

Agreement No. SP 05/2012 Environmental Audit for Sewerage Works at Pik Shui Sun Tsuen

Monthly Environmental Audit Report No. 21 – August 2015 Ref: 322036/ENL/02/21/A

> September 2015 Drainage Services Department





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September 2015

Drainage Services Department

44/F, Revenue Tower 5 Gloucester Road Wan Chai Hong Kong

Agreement No. SP 05/2012 Environmental Audit for Sewerage Works at Pik Shui Sun Tsuen Environmental Monthly Audit Report (August 2015)



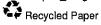
Pursuant to Condition 2.2 of Environmental Permit No. EP-435/ 2011/A, this Monthly Environmental Audit Report has been reviewed and certified by the Independent Checker (IC)

Certified by:

Terence Kong Independent Checker Mott MacDonald Hong Kong Limited

Date

16 September 2015





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### Executive Summary

On 3 May 2013, Mott MacDonald Hong Kong Limited (MMHK) was commissioned by the Drainage Services Department (DSD) under Agreement No. SP 05/2012 to undertake the Independent Checker (IC) services for the Sewerage Works at Pik Shui Sun Tsuen (The Project).

The Environmental Permit (EP) No. EP- 435/2011 for the "Sewerage Works at Pik Shui Sun Tsuen" was granted by the Environmental Protection Department (EPD) on 20 December 2011. The construction works was carried out Welcome Construction Co Ltd. (the Contractor), commenced on 26 August 2013.

In accordance with Section 5.1 and 5.3 of the Brief for the Project and Condition 2.2 of the EP, a Monthly Environmental Audit Report shall be prepared and submitted at monthly intervals to confirm in writing the full implementation of the mitigation measures recommended in the Project Profile (PP) (Register No. PP-454/2011) during and upon completion of the construction works.

When construction of the sewerage works at Pik Shui Sun Tsuen commenced, objections from the local residents were encountered. Therefore, the sewerage works were temporarily suspended. DSD arranged meetings with the local residents and tried to resolve the objections. However, there were still majority amongst the local residents showing their objections to the proposed works in a meeting held on 18 January 2014. In March 2014, DSD and the client office SIG of EPD decided to curtail the proposed sewerage works at Pik Shui Sun Tsuen from the construction contract.

Regarding the sewerage work on University Road, some sewer alignments were revised subject to actual condition. Therefore, DSD submitted the application for variation of environmental permit for the sewerage works at Pik Shui Sun Tsuen to EPD on 16 July 2014 and the amended Environmental Permit (No. EP-435/2011/A) was issued by EPD to DSD on 29 July 2014.

This is the 21<sup>st</sup> Monthly Environmental Audit Report covering the period from 1 August 2015 and 31 August 2015 (the reporting month).



## 1. Environmental Status during the reporting month

#### **1.1 Construction Programme**

Site preparation works was conducted in this reporting month. No construction work was conducted during this reporting month.

The construction works programme of the Project is provided in <u>Appendix A.</u> A layout plan of the Project is provided in <u>Figure 1.1.</u>

#### **1.2 Key Issues for the reporting month**

• Sewerage works at University Road

#### **1.3 Project Organisation**

The organisation chart and lines of communication with respect to the on-site environmental management structure together with the contact information of the key personnel are shown in <u>Appendix B</u>.

#### **1.4 Environmental Mitigation Measures - Implementation Status**

No construction work was conducted during this reporting month. Therefore, no environmental site audit was conducted during this reporting month. The checklist of implementation status of the environmental mitigation measures is provided in <u>Appendix C.</u>



## 2. Environmental Site Inspection

#### 2.1 Site Inspection

No construction work was conducted during this reporting month. Therefore, no environmental site audit was conducted during this reporting month.

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

The Contractor has been applied for a bill account for disposal. No waste was disposed of in this reporting month.

The waste flow table is present in Appendix D.

#### 2.3 Status of Environmental Licenses and Permits

The environmental permits, licenses, and/or notifications on environmental protection for this Project which were valid during the period is summarised in **Table 2-1**.

