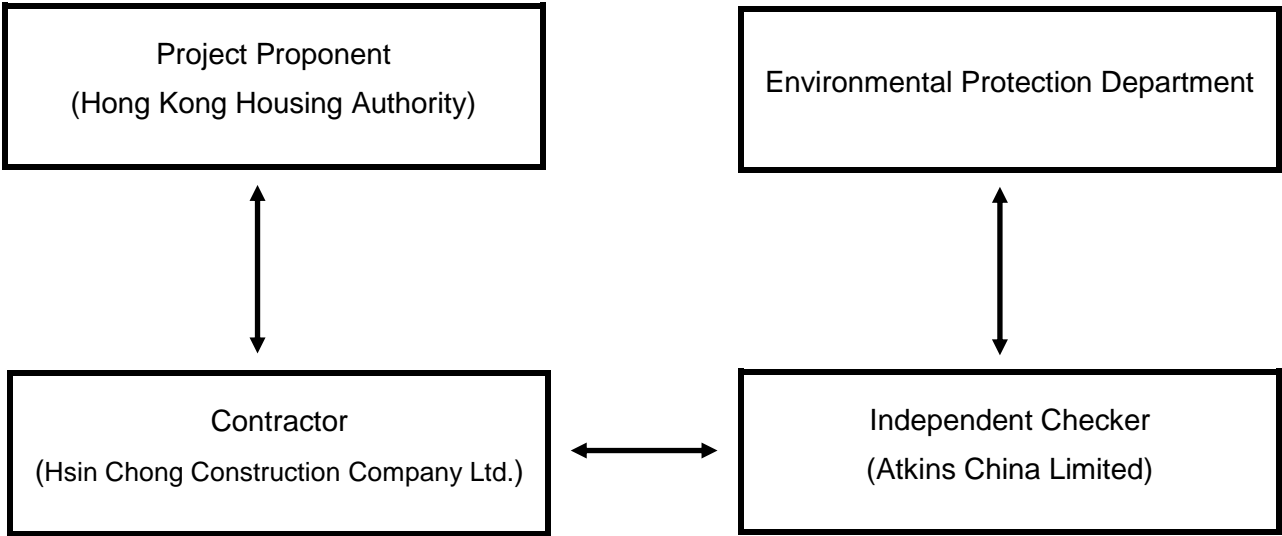


## **APPENDIX B**

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### Project Organization for Environmental Works

