

JOB NO.: TCS00310/06

VERSION NO.: 1

**DRAINAGE SERVICES DEPARTMENT
 CONTRACT NO.: DC/2005/02**

**CONSTRUCTION OF SEWERS, RISING MAINS &
 SEWAGE PUMPING STATION AT KAM TIN, NAM
 SANG WAI AND AU TAU IN YUEN LONG**

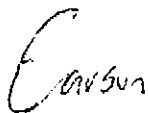
**MONTHLY ENVIRONMENTAL MONITORING &
 AUDIT (EM&A) REPORT FOR SEPTEMBER 2009
 (NO. 42) (DESIGNATED ELEMENTS)**

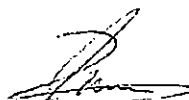
**PREPARED FOR
 LEADER CIVIL ENGINEERING CORPORATION
 LIMITED**

Quality Index

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Version No.	Date	Remarks
I	8 October 2009	First Submission

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EXECUTIVE SUMMARY

- ES01. Leader Civil Engineering Corporation Limited (the Contractor) has been awarded the DSD Contract DC/2005/02 Construction of Sewers, Rising Mains and Sewage Pumping Station at Kam Tin, Nam Sang Wai and Au Tau in Yuen Long (the Project). The Project requires an Environmental Monitoring and Audit (EM&A) program to be implemented by an Environmental Team (ET) throughout the contract period in compliance with the requirements as stated in the project Environmental Permit (EP-220/2005) and the Project's Updated EM&A (Designated Elements) Manual.
- ES02. This Monthly Environmental Monitoring and Audit (EM&A) Report for **September 2009 (No. 42)** presents the environmental impact monitoring and audit (EM&A) program conducted from **1 to 30 September 2009** for the Designated Elements. The EM&A program in **September 2009** covered air quality, construction noise and waste management only.

BREACH OF ACTION AND LIMIT (AL) LEVELS

- ES03. No 24-hour TSP monitoring result that triggered the Action or Limit Level was recorded in this month.
- ES04. No construction noise complaint (Action Level) or exceeded the Limit Level was recorded in this month.

COMPLAINT LOG

- ES05. No environmental complaint was received in this month.

NOTIFICATION OF ANY SUMMONS AND SUCCESSFUL PROSECUTION

- ES06. There was no environmental summons or prosecution in this month.

REPORTING CHANGES

- ES07. There are no changes in the reporting format or content in this month.

FUTURE KEY ISSUES

- ES08. Construction activities to be undertaken in **October 2009** include sheet piling, excavation, pipe laying, backfilling, concreting and extract sheet pile. Potential environmental impacts arising from the works include construction waste, air quality, noise and water quality (particularly site runoff during rainy seasons). Environmental mitigation measures will be properly implemented and maintained as per the Mitigation Implementation Schedule to ensure site environmental performance is acceptable.

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1.0 BASIC PROJECT INFORMATION

- 1.01 Leader Civil Engineering Corporation Ltd (the Contractor) has been awarded the DSD Contract DC/2005/02 Construction of Sewers, Rising Mains and Sewage Pumping Station at Kam Tin, Nam Sang Wai and Au Tau in Yuen Long (the Project). The Project is part of the Yuen Long and Kam Tin Sewerage and Sewage Disposal (YLKTSSD) Scheme. A site layout map showing the site boundary and the work areas is shown in [Annex A](#).
- 1.02 This [Monthly EM&A Report for September 2009 \(No. 42\)](#) (Designated Elements – Construction Phase) summarizes the impact monitoring results and audit findings from **1 to 30 September 2009**.

PROJECT ORGANIZATION

- 1.03 The organization chart and lines of communication with respect to the on-site environmental management and monitoring program are shown in [Annex B](#).

CONSTRUCTION PROGRAM OF THIS MONTH

- 1.04 A construction program showing the construction work undertaken in this month is shown in [Annex C](#). Environmental mitigation measures implemented are given in [Table 2-1](#).

MANAGEMENT STRUCTURE

- 1.05 The management structure of the Project is provided in [Annex B](#).

CONSTRUCTION ACTIVITIES UNDERTAKEN IN THIS MONTH

- 1.06 The major construction activities undertaken during this month under the Environmental Permit (EP-220/2005) were as follows:-

Kam Tin Pumping Station (P1)

- Sheet piling
- Excavation

Sha Po Pumping Station (P2)

- Sheet piling
- Excavation
- Backfilling
- Concreting

Nam Sang Wai Pumping Station (P3)

- Backfilling
- Concreting

Nam Sang Wai Road (S4)

- Sheet piling
- Excavation
- Pipe laying
- Backfilling
- Concreting
- Extract sheet pile

Pok Wai South Road (S5 and S6)

- Sheet piling
- Excavation
- Pipe laying
- Backfilling
- Concreting
- Extract sheet pile

2.0 ENVIRONMENTAL STATUS

WORKS UNDERTAKEN IN THIS MONTH

2.01 A summary of the works undertaken in this month with illustrations and environmental mitigation measures implemented is shown in [Table 2-1](#).

Table 2-1 Work Undertaken and Illustrations of Mitigation Measures

Locations	Description of Construction Activities	Environmental Mitigation Measures	EM&A Ref.
P1 (Kam Tin Pumping Station)	<ul style="list-style-type: none"> ● Pipe jacking ● Excavation 	<ul style="list-style-type: none"> • Erect 2.4m high noise barrier hoarding around the works area at P1, P2 and P3 • Remove dust and spray water at the construction access • Cover the stockpiles of dusty material properly • Spray water to all dusty materials immediately before loading and unloading 	A1 & F6 A2 A3 A4
P2 (Sha Po Pumping Station) and	<ul style="list-style-type: none"> ● Sheet piling ● Excavation ● Backfilling ● Concreting 	<ul style="list-style-type: none"> • Erect 2.4m high noise barrier hoarding around the works area at P1, P2 and P3 • Remove dust and spray water at the construction access • Cover the stockpiles of dusty material properly • Spray water to all dusty materials immediately before loading and unloading 	A1 & F6 A2 A3 A4
P3 (Nam Sang Wai Pumping Station)	<ul style="list-style-type: none"> ● Backfilling ● Concreting 	<ul style="list-style-type: none"> • Erect 2.4m high noise barrier hoarding around the works area at P1, P2 and P3 • Wash the wheels of vehicles before leaving the site • Install and use power-operated cover at the dump trucks • Spray water at the pavement breaking locations • Spray the working area of excavation frequently • Maximize the use of quiet PME on site • Apply and obtain appropriate waste disposal licenses 	A1 & F6 A5 A6 A7 A8 B1, B2 & F5 D1
S4 (Nam Sang Wai Road) and	<ul style="list-style-type: none"> ● Sheet piling ● Excavation ● Pipe laying ● Backfilling ● Concreting ● Extract sheet pile 	<ul style="list-style-type: none"> • Remove dust and spray water at the construction access • Cover the stockpiles of dusty material properly • Spray water to all dusty materials immediately before loading and unloading • Wash the wheels of vehicles before leaving the site 	A2 A3 A4 A5
S5 & S6 (Pok Wai South Road)	<ul style="list-style-type: none"> ● Sheet piling ● Excavation ● Pipe laying ● Backfilling ● Concreting ● Extract sheet pile 	<ul style="list-style-type: none"> • Handle, store and dispose of chemical wastes as per relevant regulations • Implement trip-ticket system for waste disposal • Restrict open fires and provide fire fighting equipment in the works area • Perform weekly inspection with ET and monthly audit with IEC • Conduct noise and dust monitoring as per EM&A Manual during construction • Provide sedimentation tanks for treating site discharge. • Recycle wheel washing water and provide sedimentation tanks for treating site discharge. 	D2, D3 & D4 D5 F9 H1 I1 & I2 - -

2.02 Photographic records showing the implemented 2.4m high noise barrier at the pumping station (S3) are shown in [Annex D](#).

PROJECT DRAWINGS

2.03 Drawings showing the work areas under EP-220/2005 and the locations of the designated monitoring stations are presented in [Annex E](#).

- 2.04 There are four designated air quality monitoring stations (AM1, AM5, AM6 & AM7) and four noise monitoring stations (NM3, NM4, NM6 & NM7) under the project EP. Locations of the monitoring stations and description are summarized in [Table 2-2](#).

Table 2-2 Description of the Monitoring Stations

Station ID	Nature of Premise	Site Work Description	Station Coordinates	
			Northern	Eastern
AM1	Site Boundary in NSW	Excavation; Sheet piling; Backfilling; Pipe laying; Concreting; and Extract sheet pile	835829	822910
AM5	Site Boundary in FKH		835121	823515
AM6	Site Boundary in KT		833308	823987
AM7	Site Boundary in NSW		836171	822586
NM3	Village House in NSW		835808	822817
NM4	Village House in NSW		835282	822811
NM6	Village House in KT		833288	823999
NM7	Village House in FKH		835121	823495

3.0 SUMMARY OF EM&A REQUIREMENTS

MONITORING PARAMETERS

- 3.01 Environmental monitoring and audit requirements are set out in the Updated EM&A Manual. Air quality and construction noise have been identified as the key monitoring parameters during the construction phase of the project.
- 3.02 A summary of the impact EM&A requirements for air quality and construction noise is shown in [Table 3-1](#).

Table 3-1 Summary of EM&A Requirements

Environmental Aspect	Monitoring Parameters
Air Quality	24-hour TSP
Construction Noise	Leq 30min day time 07:00 to 19:00 (Supplementary L10 and L90 for reference.)

ENVIRONMENTAL QUALITY PERFORMANCE LIMITS

- 3.03 A summary of the Action/Limit (A/L) Levels for air quality and construction noise is shown in [Tables 3-2](#) and [3-3](#).

Table 3-2 Action and Limit Levels for Air Quality

Monitoring Locations	Action Level ($\mu\text{g}/\text{m}^3$)		Limit Level ($\mu\text{g}/\text{m}^3$)	
	1-hour TSP	24-hour TSP	1-hour TSP	24-hour TSP
AM1	> 391	> 184	> 500	> 260
AM5	> 353	> 237	> 500	> 260
AM6	> 329	> 183	> 500	> 260
AM7	> 383	> 204	> 500	> 260

Table 3-3 Action and Limit Levels for Construction Noise

Monitoring Period	Action Level	Limit Level
0700-1900 hours on normal weekdays	When one or more documented complaints are received	> 75 dB(A)

EVENT AND ACTION PLANS

- 3.04 An Event Action Plan for air quality and construction noise has been implemented for this project. Details of the Event Action Plan are presented in [Annex F](#).

ENVIRONMENTAL MITIGATION MEASURES

- 3.05 The project EIA report has recommended environmental mitigation measures to minimize potential environmental impacts arising from the construction of the project. A full list of the mitigation measures is detailed in [Annex G](#).

ENVIRONMENTAL REQUIREMENTS IN CONTRACT DOCUMENTS

- 3.06 The environmental requirements in the contract documents generally refer to the compliance of the requirements as stipulated in the project EP (EP-220/2005) and the updated EM&A Manual.

4.0 IMPLEMENTATION STATUS

- 4.01 The implementation status of environmental protection and pollution control/mitigation measures as recommended in the project EIA report are summarized in [Table 2-1](#) and the implementation schedule as shown in [Annex G](#).
- 4.02 The status of permits, licenses, and/or notifications related to environmental protection under this Project during the month is presented in [Table 4-1](#).

Table 4-1 Status of Environmental Licenses and Permits

Items	Item Description	License/Permit Status
1	Environmental Permit No.: EP-220/2005	Issued in June 2005
2	Air Pollution Control (Construction Dust)	Notified EPD on 24 Dec 2005
3	Chemical Waste Producer Registration (No. 5213-528-L2544-08)	Registration on 27 Jan 2006
4	Water Pollution Control (Discharge License No. 1U434/1)	Issued on 8 May 2006
5	Account for Disposal of Construction Waste No. 5004959	Registration on 27 Dec 2005

5.0 MONITORING RESULTS

MONITORING METHODOLOGY OF AIR QUALITY MONITORING

- 5.01 The 24-hour TSP monitoring was carried out by a High Volume Air Sampler (HVAS) in compliance with the updated EM&A Manual. The HVAS employed complies with the PS specifications including.
- Power supply of 220v/50 Hz for 24-hour continuous operation;
 - 0.6-1.7m³/min (20-60 SCFM) adjustable flow rate;
 - A 7-day mechanical timer for 24-hour operation;
 - An elapsed time indicator with ± 2 minutes accuracy for 24-hour operation;
 - Minimum exposed area of 63in²;
 - Flow control accuracy of $\pm 2.5\%$ deviation over 24-hour operation;
 - An anodized aluminum shelter to protect the filter and sampler;
 - A motor speed-voltage control to control mass flow rate with accuracy of $\pm 2.5\%$ deviation over 24-hour sampling period;
 - Provision of a flow recorder for continuous monitoring;
 - Provision of a peaked roof inlet;
 - Incorporation with a manometer; and
 - An 8"x10" stainless steel filter holder to hold, seal and easy to change the filter paper.
- 5.02 The filter papers used in 24-hour TSP monitoring were of size 8"x10" and provided by a local HOKLAS-accredited laboratory, ALS Techichem Pty (HK) Limited (HOKLAS No. 66). The filters papers after measurements were returned to the laboratory for the required treatment and analysis. The validation of all monitoring practices and data were following the in-house QA/QC procedures. Blank filters samples were collected and delivered to the HOKLAS-accredited laboratory for QA/QC check.
- 5.03 The meteorological information in this month was obtained from Lau Fau Shan Station of the Hong Kong Observatory (HKO).

METHODOLOGY FOR CONSTRUCTION NOISE MONITORING

- 5.04 Noise measurements were taken in terms of the A-weighted equivalent sound pressure level (Leq) measured in decibels (dB). Supplementary statistical results (L₁₀ and L₉₀) were also obtained for reference.
- 5.05 Hand-held sound level meters and associated acoustical calibrators in compliance with the International Electrotechnical Commission (IEC) Publication 651:1979 (Type 1) and 804:1985 (Type 1) specifications were used for taking the baseline noise measurements.
- 5.06 Windshield was fitted in all measurements. All noise measurements were made with the meter set to FAST response and on the A-weighted equivalent continuous sound pressure level (Leq).
- 5.07 No noise measurement was made in the presence of fog, rain, wind with a steady speed exceeding 5m/s or wind with gusts exceeding 10m/s.

LABORATORY AND MONITORING EQUIPMENT USED

- 5.08 A local HOKLAS-accredited laboratory, ALS Technichem (HK) Pty Ltd (HOKLAS No. 66), is responsible for the analytical testing of the 24-hour TSP filter papers.
- 5.09 Monitoring equipment used in the impact EM&A program is presented in [Table 5-1](#).

Table 5-1 Monitoring Equipment Used in Impact EM&A Program

Env. Aspect	Parameters	Monitoring Equipment
Air Quality	24-hour TSP	Greasby Anderson GMWS2310 High Volume Air Sampler
Noise	Leq(30mins)	B&K Sound Level Meter (Type 2238) and Acoustics Calibrator (Type 4231)

EQUIPMENT CALIBRATION

- 5.10 Initial calibration of the HVAS was performed upon installation and thereafter at a six month intervals in accordance with the manufacturer's instruction using the NIST-certified standard calibrator (Tisch Calibration Kit Model TE-5025A). The calibration data are properly documented and the records are maintained by ET for future reference. HVAS of AM5 and AM6 was required calibration in this month, HVAS of AM5 and AM6 monitoring equipment required to calibrate in next month. Updated calibration certificate and schedule is shown in **Annex H**.
- 5.11 The sound level meters were calibrated using an acoustical calibrator prior to and after measurements. The meters are regularly calibrated in accordance with the manufacturer's instructions. Prior to and following each noise measurement, the accuracy of the sound level meter was checked using an acoustical calibrator generating a known sound pressure level at a known frequency. Measurements were considered valid only if the calibration levels before and after the noise measurement agree to within 1.0 dB.
- 5.12 Calibration certificates of the sound level meters will provide depend on the annual calibration had undertaken.

PARAMETERS MONITORED

- 5.13 The environmental parameters monitoring in this month were compliance with the monitoring requirements as in **Table 3-1**.

MONITORING LOCATIONS

- 5.14 There are four designated air quality and four noise monitoring stations under the project EP. For this month, monitoring was carried out at four designated air (AM1, AM5, AM6 & AM7) and four noise (NM3, NM4, NM6 & NM7) monitoring stations. The locations of the designated monitoring stations are shown in **Table 5-2** and geographically in **Annex E**.