Statutory Reference	Description	Permit /Reference No.	Status
EIAO	Environmental Permit	EP- 435/2011	Valid
APCO	Notification of Construction Work under APCO	355015	Valid
WPCO	Discharge License	WT00016437-2013	Valid
	Discharge License	WT00016957-2013	Valid
WDO	Bill Account for disposal	7016760	Valid

Table 2-1: Status of Environmental Submissions, Licenses and Permits

Legend: EIAO – Environmental Impact Assessment Ordinance APCO – Air Pollution Control Ordinance WPCO – Water Pollution Control Ordinance WDO – Waste Disposal Ordinance



## 3. Report on Complaints, Notifications of Summons and Successful Prosecutions

#### 3.1 Record on Environmental Complaints Received

No environmental complaint was received this month. The cumulative statistics on complaints were provided in <u>Appendix E.</u>

#### 3.2 Record on Notifications of Summons and Successful Prosecution

No notifications of summons or successful prosecution were received this month. The cumulative statistics on notifications of summons and successful prosecutions were provided in <u>Appendix E.</u>

## **3.3 Review of Reasons for and Implications of Non-compliance, Complaints, Summons and Prosecutions**

Not applicable.

#### 3.4 Follow-up Actions Taken

Not applicable.



## 4. Future Key Issues

#### 4.1 Major Site Works for the Coming Month(s)

The major site works scheduled to be commissioned in the coming month include:

Sewerage works at University Road

#### 4.2 Key Issues for the Coming Month

Key issues to be considered in the coming month include:

- Generation of dust from construction and demolition works;
- Noise impact from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Management of stockpiles and slopes, particularly on rainy days;
- Sorting, recycling, storage and disposal of general refuse and construction waste; and
- Management of chemicals and avoidance of oil spillage on-site.



## 5. Conclusion and Recommendation

#### 5.1 Conclusion

No construction activity was conducted during the reporting month.

#### 5.2 **Recommendations**

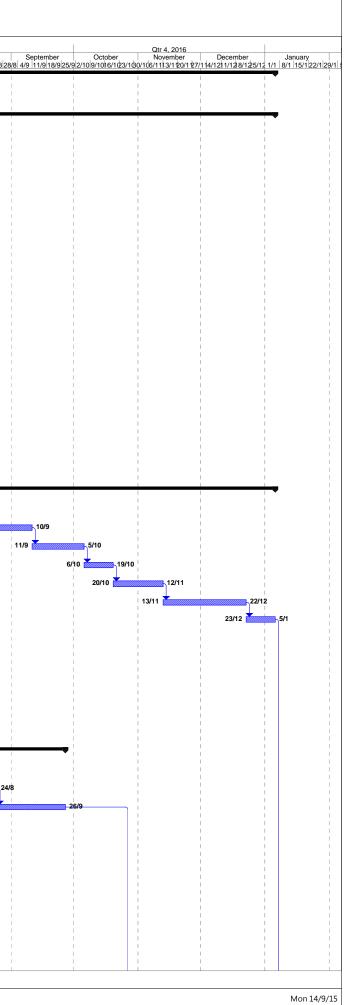
With consideration on the construction activities in the next reporting month, recommendations on mitigation measures for impacts on air quality, noise, water quality and waste were provided.

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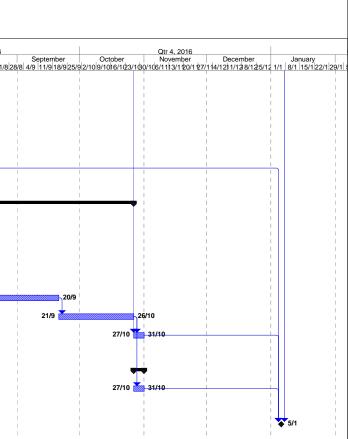