# Project Organization for Environmental Works





## **APPENDIX C**

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### Construction Programme

Construction of Public Rental Housing Development at Tung Chung Area 56

ID	Task Name	Start	Finish	Duration	Predecessors	Successors	alf	1st Half		2nd Half		1st Half		2nd Half		1st Half		2nd Half		
							Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	
639	<b>RC structure</b>	25 Nov '14	16 Apr '16	384 days																
640	<b>TSPS</b>	25 Nov '14	22 Jan '16	321 days																
641	Submit and Approval of Environmental Office (TSPS)	25 Nov '14	10 Dec '14	14 days	69SS	794SS,642														
642	Pipe pile & King Post installation & grout curtain (TSPS)	11 Dec '14	27 Jan '15	37 days	641	643														
643	Pumping test and report submission (TSPS)	28 Jan '15	3 Mar '15	25 days	642	644														
644	Submit as-built record to CM for Approval (TSPS)	4 Mar '15	28 Mar '15	22 days	643	645														
645	Submit ICU14 & Obtain CM's Approval for ELS Work (TSPS)	30 Mar '15	8 May '15	30 days	644	646,71FF-22 days														
646	ELS for the footing (TSPS) & Plate Load Test	9 May '15	5 Aug '15	60 days	645	647														
647	Submit as-built ELS record to ICU (TSPS)	6 Aug '15	5 Sep '15	22 days	646	648														
648	Footing construction (TSPS)	7 Sep '15	30 Oct '15	42 days	647	649														
649	Footing to G/F beam and slab construction (TSPS)	31 Oct '15	31 Dec '15	51 days	648	650,652SS														
650	G/F - roof construction (TSPS)	2 Jan '16	22 Jan '16	18 days	649	795,796FS+44 days														
651	<b>RCP &amp; Supermarket</b>	31 Oct '15	16 Apr '16	132 days																
652	Sheet pile installation (RCP, Supermarket)	31 Oct '15	11 Nov '15	10 days	649SS	653														
653	Submit as-built record to CM for Approval (RCP, Supermarket)	12 Nov '15	4 Dec '15	20 days	652	654														
654	Submit ICU14 & Obtain CM's Approval for ELS Work (RCP & Supermarket)	5 Dec '15	2 Jan '16	22 days	653	655SS														
655	Excavation for the footing (RCP/Supermarket) & Plate Load Test	5 Dec '15	18 Dec '15	12 days	654SS	656FS-6 days														
656	Footing construction (RCP/Supermarket)	12 Dec '15	2 Jan '16	16 days	655FS-6 days	657														
657	Footing to G/F beam and slab construction (RCP/Supermarket)	4 Jan '16	19 Feb '16	35 days	656	658														
658	G/F - roof construction (RCP/Supermarket)	20 Feb '16	16 Apr '16	45 days	657	666,680FS+21 days,660,663														
659	<b>Finishes</b>	18 Apr '16	6 Dec '16	194 days																
660	Internal Finishes - RCP	18 Apr '16	16 Jul '16	73 days	658	661SS,679SS,685														
661	Roof screeding & waterproofing - RCP	18 Apr '16	17 Jun '16	49 days	660SS	662														
662	Green roof/sitting bench - RCP	18 Jun '16	18 Jul '16	25 days	661															
663	Internal Finishes - TSPS	18 Apr '16	17 Jun '16	49 days	658	664SS,665														
664	Roof screeding & waterproofing - TSPS	18 Apr '16	17 Jun '16	49 days	663SS	665														
665	Roofing & railing - TSPS	18 Jun '16	18 Jul '16	25 days	664,663															
666	Internal Finishes - Supermarket	18 Apr '16	30 Jun '16	60 days	658	667SS														
667	Roof Basket Ball Court Finishes & Roof Finishes - Supermarket	18 Apr '16	13 Jun '16	45 days	666SS	668FS-15 days														
668	External wall plastering	25 May '16	5 Aug '16	60 days	667FS-15 days	669FS-20 days														
669	External wall textured spray painting	14 Jul '16	3 Sep '16	45 days	668FS-20 days	670														
670	Shop front & window glazing, glass doors	5 Sep '16	4 Oct '16	25 days	669	672,674														
671	Water Test to Shop Front	10 Sep '16	21 Sep '16	10 days	623															
672	Doors & ironmongeries	5 Oct '16	12 Oct '16	7 days	670	673														
673	Sanitary fittings & toilet cubicles	13 Oct '16	26 Oct '16	12 days	672															
674	Steel and metal works	5 Oct '16	2 Nov '16	25 days	670	675														
675	Roller shutter	3 Nov '16	29 Nov '16	23 days	674	676SS														
676	Painting works	3 Nov '16	10 Nov '16	7 days	675SS	677SS+15 days														
677	Signage	21 Nov '16	6 Dec '16	14 days	676SS+15 days															
678	<b>Building services installation</b>	18 Apr '16	9 Oct '16	145 days																
679	Building services installation	18 Apr '16	9 Oct '16	145 days	660SS															
680	Make Available water tanks & pump rooms to NSC	12 May '16	12 May '16	0 days	658FS+21 days	682,681SS														
681	Make available TBE room to FTNS	12 May '16	12 May '16	0 days	680SS															
682	FS installation & water pump installation	13 May '16	28 Jun '16	37 days	680	683														
683	Testing & commissioning (EL, FS, P&D)	29 Jun '16	28 Jul '16	25 days	682	815FS+16 days,818FS+18 days														
684	<b>Refuse Handling System Installation</b>	16 Jul '16	29 Nov '16	115 days																
685	Make Available RCP, JCP & Refuse Rooms to Direct Contractor	16 Jul '16	16 Jul '16	0 days	660	686FS+30 days														
686	Make Available Vehicular Access for Transportation of Equipment	20 Aug '16	20 Aug '16	0 days	685FS+30 days	687FS+1 day														
687	Installation Works	23 Aug '16	21 Nov '16	77 days	686FS+1 day	688														
688	Trial Run by Refuse Collection Vehicle	22 Nov '16	29 Nov '16	7 days	687															
689	<b>Wet Market</b>	19 Nov '15	17 Oct '16	267 days																
690	<b>RC structure (Detailed Programmed to be Submitted Separately)</b>	19 Nov '15	17 Oct '16	267 days																