Table 5-2 Location of Air Quality and Construction Noise Monitoring Stations/Locations

Air Quality (4 Stations)	
AM1	Worksite boundary facing scattered house in Nam Sang Wai
AM5	Worksite boundary facing Fung Kat Heung
AM6	Worksite boundary facing scattered near Route 3
AM7	Worksite boundary facing scattered house in Nam Sang Wai
Construction Noise (4 Locations)	
NM3	Village House in Nam Sang Wai
NM4	Village House in Nam Sang Wai
NM6	Scattered House near Route 3
NM7	Fung Kat Heung

MONITORING FREQUENCY AND PERIOD

- 5.15 The impact 24-hour TSP monitoring was conducted at the designated stations once every 6 days in compliance with the updated EM&A Manual. In this month, **20** monitoring events of 24-hour TSP monitoring were conducted.

5.16 The impact noise monitoring was conducted at the designated stations once every 6 normal working days in compliance with the updated EM&A Manual. Total of 20 monitoring events were carried out in this month.

MONITORING RESULTS AND SCHEDULE

5.17 Monitoring results in this month for air quality and construction noise were summarized at Tables 5-3 to 5-7.

5.18 No exceedances of air quality monitoring were recorded in this reporting month. Power failure occurred at Location AM1 on 3, 9 and 26 September 2009. Due to the power supply has not yet rectified, thus no subsequent monitoring would be made until further notification from the Contractor.

Table 5-3 Summary of Air Quality Monitoring Results

Date	24-hour TSP ($\mu\text{g}/\text{m}^3$)			
	AM1	AM5	AM6	AM7
3-Sep-09	#Power failure	155	53	80
9-Sep-09	#Power failure	128	60	52
15-Sep-09	65	168	42	41
21-Sep-09	83	120	79	54
26-Sep-09	#Power failure	185	40	14
Average (Range)	74 (65-83)	151 (120-185)	55 (40-79)	48 (14-80)
Action / Limit	> 184 / >260	> 237 / >260	> 183 / >260	> 204 / >260

Note: All 24-hour TSP monitoring were preset to start at 00:00 on each monitoring date.

* Monitoring date for made up the lost sample.

Monitoring was affected due to power failure.

5.19 No construction noise complaint (Action Level) was received and no construction noise monitoring above the Limit Level was recorded in this month. Noise monitoring was cancelled due to the heavy rain condition on 16 September 2009.

Table 5-4 Summary of Noise Monitoring Results at NM3

Date	Start Time	1st Leq5	2nd Leq5	3rd Leq5	4th Leq5	5th Leq5	6th Leq5	Leq30	Corrected* Leq30
04-Sep-09	10:05	46.7	47.8	51.1	45.8	46.2	46.5	47.8	50.8
10-Sep-09	14:35	58.6	59.3	57.5	60.7	59.9	60.3	59.5	62.5
#16-Sep-09	-	-	-	-	-	-	-	-	-
22-Sep-09	15:00	53.4	54.6	56.4	52.4	55.9	54.9	54.8	57.8
28-Sep-09	09:15	62.6	63.4	62.7	63.2	62.4	62.7	62.8	65.8
Limit Level									75

Note: * A façade correction of +3 dB(A) has been added according to acoustical principles and EPD guidelines.

Noise monitoring for 16 September 2009 was cancelled due to heavy rain condition.

Table 5-5 Summary of Noise Monitoring Results at NM4

Date	Start Time	1st Leq5	2nd Leq5	3rd Leq5	4th Leq5	5th Leq5	6th Leq5	Leq30	Corrected* Leq30
04-Sep-09	11:30	47.1	49.2	50.9	47.3	47.9	46.6	48.4	51.4
10-Sep-09	11:30	59.9	62.4	59.8	62.2	59.4	63.1	61.4	64.4
#16-Sep-09	-	-	-	-	-	-	-	-	-
22-Sep-09	11:30	62.0	61.4	63.6	59.4	62.4	65.7	62.9	65.9
28-Sep-09	11:20	56.9	57.8	57.2	57.9	57.6	56.4	57.3	60.3
Limit Level									75

Note: * A façade correction of +3 dB(A) has been added according to acoustical principles and EPD guidelines.

Noise monitoring for 16 September 2009 was cancelled due to heavy rain condition.

Table 5-6 Summary of Noise Monitoring Results at NM6

Date	Start Time	1st Leq5	2nd Leq5	3rd Leq5	4th Leq5	5th Leq5	6th Leq5	Leq30
04-Sep-09	11:29	53.9	53.5	54.2	53.3	53.3	54.7	53.8
10-Sep-09	11:27	56.3	54.8	55.5	55.0	54.6	54.1	55.1
#16-Sep-09	-	-	-	-	-	-	-	-
22-Sep-09	11:27	60.3	59.0	58.6	56.4	58.9	60.3	59.1
28-Sep-09	11:26	59.1	60.4	60.9	61.0	60.7	61.4	60.6
Limit Level								75

Note: * Noise monitoring was undertaken at the façade, correction was not necessary.
Noise monitoring for 16 September 2009 was cancelled due to heavy rain condition.

Table 5-7 Summary of Noise Monitoring Results at NM7

Date	Start Time	1st Leq5	2nd Leq5	3rd Leq5	4th Leq5	5th Leq5	6th Leq5	Leq30
04-Sep-09	10:30	60.4	61.2	60.8	61.7	60.5	58.9	60.7
10-Sep-09	02:24	50.1	51.5	48.6	47.4	52.5	51.1	50.5
#16-Sep-09	-	-	-	-	-	-	-	-
22-Sep-09	09:20	53.2	51.7	56.1	49.7	52.4	51.9	53.0
28-Sep-09	10:00	56.7	57.4	57.2	56.2	56.8	57.2	56.9
Limit Level								75

Note: * Noise monitoring was undertaken at the façade, correction was not necessary.
Noise monitoring for 16 September 2009 was cancelled due to heavy rain condition.

5.20 The tentative monitoring schedule for the coming month (**October 2009**) is shown in **Table 5-8**.

Table 5-8 Tentative Schedule of Monitoring for Next Month

Date	Air Quality	Noise Leq 30min
Thu 1-Oct-09		
Fri 2-Oct-09		
Sat 3-Oct-09		
Sun 4-Oct-09		
Mon 5-Oct-09		
Tue 6-Oct-09		
Wed 7-Oct-09		
Thu 8-Oct-09		
Fri 9-Oct-09		
Sat 10-Oct-09		
Sun 11-Oct-09		
Mon 12-Oct-09		
Tue 13-Oct-09		
Wed 14-Oct-09		
Thu 15-Oct-09		
Fri 16-Oct-09		
Sat 17-Oct-09		
Sun 18-Oct-09		
Mon 19-Oct-09		
Tue 20-Oct-09		
Wed 21-Oct-09		
Thu 22-Oct-09		
Fri 23-Oct-09		
Sat 24-Oct-09		
Sun 25-Oct-09		
Mon 26-Oct-09		
Tue 27-Oct-09		
Wed 28-Oct-09		

Thu	29-Oct-09		
Fri	30-Oct-09		
Sat	31-Oct-09		

	Monitoring Day
	Sunday or Public

WEATHER CONDITIONS DURING THE MONITORING MONTH

5.21 The meteorological data during the monitoring date are summarized in [Annex I](#).

GRAPHICAL PLOTS OF TRENDS OF MONITORED PARAMETERS

5.22 The graphical plots of air quality and construction noise monitoring data are presented in [Annex J](#).

WEATHER CONDITIONS THAT AFFECT THE MONITORING RESULTS

5.23 The weather conditions during monitoring were considered acceptable for monitoring activities and did not have significant impact on the monitoring results obtained.

OTHER FACTORS INFLUENCING THE MONITORING RESULTS

5.24 There were no other noticeable external factors generally affecting the monitoring results in this month.

QA/QC RESULTS AND DETECTION LIMITS

5.25 Not applicable.

6.0 REPORT ON NON-COMPLIANCE, COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS

RECORD OF NON-COMPLIANCE OF ACTION AND LIMIT LEVELS

- 6.01 No exceedance of air quality monitoring and dust complaint was recorded in this reporting month.
- 6.02 No construction noise complaint (Action Level) or monitoring noise level exceeding the Limit Level was recorded in this reporting month.

RECORD OF ENVIRONMENTAL COMPLAINTS RECEIVED

- 6.03 There was no environmental complaint received in this month.

RECORD OF NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTION

- 6.04 There was no notification of summons or prosecution received in this month.

REVIEW OF REASONS FOR AND IMPLICATIONS OF NC, COMPLAINTS AND NOS

- 6.05 No complaints or notification of summons was received in this month.

DESCRIPTION OF FOLLOW-UP ACTIONS TAKEN

- 6.06 As mention in Section 6.05, no non-compliance, complaints or notification of symmons was received in this month. Therefore, no follow-up action was needed. The Contractor was reminded to implement the environmental mitigation measures as present in [Table 2-1](#) as necessary.

7.0 OTHERS

FUTURE KEY ISSUES

- 7.01 Construction activities to be undertaken in **October 2009** include sheet piling, excavation, pipe laying, backfilling, concreting and extract sheet pile. Potential environmental impacts arising from the works include construction waste, air quality, noise and water quality (particularly site runoff during rainy seasons). Environmental mitigation measures will be properly implemented and maintained as per the Mitigation Implementation Schedule to ensure site environmental performance is acceptable.

SOLID AND LIQUID WASTE MANAGEMENT STATUS

- 7.02 The quantities of waste for disposal or reuse in this month are summarized in **Tables 7-1** and **7-2**.

Table 7-1 Summary of Waste Quantities for Disposal

Type of Waste	Quantity	Disposal Location
C&D Materials (Inert) (tons) – Disposed	3.159	Tuen Mun 38 Fill Bank
C&D Materials (Inert) (tons) – Reused	0	DSD Contract DC/2005/02
C&D Materials (Non-Inert) (tons)	0	NA
Chemical Waste (Litres)	0	NA
General Refuse (tons)	0.062	Refuse Collector

Table 7-2 Summary of Waste Quantities for Reuse/Recycling

Type of Waste	Quantity	Disposal Location
Metals for Recycling (kg)	7.13	NA
Paper for Recycling (kg)	0	NA
Plastics for Recycling (kg)	0	NA

- 7.03 There was no site effluent discharged but an estimated volume of less than 50m³ of surface runoff was discharged in the month. The sampling of effluent had been carried out by the Contractor in compliance with the Discharge License (No.1U434/1) requirement in this month.

SUBMISSION OF PROFORMA

- 7.04 Representatives of the Engineer, the Contractor and ET carried out regular weekly site inspection on **1, 8, 17, 22 and 29 September 2009** to evaluate the site environmental performance. No non-compliance was found in this month. **8** observations were recorded from the ET weekly site inspections. **3** observations were recorded on 1 September 2009; **2** observations were recorded on 8 September 2009; **2** observations were recorded on 22 September 2009 and **1** observation was found on 29 September 2009 during the regular weekly site inspections. The monthly site audit by the IEC for **September 2009** was undertaken on **22 September 2009**. No non-compliance but **2** observations were indicated by IEC.
- 7.05 Records of the weekly site inspection and joint IEC site audit are presented in **Annex K**.

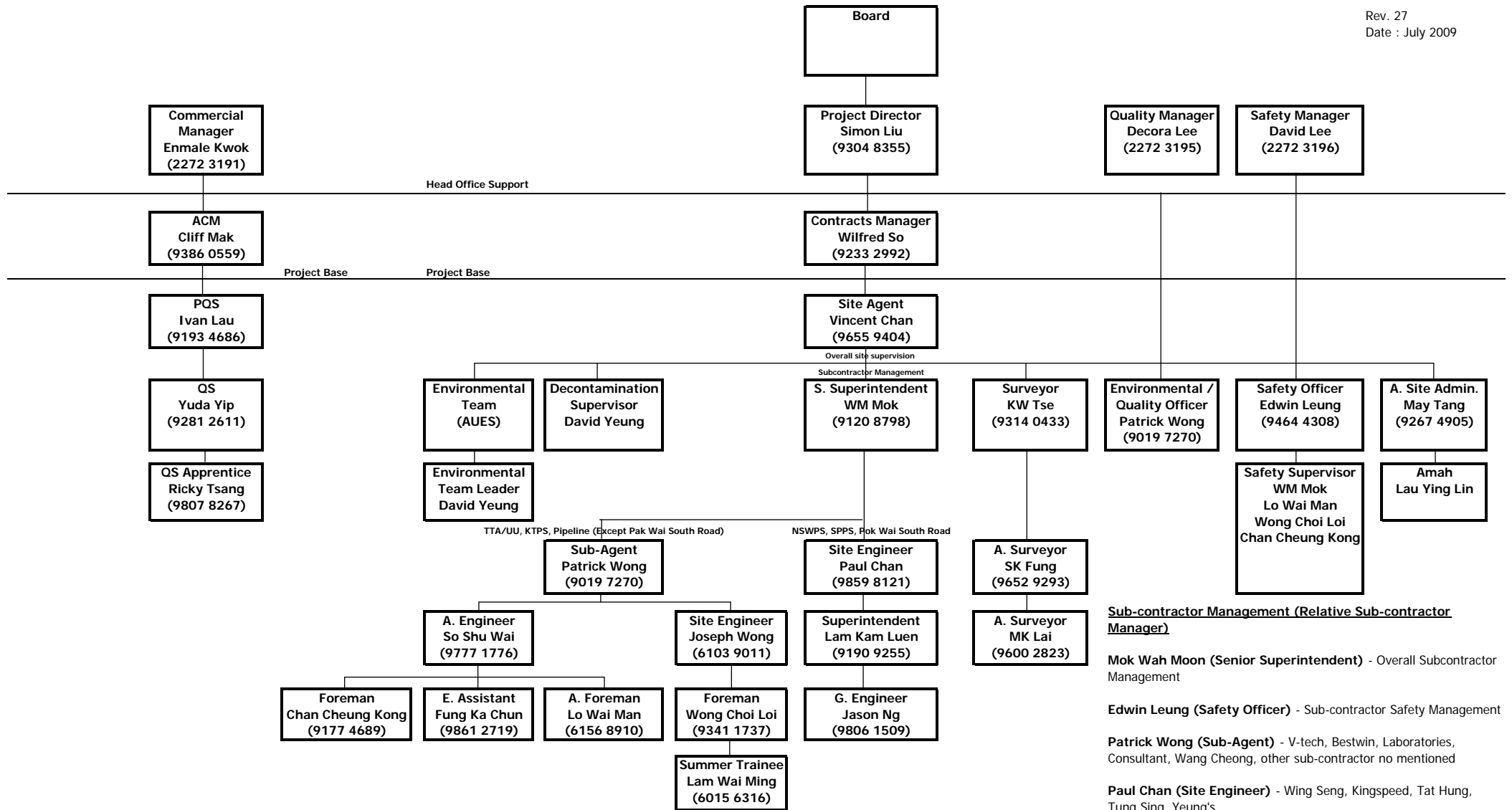
ANNEX A
PROJECT SITE LAYOUT

ANNEX B

PROJECT ORGANIZATION AND MANAGEMENT STRUCTURE

DSD Contract No. DC/2005/02
Construction of Sewers, Rising Mains and Sewage Pumping Station at Kam Tin
Nam Sang Wai and Au Tau in Yuen Long
Contractor's Site Organization Chart

Rev. 27
 Date : July 2009



Sub-contractor Management (Relative Sub-contractor Manager)