## Appendix A. Tentative Construction Programme

Clear Water Base         2       Sewerage fr         3       Sewerage fr         4       Excavate         5       Install se         6       Install se         7       Lay Sew         8       IInfill Gro         9       Re-cons         10       Construct         11	e from MH Nos. 1.15 to S5 at University Road & Clear	464 days		Thu 5/1/17 Thu 5/1/17		Qtr 4, 2015 October November 14/1011/1018/1025/1011/1118/1115/1122/1	December 29/116/1213/120/127/	Qtr 1, 2016 January February March 12 3/1 10/117/124/131/1 7/2 14/221/228/2 6/3 13/3/20	April /3 27/3  3/4   10/4 17/4 24/4  1/5	Qtr 2, 2016 May 5 8/5 15/5 22/5 2	June 9/5  5/6  12/6 19/6 26	July 5/6 3/7 10/7 17/7 24/7	Qtr 3, 2016 August 731/7 7/8 14/8/21/4
Clear Water Base         2       Sewerage fr         3       Sewerage fr         4       Excavate         5       Install se         6       Install se         7       Lay Sew         8       IInfill Gro         9       Re-cons         10       Construct         11	er Bay Road ge from MH Nos. 1.15 to S5 at University Road & Clear ay Road age from MH Nos. PSST155 to S5 at University Road, less (50m long) avate & construct Thurst Pit at MH No. PSST155 all set-up at Thurst Pit at MH No. PSST155 all Segmental Sleeve Pipeline Sewer Pipeline I Grout inside Sleeve Pipe construct Existing Manhole MH No. S5	464 days 169 days 30 days 14 days 50 days	Wed 30/9/15 Wed 30/9/15 Wed 30/9/15	Thu 5/1/17 Thu 5/1/17		October November  4/10)1/10/8/10/5/11/2/11             	December 29/116/1213/120/127/	January February March 12 3/1  10/1 17/1 24/1 31/1  7/2  14/2 21/2 28/2  6/3  13/3 20	April /3 27/3  3/4  10/4 17/4 24/4  1/5	May 5 8/5 15/5 22/5 2	June 9/5 5/6 12/6 19/6 26	July 10/7 17/7 24/7	August '31/7 7/8 14/8 21/
Water Bay R       3     Sewerage trenchless       4     Excavate       5     Install se       6     Install se       6     Install se       7     Lay Sew       8     IInfill Gro       9     Re-cons       10     Construct       11     12       13     Excavate       14     Install se       15     Install se       16     Lay Sew       17     IInfill Gro       18     11       19     Sewerage Bay Road (       20     Install Se       21     Lay Sew       22     IInfill Gro       23     Re-cons       24     Construct       25     CCTV c       26	ay Road age from MH Nos. PSST155 to S5 at University Road, less (50m long) avate & construct Thurst Pit at MH No. PSST155 all set-up at Thurst Pit at MH No. PSST155 all Segmental Sleeve Pipeline Sewer Pipeline I Grout inside Sleeve Pipe construct Existing Manhole MH No. S5	<b>169 days</b> 30 days 14 days 50 days	Wed 30/9/15 Wed 30/9/15								1	1	1
trenchless       4     Excavate       5     Install se       6     Install se       6     Install se       7     Lay Sew       8     IInfill Gro       9     Re-cons       10     Construct       11	less (50m long) avate & construct Thurst Pit at MH No. PSST155 all set-up at Thurst Pit at MH No. PSST155 all Segmental Sleeve Pipeline Sewer Pipeline I Grout inside Sleeve Pipe construct Existing Manhole MH No. S5	30 days 14 days 50 days	Wed 30/9/15	Wed 16/3/16		I. I.	i I				,       	 	-       
