

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

**Monthly Environmental Audit Report No. 14
(Covering the Period from 1 December 2015 to 31 December 2015)**

14 January 2016

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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 fourteenth monthly Environmental Audit Report for the Project which summaries the audit findings during the reporting period from 1 December 2015 to 31 December 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 from ground floor to roof.



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 fourteenth monthly Environmental Audit Report for the Project which summaries the audit findings during the reporting period from 1 December 2015 to 31 December 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	Pan Fong	9436 9435	
	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 1, 10, 15, 22 and 31 December 2015.
- 2.1.2 For the observations issued on 24 November 2015 regarding placement of petroleum product on bare soil without drip tray, the contractor has removed these petroleum product from site. These observations were closed on 1 December 2015.
- 2.1.3 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
1 December 2015	No observation was made during this inspection.	Nil
10 December 2015	No observation was made during this inspection.	Nil
15 December 2015	No observation was made during this inspection.	Nil
22 December 2015	Stagnant water ponding was observed at site.	The stagnant water ponding at site was removed.
31 December 2015	No observation was made during this inspection.	Nil

- 2.1.4 The Contractor has rectified all observations as identified during environmental site inspections during the reporting month.

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 January 2016 includes:

- Construction from ground floor to roof.

3.2 Environmental Site Inspection Schedule for the Coming Month

3.2.1 The tentative schedule for weekly site inspections for January 2016 is every Tuesday (i.e. 5, 12, 19 and 26 January 2016).



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 1, 10, 15, 22 and 31 December 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

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

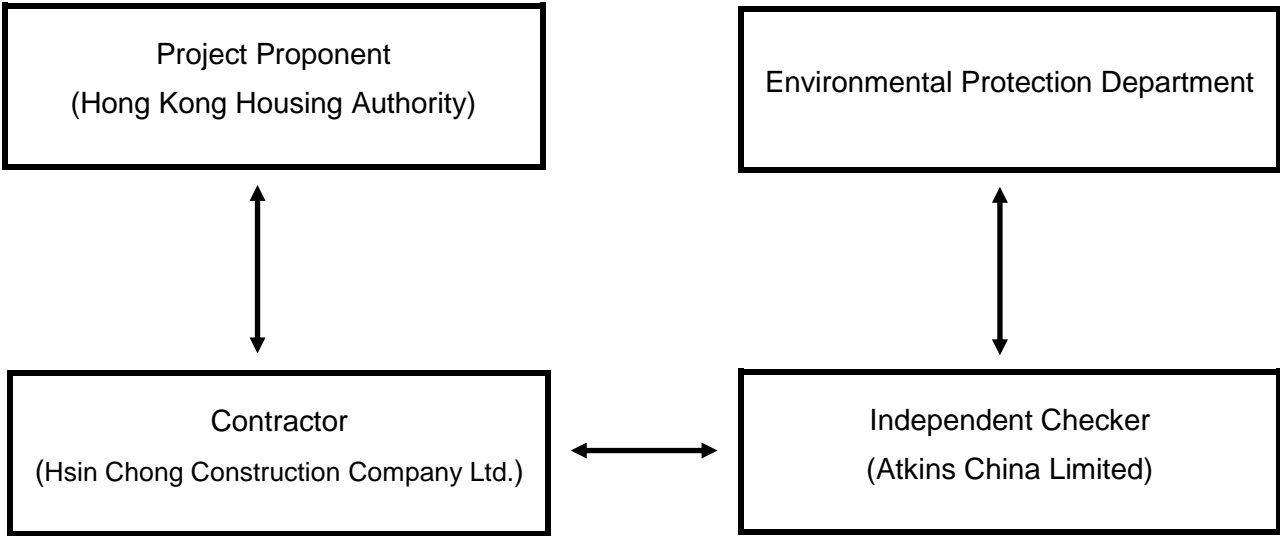
-  Temporary Sewage Pumping Station
-  Site Boundary of Tung Chung Area 56 Public Housing Development
-  500 m from Temporary Sewage Pumping Station



APPENDIX B

Project Organization for Environmental Works

Project Organization for Environmental Works





APPENDIX C

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
639	RC structure	25 Nov '14	16 Apr '16	384 days									
640	TSPS	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	RCP & Supermarket	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	Finishes	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	Building services installation	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	Refuse Handling System Installation	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	Wet Market	19 Nov '15	17 Oct '16	267 days									
690	RC structure (Detailed Programmed to be Submitted Separately)	19 Nov '15	17 Oct '16	267 days									



APPENDIX D

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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.380	0.000
Grand Total	2878.880	0.000	0.000	0.000	2878.880	0.000	0.000	0.000	0.000	73.530	0.000

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

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)

CNP Number	Area Coverage	Valid Since	Expiry Date	Current Status
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 2016	Expired, as renewed as GW-RS1379-15
GW-RS1379-15	Entire Site of the Contract (include TSPS)	29 Dec 2015	28 Jun 2016	Active



APPENDIX F

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
14th Reporting Month (1 Dec 2015 – 31 Dec 2015)	0	0	0
Cumulative Statistics (19 Nov 2014 – 31 Dec 2015)	0	0	0