Mok Wah Moon (Senior Superintendent) - Overall Subcontractor Management

Edwin Leung (Safety Officer) - Sub-contractor Safety Management

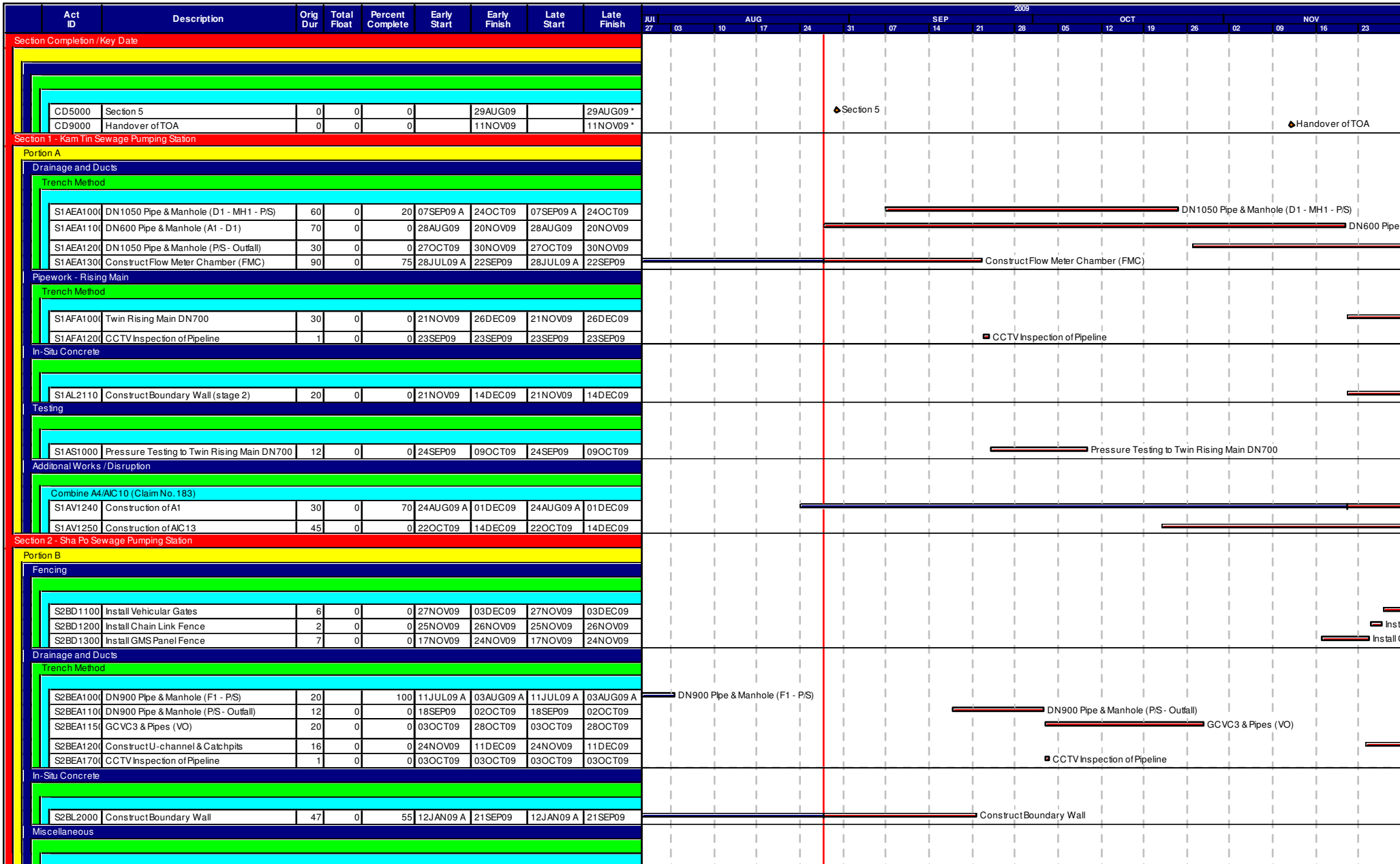
Patrick Wong (Sub-Agent) - V-tech, Bestwin, Laboratories, Consultant, Wang Cheong, other sub-contractor no mentioned

Paul Chan (Site Engineer) - Wing Seng, Kingspeed, Tat Hung, Tung Sing, Yeung's

Joseph Wong (Site Engineer) - Fairmax, Harvest. Pegasus

ANNEX C

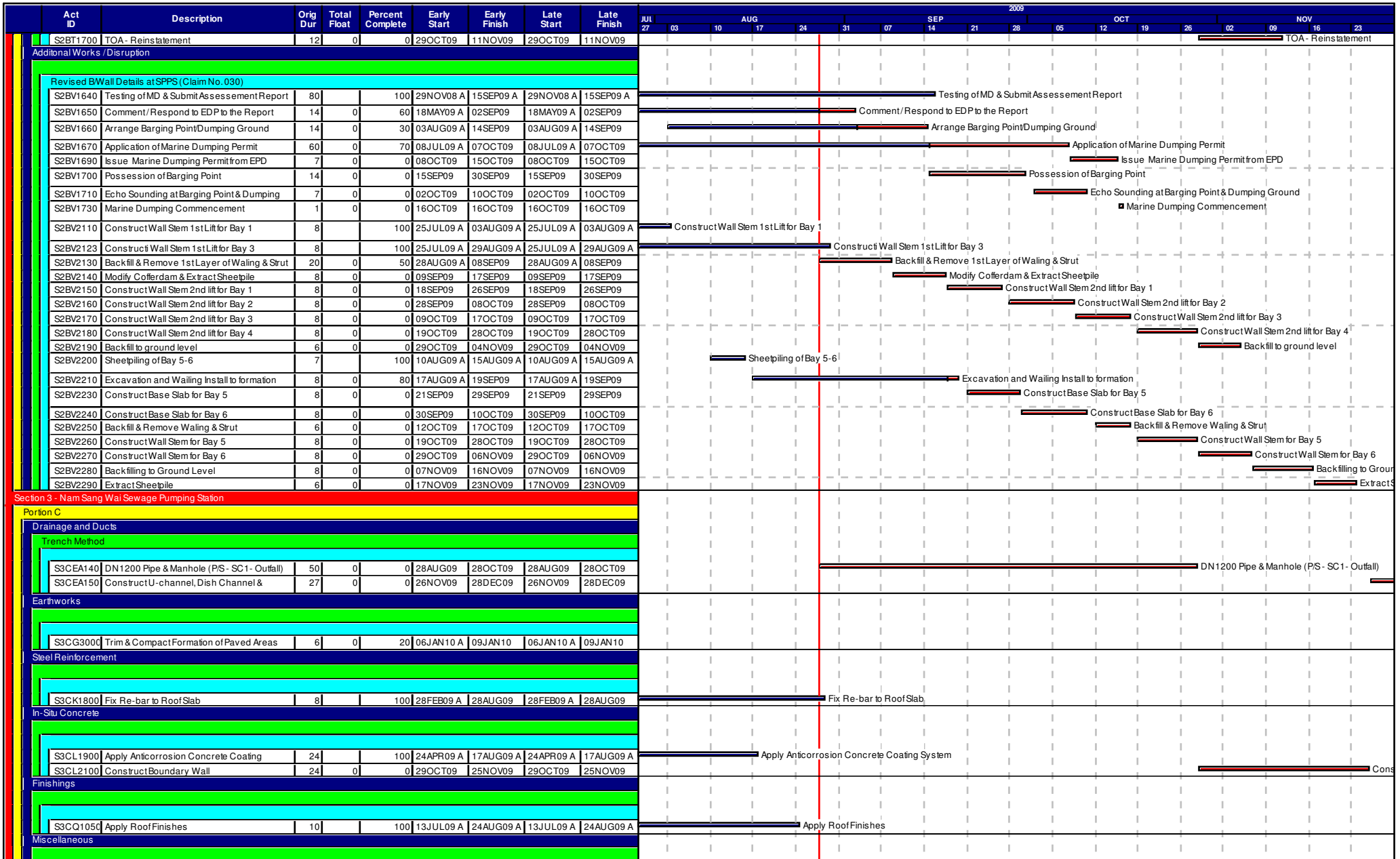
CONSTRUCTION PROGRAM



Start date	19DEC05
Finish date	25JAN11
Data date	28AUG09
Page number	1A
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Leader Civil Engineering Corp. Ltd.
DSD Contract No. DC/2005/02
3-Month Rolling Programme - 3M01 at 29 AUG 2009

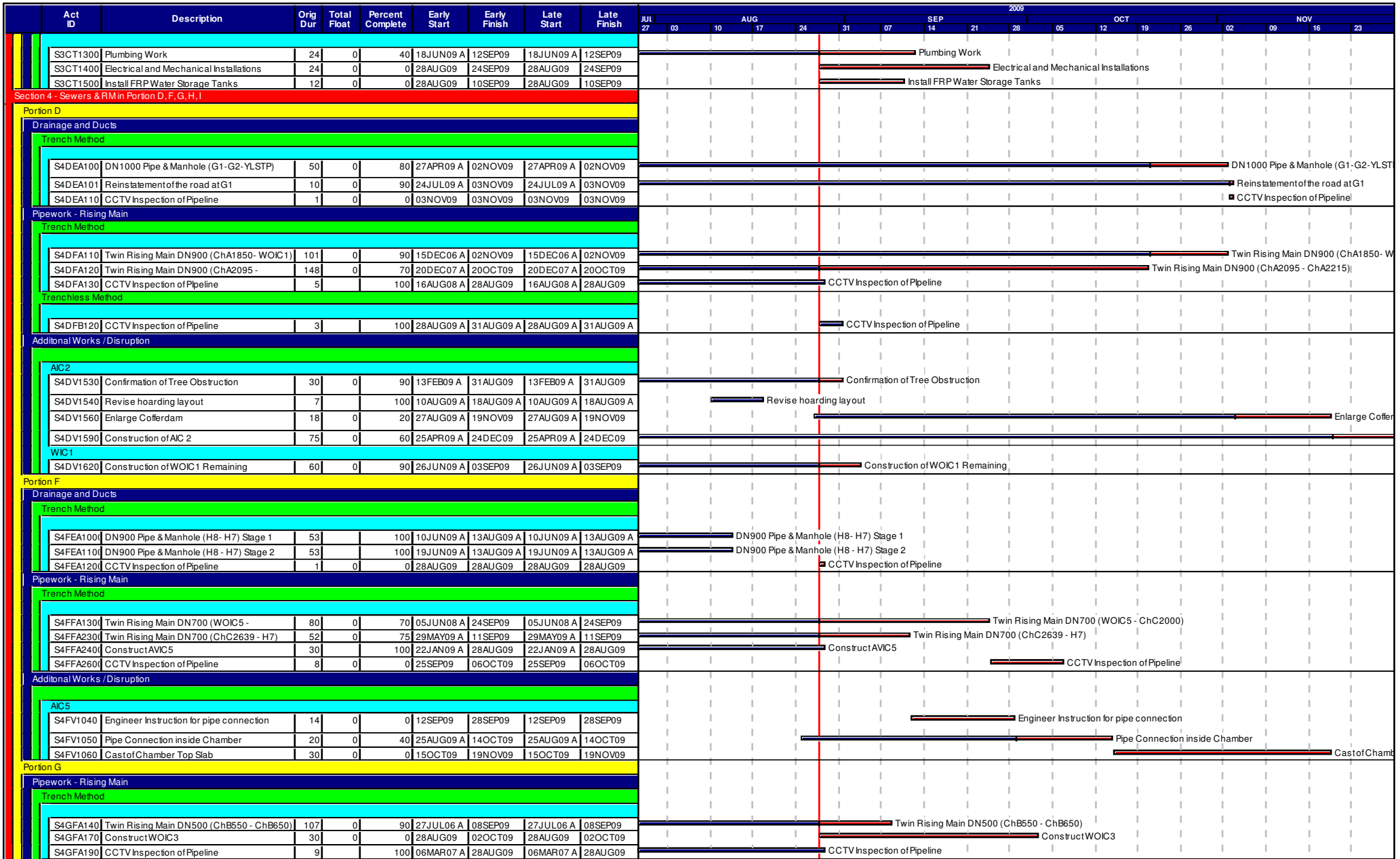
- Early bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point



Start date 19DEC05
 Finish date 25JAN11
 Data date 28AUG09
 Page number 2A
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Startdate 19DEC05
 Finish date 25JAN11
 Data date 28AUG09
 Page number 3A
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DSD Contract No. DC/2005/02
3-Month Rolling Programme - 3M01 at 29 AUG 2009

- Early bar
- Progress bar
- Critical bar
- Summary bar
- ◆ Start milestone point
- ◆ Finish milestone point

Act ID	Description	Orig Dur	Total Float	Percent Complete	Early Start	Early Finish	Late Start	Late Finish	2009												
									JUL 27	03	10	17	24	31	AUG 07	14	21	28	05	12	19
Additional Works / Disruption																					
AIC6																					
S4GV1020	Construction of AIC6	280		100	02OCT08 A	28AUG09 A	02OCT08 A	28AUG09 A		Construction of AIC6											
S4GV1025	Extraction of Sheet Pile	24	0	0	28AUG09	24SEP09	28AUG09	24SEP09		Extraction of Sheet Pile											
S4GV1030	Engineer Instruction of Pipe Connection	14	0	0	25SEP09	13OCT09	25SEP09	13OCT09		Engineer Instruction of Pipe Connection											
S4GV1040	Pipe Connection inside Chamber	20	0	0	14OCT09	06NOV09	14OCT09	06NOV09		Pipe Connection inside Chamber											
Portion H																					
Ground Investigation																					
S4HB1300	Install Settlement Markers	727	0	85	26MAY06 A	08JAN10	26MAY06 A	08JAN10													
Drainage and Ducts																					
Trench Method																					
S4HEA100	DN500 Pipe & Manhole (A4 - A6)	90		100	03OCT08 A	01SEP09 A	03OCT08 A	01SEP09 A		DN500 Pipe & Manhole (A4 - A6)											
S4HEA170	DN300 Pipe & Manhole (A3 - B2) (Deleted)	0		100	28AUG09 A	27AUG09 A	28AUG09 A	27AUG09 A		DN300 Pipe & Manhole (A3 - B2) (Deleted SA2)											
S4HEA180	DN300 Pipe & Manhole (B2 - B4) (Deleted)	0		100	28AUG09 A	27AUG09 A	28AUG09 A	27AUG09 A		DN300 Pipe & Manhole (B2 - B4) (Deleted SA2)											
S4HEA190	DN300 Pipe & Manhole (B4 - B6) (Deleted)	0		100	28AUG09 A	27AUG09 A	28AUG09 A	27AUG09 A		DN300 Pipe & Manhole (B4 - B6) (Deleted SA2)											
S4HEA200	DN300 Pipe & Manhole (B6 - B8) (Deleted)	0		100	28AUG09 A	27AUG09 A	28AUG09 A	27AUG09 A		DN300 Pipe & Manhole (B6 - B8) (Deleted SA2)											
S4HEA210	CCTV Inspection of Pipeline	0		100	28AUG09 A	27AUG09 A	28AUG09 A	27AUG09 A		CCTV Inspection of Pipeline											
Trenchless Method																					
S4HEB110	CCTV Inspection of Pipeline	1	0	0	28AUG09	28AUG09	28AUG09	28AUG09		CCTV Inspection of Pipeline											
Pipework - Rising Main																					
Trench Method																					
S4HFA100	Twin Rising Main DN700 (ChC100 -	45	0	90	08OCT08 A	01SEP09	08OCT08 A	01SEP09		Twin Rising Main DN700 (ChC100 - ChC170)											
S4HFA180	Twin Rising Main DN700 (ChC850 -	125	0	50	14APR09 A	11NOV09	14APR09 A	11NOV09		Twin Rising Main DN700 (ChC850 - ChC170)											
S4HFA240	Twin Rising Main DN700 (ChC1450 -	110	0	0	28AUG09	08JAN10	28AUG09	08JAN10		Twin Rising Main DN700 (ChC1450 - ChC170)											
S4HFA261	Twin Rising Main DN700 (ChC1715 -	80	0	70	27JUN09 A	24SEP09	27JUN09 A	24SEP09		Twin Rising Main DN700 (ChC1715 - ChC1790)											
S4HFA270	Twin Rising Main DN700 (ChC1790 -	90	0	50	22JUN09 A	19NOV09	22JUN09 A	19NOV09		Twin Rising Main DN700 (ChC1790 - ChC1790)											
S4HFA300	Construct AIC9 (combined with WOIC8)	0		100	13MAY09 A	01AUG09 A	13MAY09 A	01AUG09 A		Construct AIC9 (combined with WOIC8) (VO)											
S4HFA350	Construct AIC7 (AIC6)	91	0	70	05MAY09 A	28SEP09	05MAY09 A	28SEP09		Construct AIC7 (AIC6)											
Trenchless Method																					
S4HFB120	Construct WOIC7	60	0	40	11MAY09 A	10OCT09	11MAY09 A	10OCT09		Construct WOIC7											
S4HFB130	CCTV Inspection of Pipeline	2	0	0	28AUG09	29AUG09	28AUG09	29AUG09		CCTV Inspection of Pipeline											
Geotechnical works																					
S4HP1000	Monitoring of Instruments	947	0	85	26MAY06 A	19FEB10	26MAY06 A	19FEB10													
Additional Works / Disruption																					
Combine A4/AIC10 (Claim No. 183)																					
S4HV1510	Construct combine A4/AIC10	100	0	30	28JUL09 A	20NOV09	28JUL09 A	20NOV09		Construct combine A4/AIC10											
S4HV5040	Extraction of Sheetpile	12	0	0	28AUG09	10SEP09	28AUG09	10SEP09		Extraction of Sheetpile											
S4HV5050	Confirmation of Delay Pipe connection	14	0	0	11SEP09	26SEP09	11SEP09	26SEP09		Confirmation of Delay Pipe connection											
S4HV5060	Delay Pipe Connection	10	0	0	28SEP09	10OCT09	28SEP09	10OCT09		Delay Pipe Connection											
Portion I																					
Ground Investigation																					
S4IB1300	Install Settlement Markers	736	0	82	26JUN06 A	06FEB10	26JUN06 A	06FEB10													
Drainage and Ducts																					
Trench Method																					