5       Install set         6       Install set         6       Install set         7       Lay Sew         8       IInfill Grd         9       Re-cons         10       Construct         11       1         12       Sewerage (Footpath)         13       Excavate         14       Install set         15       Install Set         16       Lay Sew         17       IInfill Grd         18       1         19       Sewerage (Footpath)         20       Install Set         21       Lay Sew         22       IInfill Grd         23       Re-cons         24       Construct         25       CCTV c         26       27         28       MH Nos.         29       MH Nos.         30       Sewerage         31       Sewerage	all set-up at Thurst Pit at MH No. PSST155 all Segmental Sleeve Pipeline Sewer Pipeline I Grout inside Sleeve Pipe construct Existing Manhole MH No. S5	14 days 50 days									     		
6     Install St       7     Lay Sew       8     IInfill Group       9     Re-cons       10     Construct       11	all Segmental Sleeve Pipeline Sewer Pipeline I Grout inside Sleeve Pipe construct Existing Manhole MH No. S5	50 days	Fri 30/10/15	Thu 29/10/15	30/9 🚞	29/10					1		
7     Lay Sew       8     IInfill Grd       9     Re-cons       10     Construct       11	Sewer Pipeline I Grout inside Sleeve Pipe construct Existing Manhole MH No. S5			Thu 12/11/15		30/10 12/11					   	1	
8       IInfill Grd         9       Re-cons         10       Construct         11	I Grout inside Sleeve Pipe construct Existing Manhole MH No. S5	14 days	Fri 13/11/15	Fri 1/1/16	1	13/11	Ì	<mark>∞_1/1</mark>			l I	l I	i I
9     Re-cons       10     Construct       11	construct Existing Manhole MH No. S5		Sat 2/1/16	Fri 15/1/16			2/1	15/1					
10     Construct       11	-	7 days	Sat 16/1/16	Fri 22/1/16				16/1 22/1			-   		
11       12     Sewerage (Footpath)       13     Excavate       14     Install se       15     Install se       16     Lay Sew       17     IInfill Gro       18     1       19     Sewerage Bay Road (       20     Install Se       21     Lay Sew       22     IInfill Gro       23     Re-cons       24     Construct       25     CCTV c       26	truct Manhole No. PSST155	24 days	Sat 23/1/16	Mon 15/2/16				23/1			1		
11       12     Sewerage (Footpath)       13     Excavate       14     Install se       15     Install se       16     Lay Sew       17     IInfill Gro       18     1       19     Sewerage Bay Road (       20     Install Se       21     Lay Sew       22     IInfill Gro       23     Re-cons       24     Construct       25     CCTV c       26		30 days						16/2	3				
(Footpath)       13     Excavate       14     Install se       15     Install se       16     Lay Sew       17     IInfill Gro       18     11       19     Sewerage       Bay Road (       20     Install Se       21     Lay Sew       22     IInfill Gro       23     Re-cons       24     Construct       25     CCTV c       26     27       27     Sewerage       28     MH Nos.       29     MH Nos.       30     31											1 		
14     Install set       15     Install set       16     Lay Sew       17     IInfill Gro       18     Install set       19     Sewerage Bay Road (       20     Install Set       21     Lay Sew       22     IInfill Gro       23     Re-cons       24     Construct       25     CCTV c       26	age from MH Nos. PSST151 to PSST155 at University Road ath)-85m long	168 days	Sat 2/1/16	Fri 17/6/16							· · · ·	-     	
15     Install Sr       16     Lay Sew       17     IInfill Gro       18	avate & construct Thurst Pit at MH No. PSST151	30 days	Sat 2/1/16	Sun 31/1/16			2/1	31/1					
16     Lay Sew       17     IInfill Gro       18	all set-up at Thurst Pit at MH No. PSST151	14 days	Mon 1/2/16	Sun 14/2/16				1/2 14/2			-   		