## APPENDIX D

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### Waste Flow Table

**Temporary Sewage Pumping Station  
Ancillary to Tung Chung Area 56 Public Housing Development  
Waste Flow Table**

Month	Estimated Annual Quantities of Inert C&D Materials (in '000 Kg)					Estimated Quantities of C&D Waste					
	Total Quantity Generated	Suitable for Recycled Aggregates	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Metals	Paper/cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse	Timber
	(a)	(b)	(c)	(d)	(e=a-b-c-d)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000litre)	(in '000 Kg)	(in '000 Kg)
2014											
November	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.160	0.000
December	4.910	0.000	0.000	0.000	4.910	0.000	0.000	0.000	0.000	5.830	0.000
2015											
January	5.970	0.000	0.000	0.000	5.970	0.000	0.000	0.000	0.000	2.880	0.000
February	4.540	0.000	0.000	0.000	4.540	0.000	0.000	0.000	0.000	2.450	0.000
March	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.480	0.000
April	1097.040	0.000	0.000	0.000	1097.040	0.000	0.000	0.000	0.000	1.930	0.000
May	467.250	0.000	0.000	0.000	467.250	0.000	0.000	0.000	0.000	6.520	0.000
June	1237.690	0.000	0.000	0.000	1237.690	0.000	0.000	0.000	0.000	9.720	0.000
July	61.480	0.000	0.000	0.000	61.480	0.000	0.000	0.000	0.000	8.680	0.000
August	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.210	0.000
September	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.170	0.000
October	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.180	0.000
November	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.940	0.000
December											
<b>Grand Total</b>	<b>2878.880</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>2878.880</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>65.150</b>	<b>0.000</b>

Notes: (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

(2) Plastics refer to plastic bottles / containers, plastic sheets / foam from packaging material



## **APPENDIX E**

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### Environmental Licenses and Permits

## Summary of Environmental Licences and Permits Application and Status

### Environmental Permit (EP)

EP No.	EP Holder	Date of EP Issued	Expiry Date	Area Coverage	Status
EP-452/2013	Hong Kong Housing Authority	6 Jun 2013	N/A	TSPS Only	Active

### Notification of Carrying Out Notifiable Works under Air Pollution Control (Construction Dust) Regulation

Notification Ref. No.	Area Coverage	Valid Since	Expiry Date
367052	Entire Site of the Contract (include TSPS)	13 Nov 2013	N/A

### Billing Account for Disposal of Construction Works

Billing Account No.	Area Coverage	Valid Since	Expiry Date
7018949	Entire Site of the Contract (include TSPS)	16 Dec 2013	N/A

### Chemical Waste Producer Registration

Waste Producer No.	Area Coverage	Major Chemical Waste Type	Valid Since	Expiry Date
5213-950-H2913-43	Entire Site of the Contract (include TSPS)	Spent lubricant, Spent Flammable Liquid, Spent organic solvent, contaminated rags	19 Nov 2014	N/A

### Wastewater Discharge Licence

Licence Number	Area Coverage	Valid Since	Expiry Date
WT00018218-2014	Entire Site of the Contract (include TSPS)	30 Jan 2014	31 Jan 2019

**Construction Noise Permit (CNP)**

<b>CNP Number</b>	<b>Area Coverage</b>	<b>Valid Since</b>	<b>Expiry Date</b>	<b>Current Status</b>
GW-RS1162-14	Entire Site of the Contract (include TSPS)	24 Oct 2014	23 Apr 2015	Expired
GW-RS0418-15	Entire Site of the Contract (include TSPS)	24 Apr 2015	23 Oct 2015	Expired
GW-RS1088-15	Entire Site of the Contract (include TSPS)	24 Oct 2015	23 Apr 2015	Active



## **APPENDIX F**

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### **Statistics on Environmental Complaints, Notification of Summons and Successful Prosecutions**

**Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions**

Reporting period	Complaints	Notifications of Summons	Successful Prosecutions
13th Reporting Month (1 Nov 2015 – 30 Nov 2015)	0	0	0
Cumulative Statistics (19 Nov 2014 – 30 Nov 2015)	0	0	0