Start date	19DEC05
Finish date	25JAN11
Data date	28AUG09
Page number	4A
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DSD Contract No. DC/2005/02
3-Month Rolling Programme - 3M01 at 29 AUG 2009

- Early bar
- Progress bar
- Critical bar
- Summary bar
- ◆ Start milestone point
- ◆ Finish milestone point

ANNEX D

PHOTOGRAPHICAL RECORDS – NOISE BARRIER ON-SITE



ANNEX E

LOCATIONS OF MONITORING STATIONS

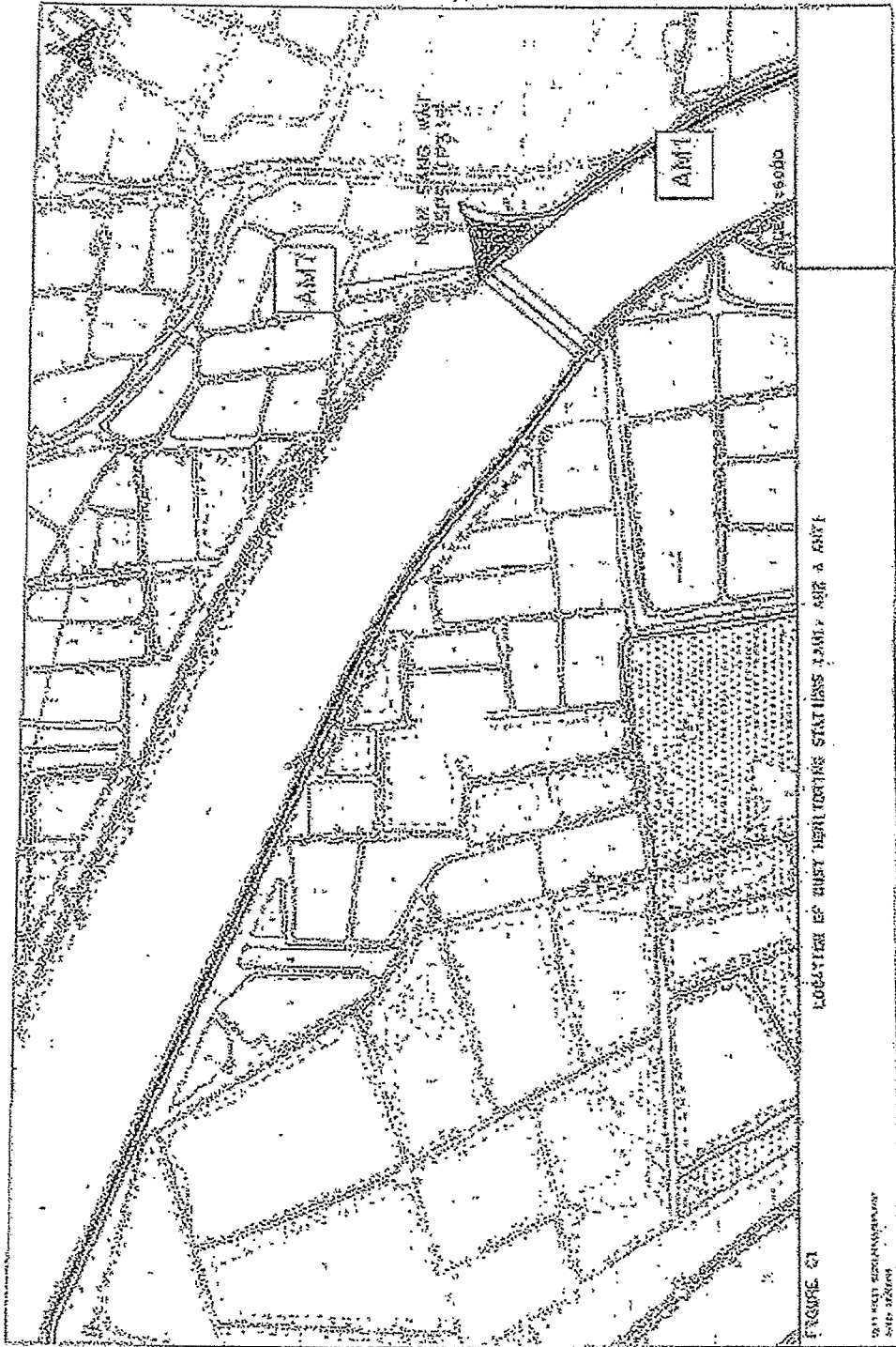


FIGURE 01

LOCATION OF CHIEF HERITORS STATISS JAMI, ASR A AIRT

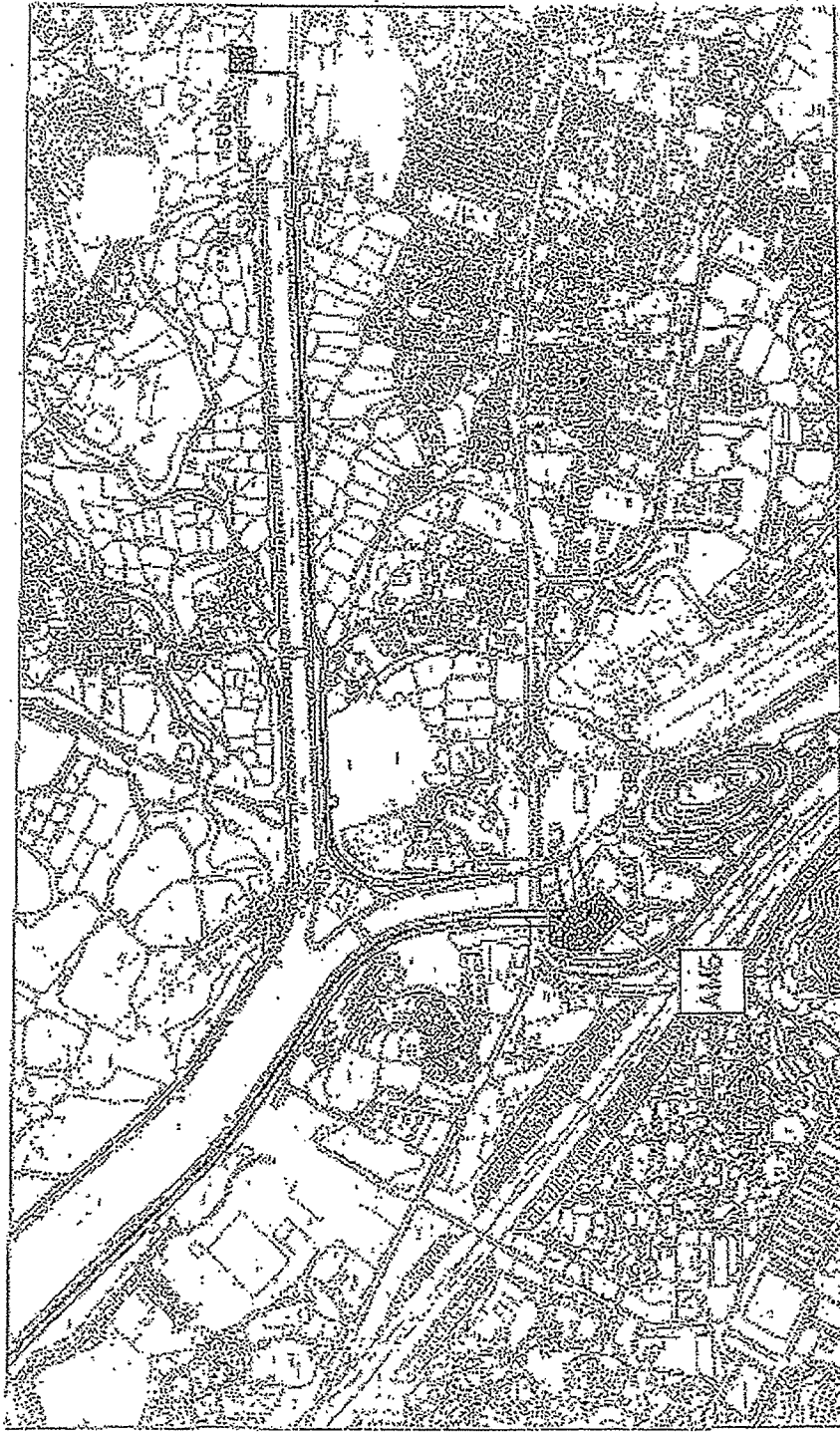
BY THE HERITORS



FIGURE OF BEST MONITORING STATION LAYOUT

FIGURE 62

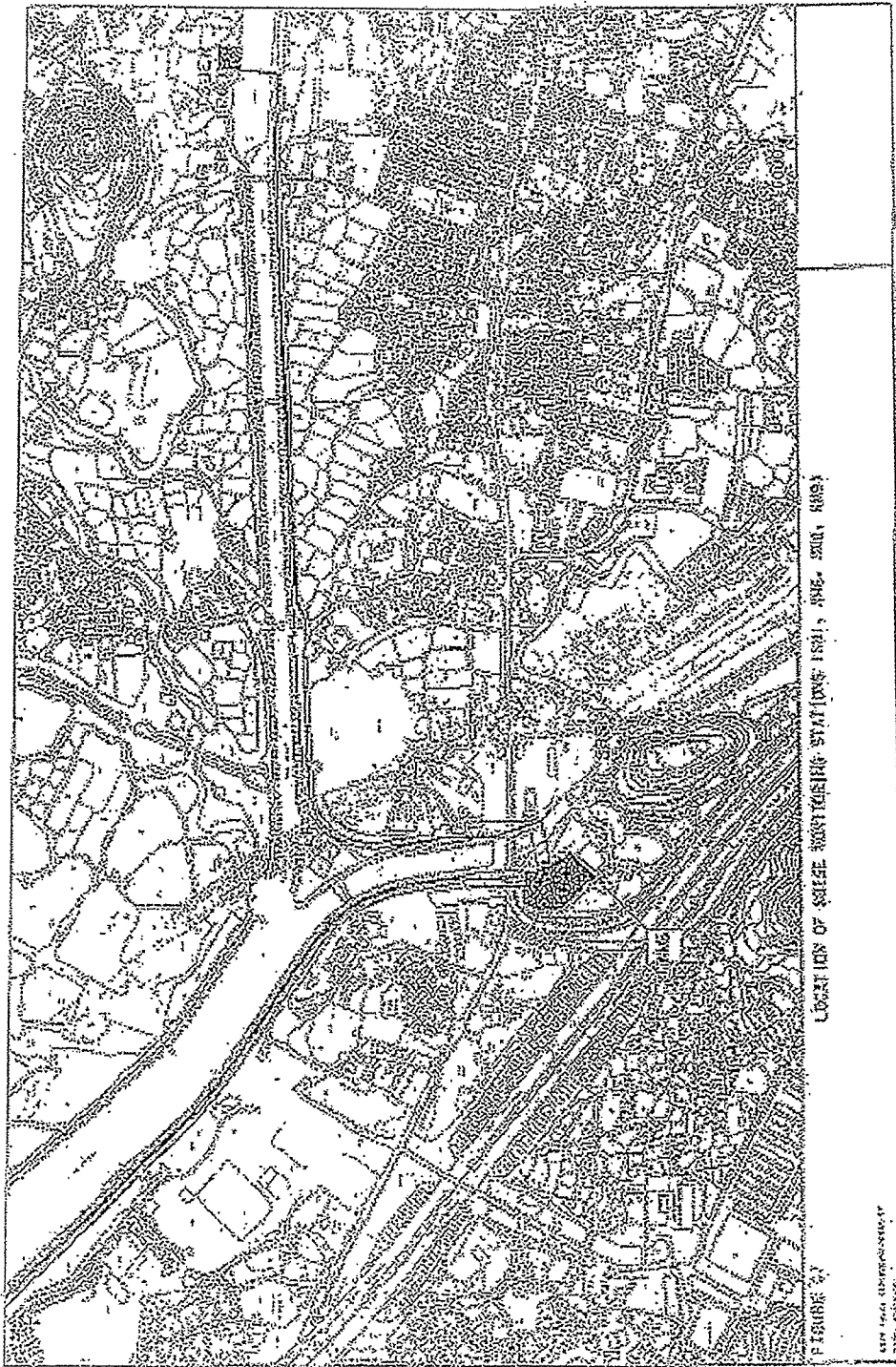
Scale: 1/4" = 1'-0"
600' radius



LOCATION OF BEST MONITORING STATIONS (AMC, AMS & AMOS)

FIGURE 20

AMERICAN OVERSEAS AIRLINES
1950-1951



LOCATION OF SILENT INVESTING STATIONS 1931, 1932, 1933, 1934

FIGURE 4

NEW YORK UNIVERSITY
 THE LIBRARY

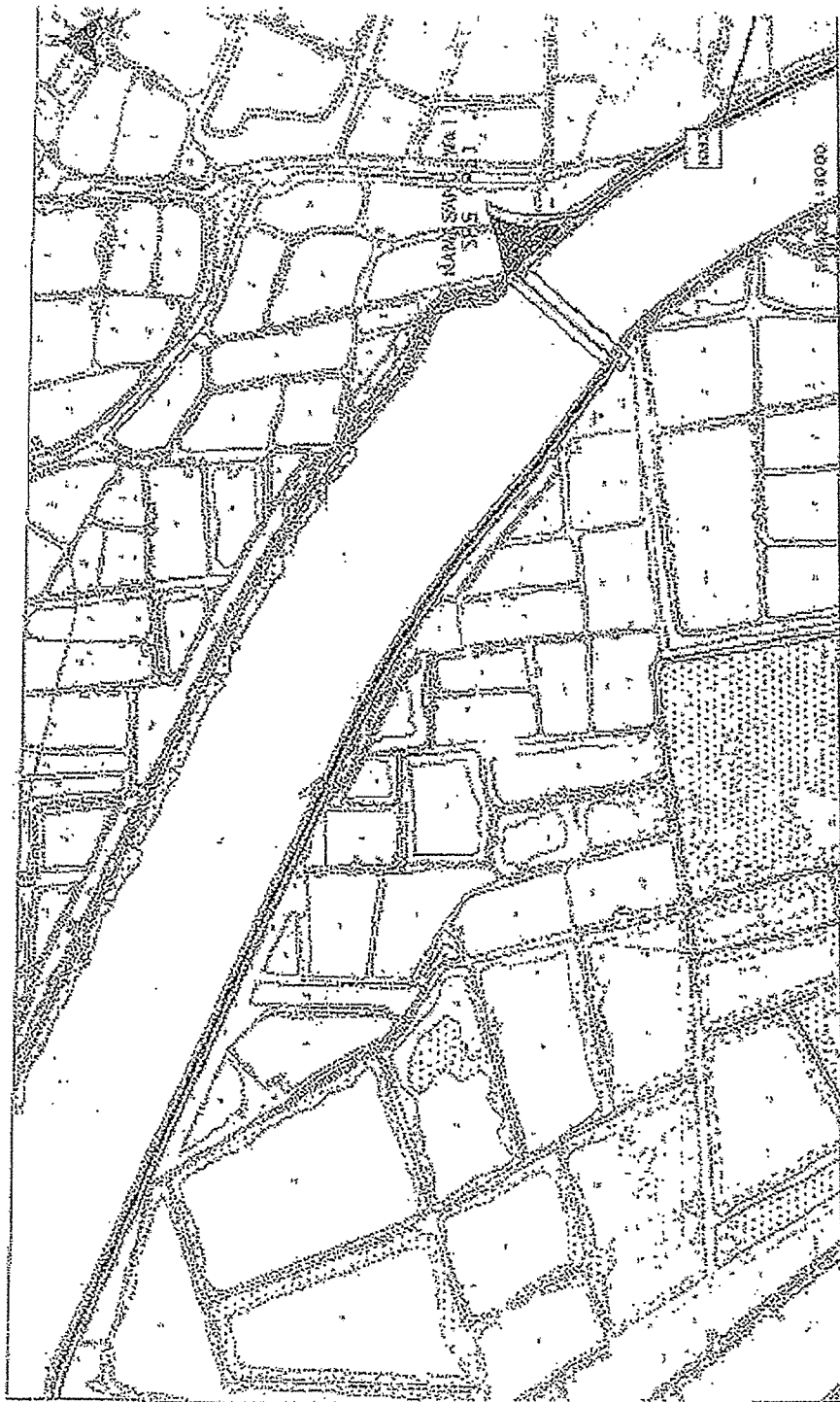


FIGURE 10

LOCATION OF HOUSE PURCHASES STATISTICS (1943-1951)

UNITED STATES GOVERNMENT
 GEOGRAPHIC BOARD



LOCATION OF NOISE BARRIER STATIONS FROM MAP

FIGURE NO.