17     IInfill Group       18     Infill Group       19     Sewerage       20     Install Se       21     Lay Sew       22     IInfill Group       23     Re-cons       24     Construct       25     CCTV c       26     27       28     MH Nos.       29     MH Nos.       30     Sewerage       31     Sewerage	all Segmental Sleeve Pipeline	85 days	Mon 15/2/16	Mon 9/5/16				15/2		<mark>9/5</mark>	1	1	
18       19     Sewerage Bay Road I       20     Install St       21     Lay Sew       22     IInfill Gro       23     Re-cons       24     Construct       25     CCTV c       26     27       27     Sewerage Road (Carri       28     MH Nos.       29     MH Nos.       30     31	Sewer Pipeline	25 days	Tue 10/5/16	Fri 3/6/16					10	/5	3/6		
Image: second	I Grout inside Sleeve Pipe	14 days	Sat 4/6/16	Fri 17/6/16						4/	6 17/6		
Bay Road (       20     Install Se       21     Lay Sew       22     IInfill Gro       23     Re-cons       24     Construct       25     CCTV c       26													
21     Lay Sew       22     IInfill Gro       23     Re-cons       24     Construct       25     CCTV c       26	age from MH No. MF1.15 to MH No.PSST151 at Clear Water vad (Footpath)-85m long	202 days	Sat 18/6/16	Thu 5/1/17								 	     
22     IInfill Grd       23     Re-cons       24     Construct       25     CCTV c       26     27       27     Sewerage Road (Carr       28     MH Nos.       29     MH Nos.       30     Sewerage	all Segmental Sleeve Pipeline	85 days	Sat 18/6/16	Sat 10/9/16							18/6		
22 IInfill Gro 23 Re-cons 24 Construct 25 CCTV c 26 27 Sewerage Road (Carr 28 MH Nos. 29 MH Nos. 30 31 Sewerage	Sewer Pipeline	25 days	Sun 11/9/16	Wed 5/10/16							1	1	
23     Re-cons       24     Construct       25     CCTV c       26	I Grout inside Sleeve Pipe	14 days	Thu 6/10/16	Wed 19/10/16							1	1	
24 Construct 25 CCTV c 26 27 Sewerage Road (Carr 28 MH Nos. 29 MH Nos. 30 31 Sewerage	construct Existing Manhole MH No. MF1.15	24 days	Thu 20/10/16	Sat 12/11/16							1		
25 CCTV c 26 27 Sewerage Road (Carr 28 MH Nos. 29 MH Nos. 30 31 Sewerage	struct Manhole No. PSST151	40 days	Sun 13/11/16	Thu 22/12/16	i						 	i I	i I
26 27 Sewerage Road (Carr 28 MH Nos. 29 MH Nos. 30 31 Sewerage	TV of Pipeline (Stage 4)	14 days									1		}
27 Sewerage Road (Carr 28 MH Nos. 29 MH Nos. 30 31 Sewerage	· · · · · · · · · · · · · · · · · · ·							         			 		
29 MH Nos. 30 31 Sewerage	age from MH Nos. PSST149 to PSST147 at Clear Water Bay Carriageway)-93m long	182 days	Mon 9/11/15	Sun 8/5/16							   		
30 31 Sewerage	Nos. PSST149 to PSST148	48 days	Mon 9/11/15	Sat 26/12/15		9/11		6/12			1 		
31 Sewerage	Nos. PSST148 to PSST147	134 days	Sun 27/12/15	Sun 8/5/16			27/12			8/5	'   	1	i I
											1		
	age from MH Nos. PSST147 to PSST140 at Chuk Kok Road eway)-84m long	141 days	Mon 9/5/16	Mon 26/9/16						•	1     	1     	     
32 MH Nos.	Nos. PSST147 to PSST146	108 days	Mon 9/5/16	Wed 24/8/16					9/	5		1	
	Nos. PSST146 to PSST140	33 days		Mon 26/9/16							   		25/8
34	· · · · · · ·										1	1	
35 Sewerage		152 days	Mon 16/11/15	Fri 15/4/16							     	     	
36 MH Nos.	age from MH Nos. PSST140 to PSST135 at Chuk Kok Road eway_180m long	39 days	Mon 16/11/15	Thu 24/12/15		16/11		12			 	 	1
		21 days			i		25/12	<b>14/1</b>			1	1	l I
	eway)_180m long	32 days						15/1			1		
	eway_180m long Nos. PSST140 to PSST139							16/2			- 	- 	
40 MH Nos.	eway)_180m long Nos. PSST140 to PSST139 Nos. PSST139 to PSST138	24 days	Fri 11/3/16			1		11/3	15/4		1	1	I I