ENVIRONMENTAL
ENGINEERING

ANNEX F

EVENT AND ACTION PLAN

Monthly EM&A Report for September 2009 (No. 42) (Designated Elements)

Event and Action Plan for Construction Phase Air Quality

EVENT	ACTION			
	ET Leader	IEC	Engineer	Contractor
<i>Action Level</i>				
Exceedance for one sample	<ol style="list-style-type: none"> Identify source (s) of exceedance and inform IEC, Contractor and Engineer Repeat dust measurements to confirm findings Increase monitoring frequency to daily Assess efficacy of remedial measures and keep the Contractor, IEC, and Engineer informed 	<ol style="list-style-type: none"> Check monitoring data submitted by ET Check monitoring data trends and Contractors working methods Check and confirm Contractors proposed remedial actions and working methods are appropriate 	<ol style="list-style-type: none"> Confirm receipt of notification of exceedance in writing Remind the Contractor of his contractual obligations and review the Contractor's working methods Discuss remedial actions with the Contractor and IEC Inform complainant of actions taken, if necessary 	<ol style="list-style-type: none"> Rectify any unacceptable practice Liaise with Engineer and IEC to develop appropriate remedial measures to reduce dust impact Amend working methods and remedial proposals if required by the Engineer or IEC Implement the agreed remedial actions upon instruction from the Engineer and IEC
Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> Identify source (s) of exceedance and inform IEC, Contractor and Engineer Repeat measurements to confirm findings Increase the monitoring frequency to daily to assess the efficacy of remedial measures and keep the Contractor informed Discuss remedial actions with IEC and Contractor If exceedance continues, arrange meeting with Engineer, IEC and Contractor to review working practices and identify further remedial actions If exceedance stops, inform the Contractor and cease additional monitoring 	<ol style="list-style-type: none"> Check monitoring data submitted by ET Check monitoring data trends and Contractors working methods Discuss with Contractor and Engineer on possible remedial measures Check and confirm Contractors proposed remedial measures are appropriate Determine the efficacy of remedial actions and keep the Engineer informed 	<ol style="list-style-type: none"> Confirm receipt of notification of exceedance in writing Remind the Contractor of his contractual obligations and review the Contractor's working methods Discuss remedial actions with the Contractor and IEC Ensure remedial measures are properly implemented Inform complainant of actions taken, if necessary. 	<ol style="list-style-type: none"> Rectify any unacceptable practice, if possible Submit proposals for remedial actions to Engineer and IEC within three working days of notification Discuss and amend remedial actions, if required, by the Engineer and IEC Implement the remedial action (s) immediately upon instruction from the Engineer Discuss with Engineer and IEC, to optimise the effectiveness of the agreed remedial actions

Monthly EM&A Report for September 2009 (No. 42) (Designated Elements)

Event and Action Plan for Construction Phase Air Quality

EVENT	ACTION			
	ET Leader	IEC	Engineer	Contractor
<i>Limit Level</i>				
Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source (s) of exceedance and inform IEC, Contractor and Engineer 2. Repeat dust measurements to confirm findings 3. Increase monitoring frequency to daily 4. Assess efficacy of remedial measures and keep the Contractor, IEC, Engineer and EPD informed 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET 2. Check monitoring data trends and Contractors working methods 3. Check and confirm Contractors proposed remedial actions and working methods are appropriate 4. Check and confirm Contractors proposed remedial measures are appropriate 5. Determine the efficacy of remedial actions and keep the Engineer informed 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing 2. Remind the Contractor of his contractual obligations and review the Contractor's working methods 3. Discuss remedial actions with the Contractor and IEC, 4. Ensure remedial measures are properly implemented 5. Inform complainant of actions taken, if necessary. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to Engineer and IEC within three working days of notification 3. Discuss and amend remedial actions, if required, by the Engineer and IEC 4. Implement the remedial action (s) immediately upon instruction from the Engineer 5. Discuss with Engineer and IEC, to optimise the effectiveness of the agreed remedial actions
Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify source (s) of exceedance and inform IEC, Contractor and Engineer 2. Repeat measurements to confirm findings 3. Increase the monitoring frequency to daily to assess the efficacy of remedial measures and keep the Contractor informed 4. Discuss remedial actions with IEC and Contractor 5. If exceedance continues, arrange meeting with Engineer, IEC and Contractor to review working practices and identify further remedial actions 6. If exceedance stops, inform the Contractor and cease additional monitoring. 	<ol style="list-style-type: none"> 1. Discuss with Contractor and Engineer on possible remedial measures 2. Check and confirm Contractors proposed remedial measures are appropriate 3. Determine the efficacy of remedial actions and keep the Engineer informed 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing 2. Remind the Contractor of his contractual obligations and review the Contractor's working methods 3. Discuss remedial actions with the Contractor and IEC 4. Ensure remedial measures are properly implemented 5. If exceedance continues, instruct the Contractor to stop the relevant portion of work until the exceedance is abated 6. Inform complainant of actions taken, if necessary. 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice, if possible 2. Submit proposals for remedial actions to Engineer and IEC within three working days of notification 3. Discuss and amend remedial actions, if required, by the Engineer and IEC 4. Implement the remedial action (s) immediately upon instruction from the Engineer 5. Discuss with Engineer and IEC, to optimise the effectiveness of the agreed remedial actions

Monthly EM&A Report for September 2009 (No. 42) (Designated Elements)

Event and Action Plan for Construction Noise				
EVENT	ACTION			
	ET Leader	IEC	Engineer	Contractor
<i>Limit Level</i>				
Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source (s) of exceedance and inform IEC, Contractor and Engineer 2. Repeat dust measurements to confirm findings 3. If repeat measurements confirm exceedance ,increase monitoring frequency to daily 4. Assess efficacy of remedial measures and keep the Contractor, IEC, and Engineer informed 5. If exceedance stops, inform Contractor and cease additional noise monitoring 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET 2. Check monitoring data trends and Contractors working methods 3. Check and confirm Contractors proposed remedial actions and working methods are appropriate 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing 2. Remind the Contractor of his contractual obligations and review the Contractor's working methods 3. Discuss remedial actions with the Contractor and IEC 4. Inform complainant of actions taken, if necessary 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice 2. Liaise with Engineer and IEC to develop appropriate remedial measures to reduce noise impact 3. Amend working methods and remedial proposals if required by the Engineer or IEC 4. Implement the agreed remedial actions upon instruction from the Engineer and IEC
Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify source (s) of exceedance and inform IEC, Contractor and Engineer 2. Repeat measurements to confirm findings 3. Increase the monitoring frequency to daily 4. Discuss remedial actions with IEC, Engineer and the EPD 5. Assess the efficacy of remedial measures and keep the Contractor informed 6. If exceedance continues, arrange meeting with Engineer, IEC and Contractor to review working practices and identify further remedial actions 7. If exceedance stops, inform the Contractor and cease additional monitoring. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET 2. Check monitoring data trends and Contractors working methods 3. Discuss with Contractor and Engineer on possible remedial measures 4. Check and confirm Contractors proposed remedial measures are appropriate 5. Determine the efficacy of remedial actions and keep the Engineer informed 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing 2. Remind the Contractor of his contractual obligations and review the Contractor's working methods 3. Discuss remedial actions with the Contractor and IEC 4. Ensure remedial measures are properly implemented 5. If exceedance continues, instruct the Contractor to stop the relevant portion of work until the exceedance is abated 6. Inform complainant of actions taken, if necessary. 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice, if possible 2. Submit proposals for remedial actions to Engineer and IEC within three working days of notification 3. Discuss and amend remedial actions, if required, by the Engineer and IEC 4. Implement the remedial action (s) immediately upon instruction from the Engineer 5. Discuss with Engineer and IEC, to optimise the effectiveness of the agreed remedial actions 6. Stop the relevant portion of work as determined by the Engineer until the exceedance is abated

ANNEX G

MITIGATION IMPLEMENTATION SCHEDULE

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
CONSTRUCTION PHASE										
AIR QUALITY - Construction Phase										
		The following measures are enforceable under the <i>Air Pollution Control (Construction Dust) Regulations</i>								
3.5	A1	<p>Site boundary and entrance</p> <ul style="list-style-type: none"> where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4 m high from ground level should be provided along the boundaries of the seven pumping stations sites and the works area where the Engineer's site office and the Contractor's site office erected; 	To prevent access to the site and control potential dust impacts from construction works.	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Part III, Clause 13 (c), Air Pollution Control (Construction Dust) Regulations</i>
3.5	A2	<p>Access Road</p> <ul style="list-style-type: none"> the portion of any road leading only to a construction site that is within 30 m of a discernible or designated vehicle entrance or exit should be kept clear of dusty materials; 	To control potential dust impacts from vehicle movements.	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Part III, Clause 14, (b), Air Pollution Control (Construction Dust) Regulations</i>
3.5	A3	<p>Stockpiling of Dusty Materials</p> <ul style="list-style-type: none"> any stockpile of dusty materials should be either covered entirely by impervious sheeting and placed in an area sheltered on the top and the 3 sides or sprayed with water so as to maintain the entire surface wet; 	To control potential dust impacts during excavation and stockpiling activities.	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Part IV, Clause 18, (a, b & c), Air Pollution Control (Construction Dust) Regulations</i>
3.5	A4	<p>Loading, unloading or transfer of dusty materials</p> <ul style="list-style-type: none"> all dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading and unloading so as to maintain the dusty materials wet; 	To control potential dust impacts during material handling and truck movements.	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Part IV, Clause 19, Air Pollution Control (Construction Dust) Regulations</i>
3.5	A5	<p>Use of vehicles</p> <ul style="list-style-type: none"> every vehicle should be washed to remove any dusty materials from its body and wheels immediately before leaving a construction site; 	To control potential dust impacts from vehicle movements.	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Part IV, Clause 21, (1), Air Pollution Control (Construction</i>

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
3.5	A6	<ul style="list-style-type: none"> where a vehicle leaving a construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle; 	To control potential dust impacts during material transportation.	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Dust) Regulations Part IV, Clause 21, (2), Air Pollution Control (Construction Dust) Regulations</i>
3.5	A7	<p>Power-driven drilling, and cutting</p> <ul style="list-style-type: none"> water should be continuously sprayed on the surface where any mechanical breaking operation that causes dust emission is carried out, unless the process is accompanied by the operation of an effective dusty extraction and filtering device; 	To control potential dust impacts during mechanical breaking.	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Part IV, Clause 22, Air Pollution Control (Construction Dust) Regulations</i>
3.5	A8	<p>Excavation and earth moving</p> <ul style="list-style-type: none"> the working area of excavation should be sprayed with water immediately before, during and immediately after the operation so as to maintain the entire surface wet; 	To control potential dust impacts arising from excavation works.	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Part IV, Clause 24, Air Pollution Control (Construction Dust) Regulations</i>
3.5	A9	<p>Construction of the superstructure of a building</p> <ul style="list-style-type: none"> where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the round floor level of the SPS, or if a canopy is provided at the first floor level, from the first floor level, up to the highest level of the scaffolding; and 	To control potential dust impacts from SPS building construction works.	Full duration of SPS construction contract.	The Contractor		✓			<i>Part I, Clause 6, (a), Air Pollution Control (Construction Dust) Regulations</i>
3.5	A10	<ul style="list-style-type: none"> any skip hoist for material transport should be totally enclosed by the impervious sheeting. 	To control potential dust impacts during material transportation.	Full duration of SPS construction contract.	The Contractor		✓			<i>Part I, Clause 6, (b), Air Pollution Control (Construction Dust) Regulations</i>

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
		NOISE - Construction Phase								
4.7.1	B1	<p>General Site Clearance – Demolition Works</p> <ul style="list-style-type: none"> Use of quiet PME which meet the SWLs taken from British Standard, <i>Noise and Vibration Control on Construction Open Sites, BS 5228: Part 1: 1997</i> (Examples of these PME are shown in Table F2), 	To control potential noise impacts during site clearance and demolition works	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Annex 5 of EIAO-TM</i>
4.7.1	B2	<p>Construction of Sewage Pumping Stations P1, P2 & P3</p> <ul style="list-style-type: none"> Use of quiet PME which meet the SWLs taken from British Standard, <i>Noise and Vibration Control on Construction Open Sites, BS 5228: Part 1: 1997</i>, Adoption of temporary noise barrier, in the form of a site hoarding (with a superficial density of at least 20kg/m², with no substantial gaps), along the site boundary of the pumping station sites. 	To minimise potential noise impacts arising during the construction of P1, P2 & P3	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Annex 5 of EIAO-TM</i>
4.7.1	B3	<p>Sewers and Rising Mains using Open Trench Method</p> <ul style="list-style-type: none"> Use of quiet PME which meet the SWLs taken from British Standard, <i>Noise and Vibration Control on Construction Open Sites, BS 5228: Part 1: 1997</i>, 	To minimise potential noise impacts arising during the construction of P1, P2 & P3	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Annex 5 of EIAO-TM</i>
4.7.1	B4	<ul style="list-style-type: none"> Use of handheld breakers for all initial road opening activities, when breaking tarmac/concrete road surface to a depth of 300mm or when granular material is reached. 	To control potential noise impacts during excavation works.	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Annex 5 of EIAO-TM</i>
4.7.1	B5	<ul style="list-style-type: none"> Use of handheld breakers for all initial road opening activities, when breaking tarmac/concrete road surface to a depth of 300mm or when granular material is reached. 	To control potential noise impacts during road opening activities.	Where there are NSRs located within 50m of the line of sight. Throughout the full duration of the road opening activities.	The Contractor		✓			<i>Annex 5 of EIAO-TM</i>
4.7.1	B5	<ul style="list-style-type: none"> Use of movable noise barriers or 3 sided enclosures for all initial road opening activities 	To control potential noise impacts during road opening	Where there are NSRs located within 50m of the	The Contractor		✓			<i>Annex 5 of EIAO-TM</i>

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
4.7.1	B6	enclosures for all initial road opening activities (breaking tarmac/concrete road surface to a depth of 300mm or when granular material is reached), where there are NSRs located within 50m of the line of sight from the works area. Sewers and Rising Mains using Pipe Jacking Method • Use of quiet PME which meet the SWLs taken from British Standard, <i>Noise and Vibration Control on Construction Open Sites, BS 5228: Part 1: 1997,</i>	activities. To control potential noise impacts from PME during construction works	line of sight. Throughout the full duration of the road opening activities. Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Annex 5 of EIAO-TM</i>
4.7.1	B7	Road Pavement and Finishes • Use of quiet PME which meet the SWLs taken from British Standard, <i>Noise and Vibration Control on Construction Open Sites, BS 5228: Part 1: 1997,</i>	To control potential noise impacts from PME during pavement and finish works	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			<i>Annex 5 of EIAO-TM</i>
		WATER QUALITY - Construction Phase No water quality monitoring is required under this study.								
6.6.2	D1	WASTE - Construction Phase The Contractor shall obtain the necessary waste disposal permits from the appropriate authorities for the disposal of chemical and C&D waste, • Chemical Waste Producer and Chemical Waste Disposal Licence (<i>Waste Disposal (Chemical Waste) (General) Regulations</i>); and • Dumping Licence (<i>Land (Miscellaneous Provisions) Ordinance (Cap 28)</i>)	To monitor the collection, handling and disposal of chemical waste and C&D waste, and in compliance with relevant Hong Kong Standards and Regulations.	Site wide and throughout the full duration of the construction contract.	The Contractor	✓	✓			<i>Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste)(General) Regulation (Cap 354), the Land (Miscellaneous Provisions) Ordinance (Cap 28)</i>

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
6.6.2	D2	<p>Chemical Waste Chemical waste that is produced, as defined by Schedule 1 of the <i>Waste Disposal (Chemical Waste) (General) Regulation</i>, should be handled in accordance with the regulations and Code of Practice on the Packaging, Handling and Storage of Chemical Wastes as follows. All chemical waste producers should be registered with the EPD.</p>	To control the handling, storage and disposal of chemical waste, in order to minimise potential spillages/leakages and human health and environmental impacts.	To be implemented at all worksites throughout the full duration of the construction phase.	The Contractor		✓			<i>Part II, (6) Waste Disposal (Chemical Waste) (General) Regulation</i>
6.6.2	D3	<p>Storage, Packaging and Labelling of Chemical Waste Containers used for storage of chemical wastes should:</p> <ul style="list-style-type: none"> be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; have a capacity of less than 450 L unless the specifications have been approved by the EPD; and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Regulations. 	To ensure the proper storage, packaging and labelling of chemical waste in accordance with the Regulations.	To be implemented at all worksites throughout the full duration of the construction phase.	The Contractor		✓			<i>Part IV, (9, 10, 11 & 12) Waste Disposal (Chemical Waste) (General) Regulation</i>
6.6.2	D4	<p>Storage of chemical waste The storage area for chemical wastes should:</p> <ul style="list-style-type: none"> be clearly labelled and used solely for the storage of chemical waste; be enclosed on at least 3 sides; have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest; have adequate ventilation; be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste, if necessary); and be arranged so that incompatible materials are 	To ensure the proper storage of chemical waste in accordance with the Regulations.	To be implemented at all worksites throughout the full duration of the construction phase.	The Contractor		✓			<i>Part IV, (13,14, 15, 16, 17, & 18) Waste Disposal (Chemical Waste) (General) Regulation</i>

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
		adequately separate								
6.6.2	D5	<p>Disposal of chemical waste</p> <ul style="list-style-type: none"> The Contractor should ensure that the disposal of chemical waste is via a licensed Waste Collector and in accordance with the <i>Waste Disposal (Chemical Waste) (General) Regulations</i>. <p><i>Management of Waste Disposal</i> A trip-ticket system should be established which monitors the disposal of C&DM and solid wastes at public filling facilities and landfills and to control fly-tipping, in accordance with <i>Land (Miscellaneous Provisions) Ordinance (Cap28)</i> and the <i>Works Bureau Technical Circular No. 5/99</i>.</p>	<p>To control the disposal of chemical waste in accordance with the Regulations.</p>	To be implemented at all worksites throughout the full duration of the construction phase.	The Contractor		✓			<i>Part IV, (20 -25) Waste Disposal (Chemical Waste) (General) Regulation</i>
		<p>LAND CONTAMINATION- Construction Phase</p> <p>A revised CAP should be submitted to the EPD for approval before the commencement of the construction works. Following receipt of the EPD's approval, the CAP shall be implemented and the findings of the investigations will be reported in the Contaminated Assessment Report (CAR), before ground disturbance is allowed at the concerned sites. If land contamination is confirmed, a Remediation Action Plan (RAP) shall be prepared, and both the CAR and the RAP shall be submitted as a combined report to the EPD for approval before disturbing the ground of the concerned sites. If applicable and required in consultation with the</p>	<p>To monitor the disposal of C&DM and solid wastes at public filling facilities and landfills and to control fly-tipping.</p>	To be implemented at all worksites throughout the full duration of the construction phase.	The Engineer/ Contractor		✓			<i>Land (Miscellaneous Provisions) Ordinance (Cap 295) and Works Bureau Technical Circular No. 5/99.</i>
7.5.6	E1	<p>A revised CAP should be submitted to the EPD for approval before the commencement of the construction works. Following receipt of the EPD's approval, the CAP shall be implemented and the findings of the investigations will be reported in the Contaminated Assessment Report (CAR), before ground disturbance is allowed at the concerned sites. If land contamination is confirmed, a Remediation Action Plan (RAP) shall be prepared, and both the CAR and the RAP shall be submitted as a combined report to the EPD for approval before disturbing the ground of the concerned sites. If applicable and required in consultation with the</p>	<p>To determine the presence of soil and groundwater contamination and remedy any potential concerns to acceptable levels.</p>	To be implemented before the commencement of the construction works.	To be Implemented by DSD or their sub-consultants at the Detailed Design Stage, depending upon when site access can be gained.	✓				<i>EIAO TM Annex 19/3.1.1 & 3.1.2</i>

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
		EPD, the contaminated site(s) shall be remediated in accordance with the approved CAR/RAP.								
8.7.1	F1	<p>ECOLOGY - Construction Phase Mitigation Measures Adopted - Avoidance Construction activities shall be prohibited during the winter season (November to March) along the section of the proposed sewerage alignment, which fall within the Deep Bay Wetland Conservation Area and the Deep Bay Wetland Buffer Area (WCA and WBA) and close to the locations of ecologically sensitive species (including Intermediate Egret, Black-faced Spoonbill, Buzzard, Imperial Eagle and Avocet). (See Figure 8.7a attached). Regular site inspections (at least twice a month) should be conducted by the Environmental Team during the winter season (November to March) to ensure proper implementation of this restriction</p>	To schedule construction works in order to minimise potential impacts to winter visiting birds. To be confirmed by regular site inspections.	At identified location (<i>Figure 8.7a</i>) for the full duration of the construction contract.	The Contractor		✓			
8.7.2	F2	<p>Mitigation Measures Adopted - Minimisation Pipe jacking method should be used instead of dredging where sewers and rising mains cross over existing MDC within the WCA and WBA.</p>	To minimise potential construction noise impacts to ecological sensitive receivers within the WCA/WBA.	For the full duration of the construction contract.	The Contractor		✓			
8.7.2	F4	<p>Regular inspections (at least twice a month) should be conducted by the ET during the winter season (November to March) for the remaining sections of the proposed sewerage alignment (including parts of S4, S5 and S6) within the WCA and WBA, where construction activities cannot be rescheduled.</p> <p>The site inspections shall check and report the number of workfronts and implementation of</p>	To schedule noisy construction activities to minimise potential impacts to winter visiting birds.	Work fronts other than identified sections within WBA & WCA (see <i>Figure 8.7a</i> attached) throughout the full duration of the construction contract.	The Contractor		✓			

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
8.7.3	F5	mitigation measures (i.e. erection of movable noise barriers with a suitable footing along the sites) in the monthly EM&A reports. Mitigation Measures Adopted Quietened construction plant and equipment (as shown in <i>Table F2</i>) should be used for the construction of pumping stations (P3 and P2) and sewerage alignment (S4, S5 and S6) located within the WCA and WBA.	Quiet construction plant shall minimise potential noise impacts to the wildlife, particularly rare birds including Black-faced Spoonbill, Buzzard, Hobby, Imperial Eagle, Intermediate Egret, Avocet and Black-eared Kite	At described locations and throughout the full duration of the construction contract.	The Contractor		✓			
8.7.4	F6	Erection of fences along the boundary of pumping station construction sites (P1 to P3) before the commencement of construction works to prevent tipping, vehicle movements, and encroachment of personnel into adjacent areas, and P2 to avoid disturbance to the remaining pond areas (0.7 ha);	To erect fences to prevent encroachment of construction activities onto adjacent areas.	At P1 to P3 for full duration of the construction contract.	The Contractor		✓			
8.7.4	F7	No filling and dumping to the remaining abandoned fishpond at P2.	To avoid disturbance to abandoned fishponds from construction activities and illegal dumping.	At P2 for full duration of the construction contract	The Contractor		✓			
8.7.4	F8	Installation and operation of silt removal facilities at construction sites of P1 to P3. The silt removal facilities should be designed in accordance with Appendix A1 of ProPECC Note PN1/94 Construction Site Drainage. The minimal total combined volume of the silt removal facilities at Nam Sang Wai SPS (P3) should be 15m ³ .	To install silt removal facilities in potentially impact streams and ponds to prevent sedimentation.	At P1 to P3 for full duration of the construction contract.	The Contractor		✓			
8.7.4	F9	No open fires within the site boundary during	To prohibit open fires, thereby	Site wide and throughout	The Contractor		✓			<i>Air Pollution Control</i>

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
8.7.4	F7	construction and provide temporary fire fighting equipment in the work areas. No filling and dumping to the remaining abandoned fishpond at P2.	minimising potential damage to trees and shrubs. To avoid disturbance to abandoned fishponds from construction activities and illegal dumping.	the full duration of the construction contract. At P2 for full duration of the construction contract	The Contractor		✓			(Open Burning) Regulation
8.7.4	F8	Installation and operation of silt removal facilities at construction sites of P1 to P3. The silt removal facilities should be designed in accordance with Appendix A1 of ProPECC Note PN1/94 Construction Site Drainage.	To install silt removal facilities in potentially impact streams and ponds to prevent sedimentation.	At P1 to P3 for full duration of the construction contract.	The Contractor		✓			
8.7.4	F9	No open fires within the site boundary during construction and provide temporary fire fighting equipment in the work areas.	To prohibit open fires, thereby minimising potential damage to trees and shrubs.	Site wide and throughout the full duration of the construction contract.	The Contractor		✓			Air Pollution Control (Open Burning) Regulation
		FISHERIES - Construction Phase No specific mitigation measures are required for inclusion in the EP.								
		CULTURAL HERITAGE – Not Applicable for Package 1A-1T (DC/2005/02)								
		LANDSCAPE AND VISUAL - Construction Phase								
	H1	The site inspections shall check and report the implementation of mitigation measures (i.e. top-soil are reused and new compensatory planting works are carried out immediately after the construction of the civil structure) in the monthly EM&A reports. The first monthly EM&A Report should also report the appearance of the temporary hoarding barriers.	To minimise potential landscape and visual impacts.	To be implemented during the construction phases of the project.	The Contractor		✓			
	H2	Prior to application for an Environmental Permit, a set of landscape plans and building elevations of the proposed pumping stations should be	To minimise potential landscape and visual impacts.	To be implemented during the design and construction phases of the	DSD and The Contractor	✓	✓			

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
		submitted for approval by the EPD. The landscape plans and pumping station elevations should demonstrate that the following elements are considered: <ul style="list-style-type: none"> existing landscape elements (such as mature trees), transplantation of valuable trees, new compensatory planting 		project.						
		<ul style="list-style-type: none"> incorporate information on materials, details and textures so as to be as visually recessive as possible and in a style that fits with the surrounding village buildings. colour should be of low chromatic intensity to reduce the potential contrast between the structures and their background. The external finishing of the Pumping Stations shall be designed in conjunction with the landscape scheme. a minimum screen planting of 3m width and use of trees with a dense canopy of up to 5 m in height subject to constraints such as engineering and land availability. felling of mature trees are kept to a minimum. 								
3.7	I1	<p>EM&A REQUIEMENTS - Construction Phase</p> <p><i>Air Quality</i> Subject to the Environmental Protection Departments (EPDs) agreement, construction phase dust monitoring shall be undertaken at the following locations in accordance with the recommendations of the EIA.</p> <ul style="list-style-type: none"> Worksite boundary facing Scattered house in Nam Sang Wai (AM1); Worksite boundary facing Fung Kat Heung (AM5); Worksite boundary facing Scattered House near Route 3 (AM6); 	Installations of the dust monitoring stations to ensure the action and limit levels are not exceeded.	At specified dust monitoring locations for the duration of the construction works.	To be undertaken by the Environmental Team (ET) and reviewed and audited by the Engineer /DSD		✓			<i>Air Pollution Control (Construction Dust) Regulations</i>

EIA* Ref.	EM&A Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns	Location of the measure	Implementation Agent	Implementation Stage**				Relevant Legislation & Guidelines
						Des	C	O	Dec	
4.9.1	I2	<ul style="list-style-type: none"> at any additional locations, where considered necessary, in agreement with EPD. <p><i>Construction Noise</i> Subject to the Environmental Protection Departments (EPDs) agreement, construction phase noise monitoring shall be undertaken at the following locations in accordance with the recommendations of the EIA.</p> <ul style="list-style-type: none"> (NM3) Scattered House in Nam San Wai (D12); (NM4) Scattered House in Nam San Wai (D11); (NM6) Scattered House near Route 3 (D17); (NM7) Fung Kat Heung (D19); and at any additional locations, where considered necessary, in agreement with EPD 	Installations of the noise monitoring stations to ensure the action and limit levels are not exceeded.	At specified noise monitoring locations throughout the duration of the construction works.	To be undertaken by the Environmental Team (ET) and reviewed and audited by the Engineer		✓			<i>Noise Control Ordinance</i>

Des = Design, C = Construction, O = Operation, Dec = Decommissioning

ANNEX H

EQUIPMENT CALIBRATION CERTIFICATES

Equipment Calibration List for Construction of Sewers, Rising Mains & Sewage Pumping Station at Kam Tin, Nam Sang Wai and Au Tau in Yuen Long Project

Items	Aspect	Description of Equipment	Serial No.	Date of Calibration	Date of Next Calibration
1**	Air	Greasby Anderson GMWS2310 High Volume Sampler	0329 (AM1)	1 Aug 09	1 Oct 09
2**		Greasby Anderson GMWS2310 High Volume Sampler	(AM5)	1 Aug 09	1 Oct 09
3**		Greasby Anderson GMWS2310 High Volume Sampler	(AM6)	1 Aug 09	1 Oct 09
4**		Greasby Anderson GMWS2310 High Volume Sampler	1283 (AM7)	1 Aug 09	1 Oct 09
5	Noise	Bruel & Kjaer 4231 Acoustical Calibrator	2326408	28 Apr 09	28 Apr 10
6		Bruel & Kjaer 2238 Integrating Sound Level Meter	T212509	28 Apr 09	28 Apr 10

Note: Calibration certificates will only be provided if monitoring equipment is re-calibrated or new.
 * Calibration done in this reporting month, see calibration certificate attached.
 ** Calibration will be done in next reporting month.

ANNEX I

METEOROLOGICAL DATA

Meteorological Data Extracted From the HK Observatory at Lau Fau Shan Weather Station