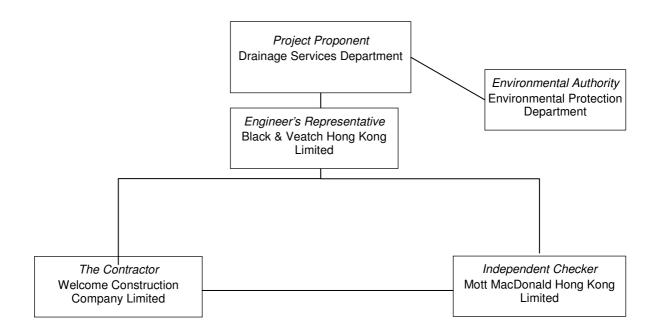


					Welcome Constuction Co Ltd. Contract No. DC/2012/06 Sewerage at Clear Water Bay Road, Pik Shui Sun Tsuen and West of Sai Kung Town Detailed Program for Sewage Works at Clear Water Bay Road, University Road, Chuk Kok Road & Hiram's HYD (Rev. 2)	
ID	Task Name	Duration	Start	Finish	Otr 4, 2015         Otr 1, 2016         Otr 2, 2016           per         October         November         January         February         March         April         May         June	Qtr 3. 2016 July August
41	CCTV Survey of Pipeline (Stage 1)	3 days	Sat 16/4/16	Mon 18/4/16	20/9/27/9/4/10/11/10/8/1/25/1(1/11/8/11/5/1/22/1/29/1/6/12/3/120/127/1/23/1/10/117/1/24/1/31/1/7/2/14/221/228/2/6/3/13/3/20/3/27/3/3/4/10/4/17/4/24/4/1/5/8/5/15/5/22/5/29/5/5/6/12/6/19/6/26/ 16/4 10/4/17/4/24/4/1/5/16/11/5/12/5/12/5/20/127/12/3/1/10/117/1/24/1/31/1/7/2/14/221/228/2/6/3/13/3/20/3/27/3/	6 3/7 10/7 17/7 24/7 31/7 7/8 14/8 21/8 21
42						
43	Sewerage from MH Nos. PSST135 to PSST134 at Chuk Kok Rd near Cheng Chek Chee Secondary School -36m long	35 days	Tue 19/4/16	Mon 23/5/10		
44	MH Nos. PSST135 to PSST134	31 days	Tue 19/4/16	Thu 19/5/16	19/4	
45	CCTV Survey of Pipeline (Stage 2)	4 days	Fri 20/5/16	Mon 23/5/16	20/5 📩 23/5	 
46						
47	Sewerage from MH Nos. PSST146 to PSST141 at Hiram's Highway Slip Road (carriageway) - 157m long	339 days	Mon 23/11/15	Wed 26/10/10		
48	MH Nos. PSST143 to PSST142	47 days	Mon 23/11/15	Fri 8/1/16	23/11 8/1	
49	MH Nos. PSST144 to PSST145	88 days	Sat 9/1/16	Tue 5/4/16	9/1	I I I I
50	MH Nos. PSST145 to PSST144	83 days	Wed 6/4/16	Mon 27/6/16	6/4	27/6
51	MH Nos. PSST146 to PSST145	85 days	Tue 28/6/16	Tue 20/9/16	28/6	
52	MH Nos. PSST142 to PSST141	36 days	Wed 21/9/16	Wed 26/10/16		
53	CCTV Survey of Pipeline (Stage 3)	5 days	Thu 27/10/16	Mon 31/10/16		
54						I I I I
55	Sewerage from MH No. PSST141 to Hirams Villas	5 days	Thu 27/10/16	Mon 31/10/10		
56	Tapping Sewer to MH No. PSST141	5 days	Thu 27/10/16	Mon 31/10/16		
57					I I I I I I I I I I I I I I I I I I I I	I I I I
58	Completion of Sewerage Works	0 days	Thu 5/1/17	Thu 5/1/17		





## Appendix B. Project Organization



Company / Department	Position	Name	Telephone / Mobile
Drainage Services Department	Project Proponent	Mr Chow Sui Ping	2594 7453
Black & Veatch Hong Kong Limited	Engineer's Representative	Mr Eugene Chan	6075 8606
Mott MacDonald Hong Kong Ltd.	Independent Checker	Mr Terence Kong	2828 5919
Welcome Construction Company Limited	Site Agent	Mr Frankie Lui	6021 7973
Welcome Construction Company Limited	Environmental Officer	Mr Jeff Wong	6051 0761

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## Appendix C. Environmental Mitigation Measures- Implementation Status

Table C1:	Construction Noise – Recommended Mitigation Measures	
* PP / ^ EP ref:	Recommended measures	Implementation Status
*5.2.6	<ul> <li>Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction works.</li> </ul>	N/A
	<ul> <li>Machines and plant that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.</li> </ul>	N/A
	• Plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from nearby NSRs.	N/A
	• Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction works.	N/A
	• Mobile plant should be sited as far away from NSRs as possible.	N/A
*5.2.2, 5.2.6	Use of temporary noise barrier, mobile barrier	N/A
*5.2.6	<ul> <li>Material stockpiles and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities</li> </ul>	N/A
*5.2.6	<ul> <li>Noisy construction activities such as road breaking, should be scheduled to less sensitive hours during the day</li> </ul>	N/A
*5.2.6	• Liaise with the affected noise sensitive receivers on the anticipated construction activities, possible impacts, expected duration and communication channel with the project office.	N/A
*5.2.1,*Table 6.1	Adoption of quiet powered mechanical equipment (QPME) during construction	N/A
*5.2.4, ^2.3	<ul> <li>For the sewer works located less than 15 m away from Cheng Chek Chee Secondary School, construction works can only be conducted after school hours or during school breaks. For the sewer works located between 15 m – 30 m away from the School, the contractor should liaise with the school and/or the Examination Authority to ascertain the exact dates and times of all examination periods and to avoid noisy construction activities during these periods.</li> </ul>	N/A