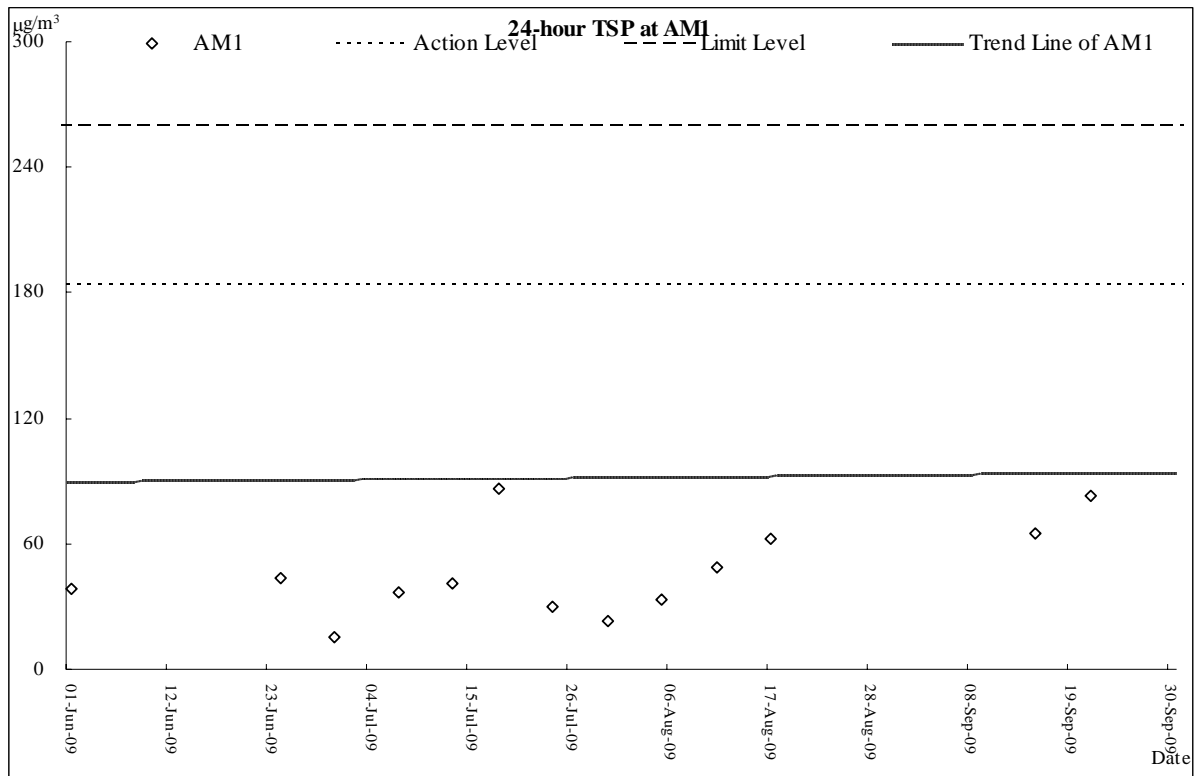
Date		Weather	Lau Fau Shan Weather Station				
			Total Rainfall (mm)	Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction
1-Sep-09	Tue	fine/very hot/a few showers/moderate	Trace	29.9	18	72	E/NE
2-Sep-09	Wed	fine/very hot/isolated showers/moderate	Trace	30.1	12.5	71	E/NE
3-Sep-09	Thu	fine/very hot/hazy/moderate	Trace	31.2	10	69.5	E/NE
4-Sep-09	Fri	fine/very hot/isolated showers/moderate	Trace	29.8	12	71	E/SE
5-Sep-09	Sat	fine/very hot/isolated showers/moderate	Trace	31.1	13.7	65.2	E/NE
6-Sep-09	Sun	fine/very hot isolated showers/moderate	0	31	14.5	68	E/NE
7-Sep-09	Mon	fine/very hot/moderate	0	31.2	8.2	66.5	E/NE
8-Sep-09	Tue	fine/very hot/moderate	0	30.6	13	61	E/SE
9-Sep-09	Wed	sunny periods/hot/isolated showers/moderate	37.1	30.6	15	66	E/NE
10-Sep-09	Thu	cloudy/squally showers/fresh/strong	0.9	30.3	14.7	63	E/NE
11-Sep-09	Fri	cloudy/rain/squally thunderstorms/moderate/fresh/str	11.8	28.5	21.5	71.5	E
12-Sep-09	Sat	a few showers/sunny intervals/moderate/fresh	5.7	30.5	20	78.2	E
13-Sep-09	Sun	fresh/cloudy/rain/moderate	23.4	29.8	18.7	78.5	W/SW
14-Sep-09	Mon	fresh/strong/gales/cloudy/squally thunderstorm	38.8	27.4	20	82	N/NE
15-Sep-09	Tue	fresh/strong/gales	190.3	27	37.5	82.5	SE
16-Sep-09	Wed	scattered showers/squally thunderstorms/sunny intervals/moderate/fresh	20.5	29.1	23	81.7	SE
17-Sep-09	Thu	fine/hot/isolated showers/moderate	Trace	28.6	11.5	87.5	S/SE
18-Sep-09	Fri	fine/very hot/moderate	0	29.6	16	80.5	W/SW
19-Sep-09	Sat	fine/very hot/moderate	0	30.4	8.5	77.5	W/SW
20-Sep-09	Sun	fine/very hot/moderate	Trace	30.3	12.2	73.5	S/SE
21-Sep-09	Mon	cloudy/sunny intervals/haze/light winds/moderate/rain	9.5	30.7	11.2	81	S/SE
22-Sep-09	Tue	fine/dry/moderate	1.3	Maintenance			
23-Sep-09	Wed	sunny periods/cloudy/rain/moderate	0	28.3	14.2	71.7	E/NE
24-Sep-09	Thu	sunny periods/cloudy/fresh/strong	Trace	30.2	16.5	67	E/NE
25-Sep-09	Fri	fine/hot/moderate/fresh	0	30.2	17	68	E/SE
26-Sep-09	Sat	fine/dry/very hot/moderate	0.3	30.8	10.5	67	E/NE
27-Sep-09	Sun	fine/hot/moderate/fresh	0	29.1	18.5	68	NE
28-Sep-09	Mon	cloudy/rain/squally thunderstorms/fresh/strong	52.7	26.4	18.5	79.2	E/NE
29-Sep-09	Tue	overcast/rain/fresh/strong	31	24.7	13.5	93.5	E/NE
30-Sep-09	Wed	cloudy/rain/moderate/fresh	63	26.9	14.5	86	E/NE

ANNEX J

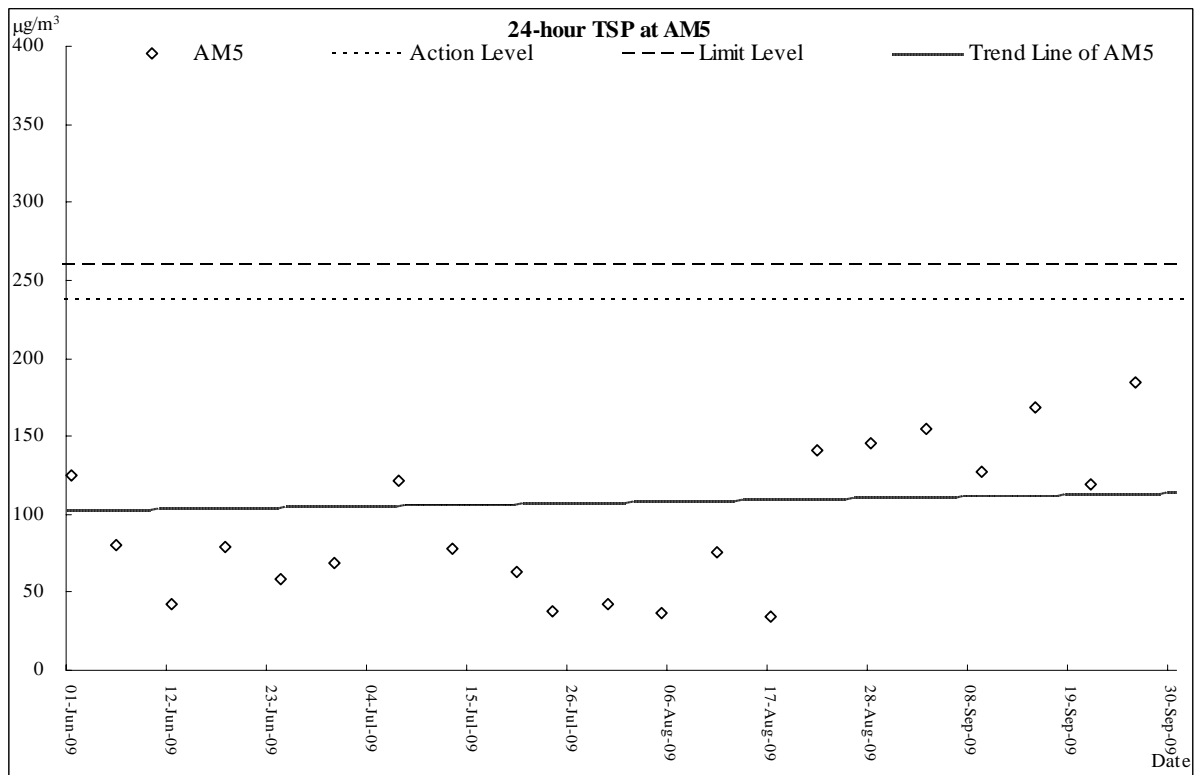
**GRAPHICAL PLOTS OF AIR QUALITY AND CONSTRUCTION NOISE
MONITORING RESULTS**

AIR QUALITY

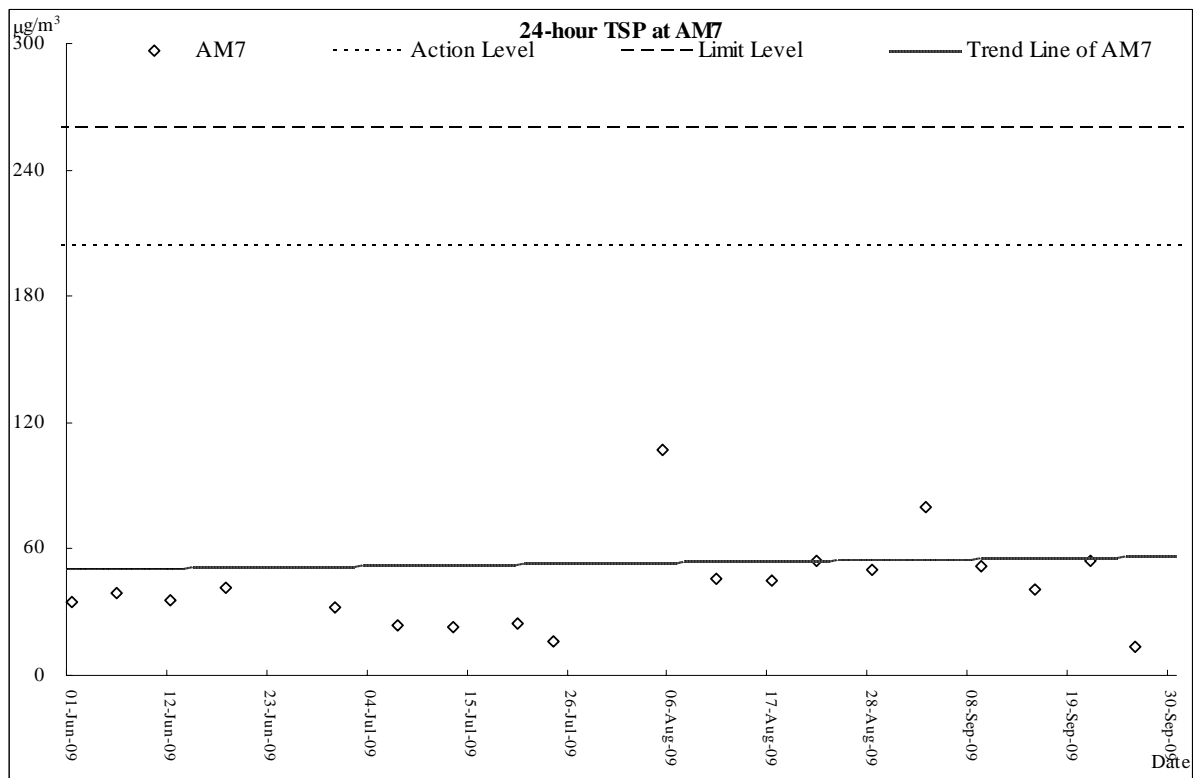
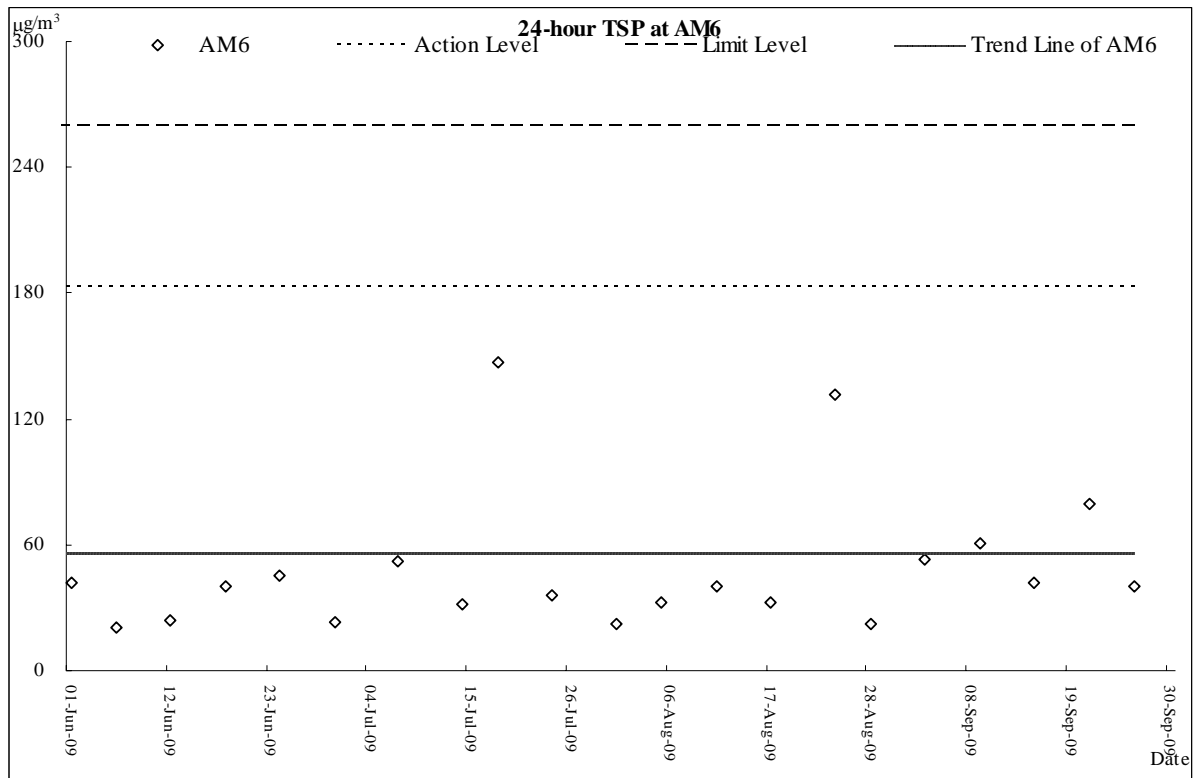
Air Quality Monitoring Results



Note: power failure occurred on 9 and 26 September 2009, therefore no result on plotting is shown.

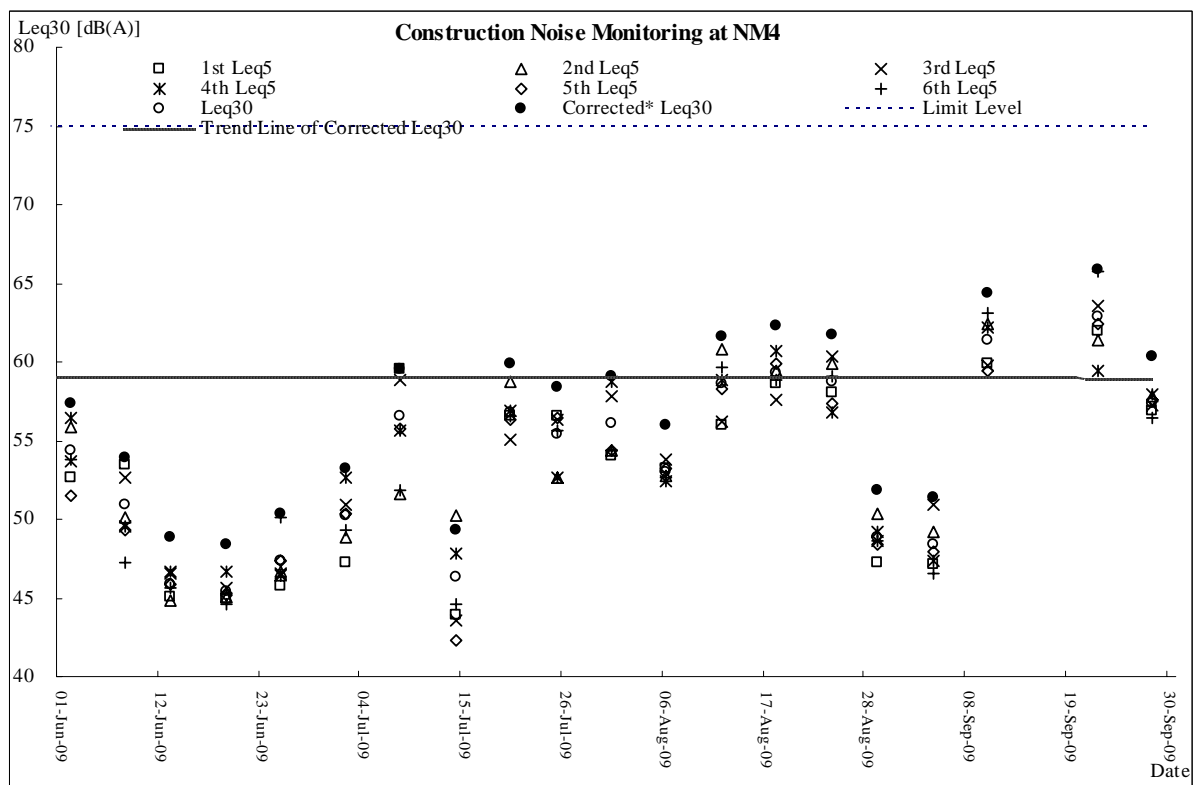
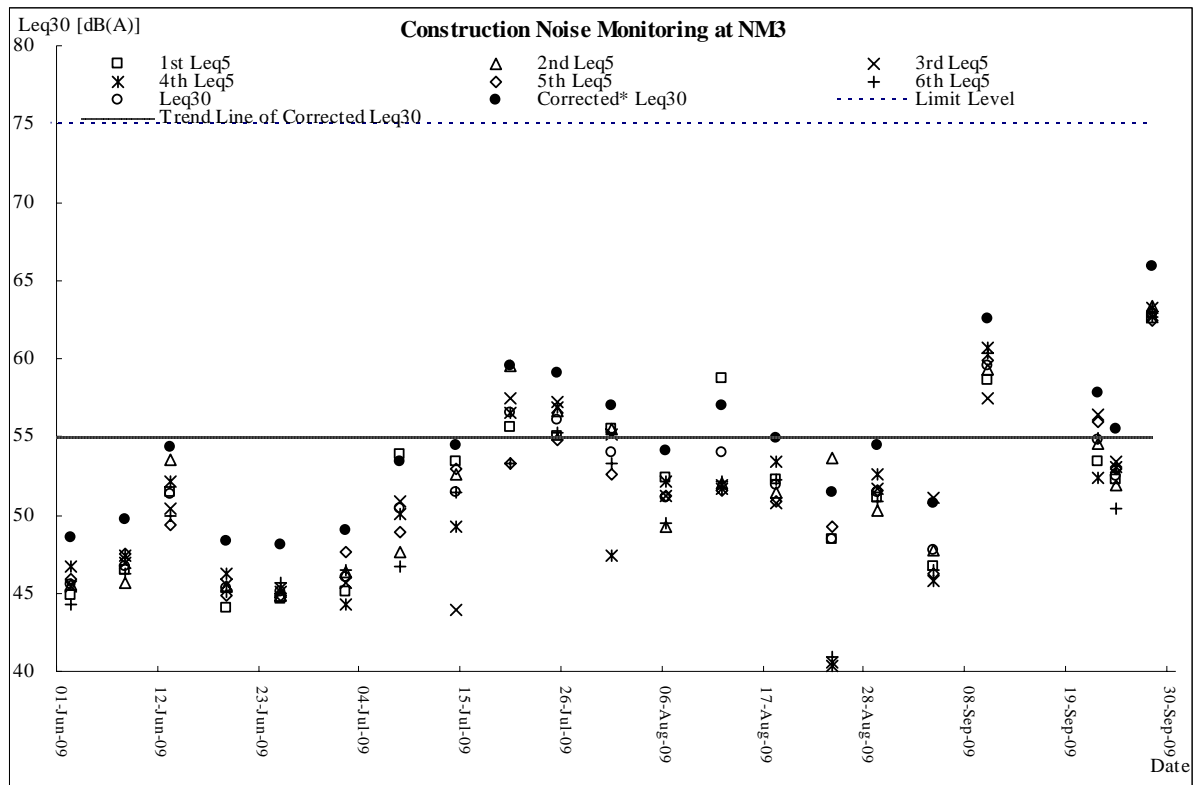