Table C2: Air Quality – Recommended Mitigation Measures

* PP / ^ EP ref:	Recommended measures	Implementation Status
*5.2.8, ^1.2	<ul> <li>Comply with the control measures in the Air Pollution Control (Construction dust) Ordinance.</li> </ul>	N/A
*5.2.8	<ul> <li>Excavated dusty materials should be covered by impervious sheeting or sprayed with water to keep the entire surface wet.</li> </ul>	N/A
*5.2.8	<ul> <li>Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.</li> </ul>	N/A

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Table C3:	Water Quality – Recommended Mitigation Measures	
* PP / ^ EP ref:	Recommended measures	Implementation Status
*5.2.10, * Table 6.1	<ul> <li>Follow the guidelines in ProPECC PN 1/94 "Construction Site Drainage".</li> </ul>	N/A
	<ul> <li>Silt removal facilities should be provided according to the guidelines stipulated in EPD's ProPECC PN 1/94.</li> </ul>	N/A
	Cover open stockpiles of construction materials with tarpaulin or similar fabric during rainstorms.	N/A

Table C4:	Waste Management – Recommended Mitigation Measures	
* PP / ^ EP ref:	Recommended measures	Implementation Status
*5.2.12, *Table 6.1	<ul> <li>Sort all C&amp;D materials and waste into different categories for reuse on site, recycling and disposal at designated public fill reception facilities or landfills.</li> </ul>	N/A
	<ul> <li>C&amp;D material and excavated materials should be reused on-site as fill material as far as possible.</li> </ul>	N/A
	<ul> <li>Disposal of C&amp;D materials should be managed through the trip ticket system for disposal of C&amp;D materials.</li> </ul>	N/A
*5.2.12	<ul> <li>All Chemical waste should be handled, stored and disposed of in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.</li> </ul>	N/A

Table C5:	Landscape and Visual Impact – Recommended Mitigation Measures	
* PP / ^ EP ref:	Recommended measures	Implementation Status
*5.2.14, *Table 6.2	<ul> <li>Retain and protect existing trees near works site.</li> </ul>	N/A
	<ul> <li>Erect site hoarding compatible with the surrounding environment for the pumping station works area</li> </ul>	N/A
	<ul> <li>Maintain site cleanliness and tidiness in accordance with the requirements stipulated in DEVB TCW No. 8/2010.</li> </ul>	N/A
	<ul> <li>Properly manage construction waste in the works area.</li> </ul>	N/A
	Minimize the number and size of temporary works area.	N/A
	<ul> <li>Promptly reinstate each section of the trench upon completion of the sewer works.</li> </ul>	N/A
	<ul> <li>Control of night-time security lightning to minimize night-time glare to nearby village.</li> </ul>	N/A

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Table C6:	Others	
* PP / ^ EP ref:	Recommended measures	Implementation Status
^1.5	<ul> <li>A copy of the valid Environmental Permit shall be displayed conspicuously on the Project site(s) at all vehicular site entrances/exits or at a convenient location for public information at all times. The most updated information about the Permit, including any amended Permit, shall be displayed at such locations. If the Permit Holder surrenders a part or whole of the Permit, the notice he send to the Director shall also be displayed at the same locations as the original Permit. The suspended, varied or cancelled Permit shall be removed from display at the Project site(s).</li> </ul>	N/A
n/a	The required licenses should be obtained by the Contractor (including CNP (if any), WPCO license, etc.)	✓

#### Legend:

$\checkmark$	Implemented
×	Not implemented
Р	Partially implemented
N/A	Not applicable
N/O	Not observed



## Appendix D- Waste Flow Table

#### Monthly Summary Waste Flow Table for August 2015

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 <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
Yr 2013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Yr 2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Yr 2015											
Jan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mar	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Apr	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
May	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jun	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sub-total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
July	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Aug	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sep											
Oct											
Nov											
Dec											
total											



# Appendix E- Cumulative statistics on complaints, notifications of summons and successful prosecutions

Cumulative statistics for complaints, notifications of summons and successful prosecutions for the Project account for period starting from the date of commencement of construction works (i.e. 26 August 2013) to the end of the reporting month and are summarized in the **Table E1** below.

Reporting Period	Cumulative Statistics					
	Complaints	Notifications of summons	Successful prosecutions			
This reporting month	0	0	0			
From 26 August 2013 to end of the reporting month	0	0	0			