Air Quality Monitoring Results

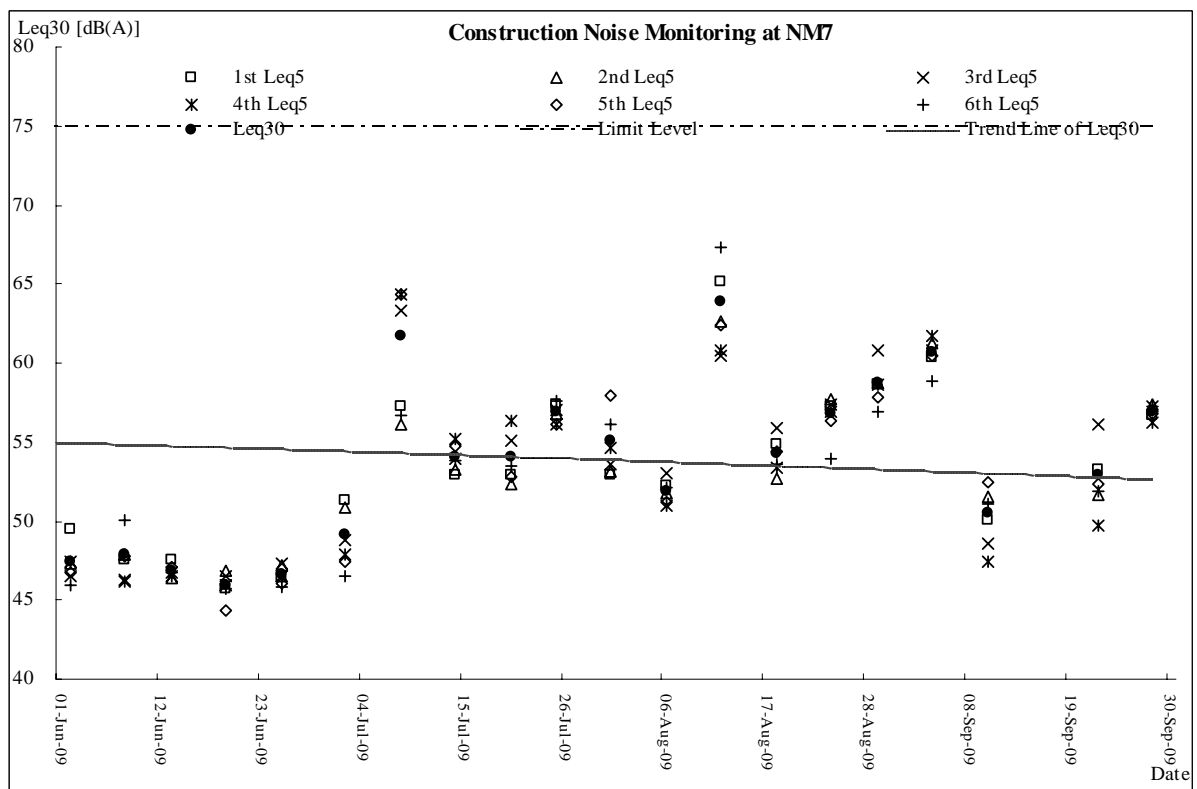
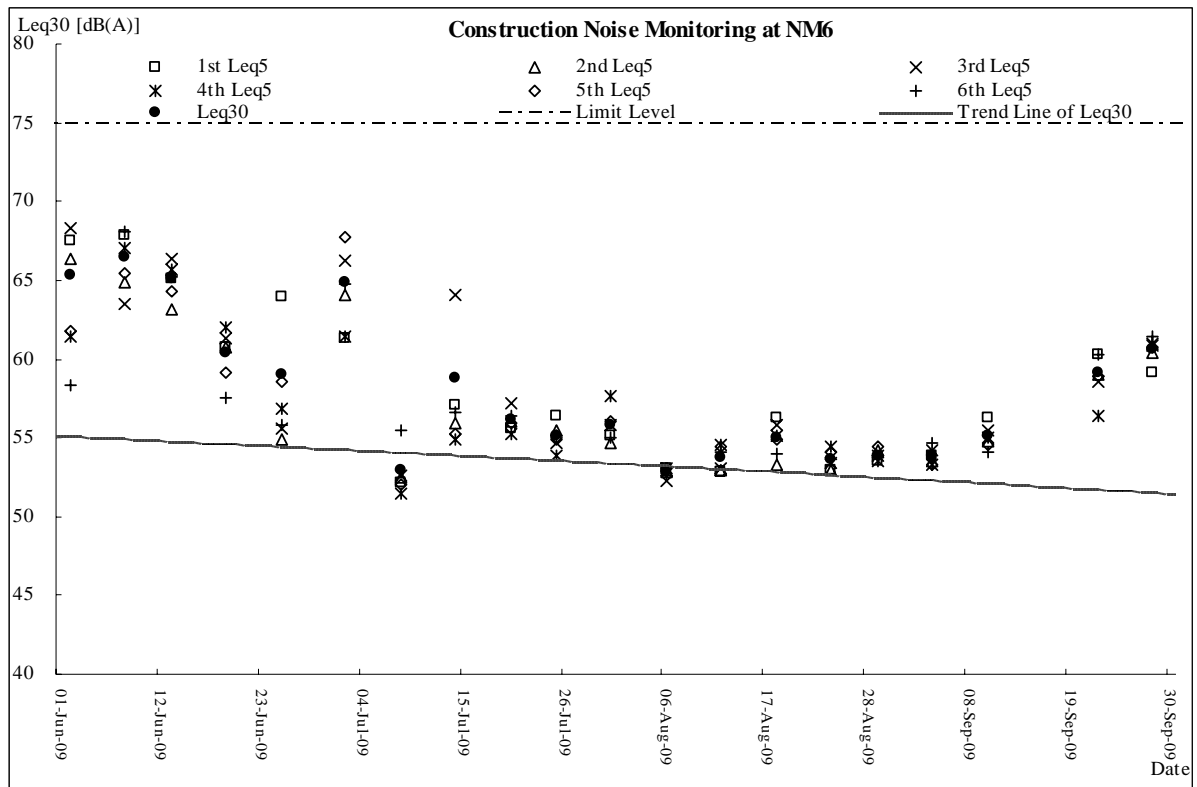


CONSTRUCTION NOISE

Construction Noise Monitoring Results



Construction Noise Monitoring Results



ANNEX K

PROFORMA OF SITE INSPECTION & IEC AUDIT

Project DC/2005/02 Construction of Sewers, Rising Mains & Sewage Pumping Station at Kam Tin, Nam Sang Wai and Au Tau in Yuen Long	Contractor: Leader Civil Engineering Corp. Ltd
Inspected by: ET Auditor: Ben Tam Contractor Rep: Edwin Leung IEC's Rep: RE's Rep:	Engineer: Babtie Asia Ltd IEC: Mott MacDonald Hong Kong Ltd Environmental Team: Action-United Environmental Services & Consulting Inspection Date & Time: 1 September 2009 (09:30) Checklist Reference No.: DSD-AT010909

General Meteorological Information

Weather Sunny Fine Cloudy Overcast Drizzle Rain Hazy
Temp: °C
Humidity: High (RH > 90%) Moderate (90% > RH > 50%) Low (RH < 50%)
Wind: Calm Light Breeze Strong

Air Quality

	Yes	NO	NA	NC	Follow-up	Remarks
Is hoarding of not less than 2.4m provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are site vehicles traveling within controlled speed limit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are site vehicles movement confined to designated haul roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are public roads outside site exits kept clean and free from dust?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are haul roads and unpaved surfaces watered regularly to avoid dust generation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there wheel washing facilities provided at site exits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is water spraying used during the main dust-generating activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are the excavated or stockpile of dusty materials kept wet or covered by impermeable/tarpaulin sheet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is exposed area of ground covered or watered frequently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are load on vehicles covered by clean impervious sheeting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are vehicles and equipment switched off while not in use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are smoky emissions from plants/equipment avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is open burning avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Observable dust sources <input type="checkbox"/> Wind erosion	<input checked="" type="checkbox"/>	NA				
<input type="checkbox"/> Loading/unloading of materials	<input type="checkbox"/>	Others	_____			

Construction Noise

Are the construction works scheduled to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are the works or equipment sited to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are all plant and equipment well maintained and in good operating condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is idle equipment turned off or throttled down?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is powered mechanical equipment covered or shielded by appropriate acoustic materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is silenced equipment used where appropriate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are noise enclosures or noise barriers used where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Does specified equipment has valid noise label?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are Construction Noise Permits (CNPs) available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Major Noise Source <input type="checkbox"/> Traffic	<input checked="" type="checkbox"/>	Construction activities inside the site				
<input type="checkbox"/> Construction activities outside of site	<input type="checkbox"/>	Others	Nil _____			

Water Quality & Drainage		Yes	NO	NA	NC	Follow-up	Remarks
Is a wastewater discharge license obtained for the Project?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is site effluent discharged in accordance with the discharge license?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is the discharge of silty water avoided?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Is drainage adequate?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is drainage system well maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there temporary ditches for runoff discharge into appropriate watercourse?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there sedimentation tanks for settling runoff prior to discharge?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are the sedimentation tanks:	Constructed of pre-formed individual cells?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	With adequate capacity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Free from silt and sediment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there neutralization tanks for concrete batching/mixing discharge?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there oil interceptors in drainage system?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is wheel wash facility provided at every site exit?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are vehicles and plant cleaned of earth, mud & debris before leaving the site?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are wheel washing facilities regularly inspected and maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are toilets provided on site? If so, are they properly maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are manholes covered and sealed?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is oil leakage or spillage avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Waste Management and Potential Land Contamination							
General Refuse:	Are receptacles (rubbish bins) available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is there regular and proper disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is proper sorting and recycling implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Construction Waste:	Is generation of construction waste minimized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is waste sorting implemented on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is construction waste reused where practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is construction waste properly disposed of?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
	Are disposal records available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Chemical waste/waste oil	Is there designated storage area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is chemical waste stored properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is there proper disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
	Is chemical waste license available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Excavated Materials	Do excavated materials appear uncontaminated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Are appropriate procedures followed if contaminated materials exist?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Are disposal records available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Chemical/Fuel	Is chemical/fuel stored in bounded area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is bund capacity adequate (>110% of the largest tank)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Are storage areas lockable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is foam, oil, grease or other objectionable matters in water or nearby drains of sewer avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Remarks:

Follow up

1. The excavated soil was removed.
2. The C&D waste was cleaned.
3. Drip Tray was provided for the free standing oil container.

Observations Recorded in this Site Inspection:



1. Waste battery was scattered at Pok Wai Road, the contractor was reminded disposed properly.
2. The C&D waste scattered on the site at location AIC4 should be disposed properly in order to maintain the site area clean and tidy.



3. Muddy water cumulated at Nam San Wai pumping Station, the contractor was reminded to clean.

Signatures:

Env. Auditor

Contractor's Representative

IC(E) Auditor


Witness by RE's Representative


 Name: Ben Yain


 Name: Edwin Leung

Name: _____


 Name: _____

TSANG Wing-tai


Project	DC/2005/02 Construction of Sewers, Rising Mains & Sewage Pumping Station at Kam Tin, Nam Sang Wai and Au Tau in Yuen Long	Contractor:	Leader Civil Engineering Corp. Ltd
Inspected by:	ET Auditor: Ben Tam	Engineer:	Babtie Asia Ltd
	Contractor Rep: Edwin Leung	IEC:	Mott MacDonald Hong Kong Ltd
	IEC's Rep:	Environmental Team:	Action-United Environmental Services & Consulting
	RE's Rep:	Inspection Date & Time:	8 September 2009 (09:30)
		Checklist Reference No.:	DSD-AT080909

General Meteorological Information

Weather Sunny Fine Cloudy Overcast Drizzle Rain Hazy
Temp: °C
Humidity: High (RH > 90%) Moderate (90% > RH > 50%) Low (RH < 50%)
Wind: Calm Light Breeze Strong

Air Quality

	Yes	NO	NA	NC	Follow-up	Remarks
Is hoarding of not less than 2.4m provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are site vehicles traveling within controlled speed limit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are site vehicles movement confined to designated haul roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are public roads outside site exits kept clean and free from dust?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are haul roads and unpaved surfaces watered regularly to avoid dust generation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there wheel washing facilities provided at site exits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is water spraying used during the main dust-generating activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the excavated or stockpile of dusty materials kept wet or covered by impermeable/tarpaulin sheet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is exposed area of ground covered or watered frequently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are load on vehicles covered by clean impervious sheeting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicles and equipment switched off while not in use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are smoky emissions from plants/equipment avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is open burning avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Observable dust sources <input type="checkbox"/> Wind erosion	<input checked="" type="checkbox"/>	NA				
<input type="checkbox"/> Loading/unloading of materials	<input type="checkbox"/>	Others				

Construction Noise

Are the construction works scheduled to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the works or equipment sited to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all plant and equipment well maintained and in good operating condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is idle equipment turned off or throttled down?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is powered mechanical equipment covered or shielded by appropriate acoustic materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is silenced equipment used where appropriate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are noise enclosures or noise barriers used where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does specified equipment has valid noise label?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are Construction Noise Permits (CNPs) available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Major Noise Source <input type="checkbox"/> Traffic	<input checked="" type="checkbox"/>	Construction activities inside the site				
<input type="checkbox"/> Construction activities outside of site	<input type="checkbox"/>	Others	Nil			

Water Quality & Drainage		Yes	NO	NA	NC	Follow-up	Remarks
Is a wastewater discharge license obtained for the Project?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is site effluent discharged in accordance with the discharge license?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is the discharge of silty water avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is drainage adequate?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is drainage system well maintained?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Are there temporary ditches for runoff discharge into appropriate watercourse?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there sedimentation tanks for settling runoff prior to discharge?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are the sedimentation tanks: Constructed of pre-formed individual cells?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
With adequate capacity?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Free from silt and sediment?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there neutralization tanks for concrete batching/mixing discharge?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there oil interceptors in drainage system?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is wheel wash facility provided at every site exit?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are vehicles and plant cleaned of earth, mud & debris before leaving the site?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are wheel washing facilities regularly inspected and maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are toilets provided on site? If so, are they properly maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are manholes covered and sealed?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is oil leakage or spillage avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Waste Management and Potential Land Contamination							
General Refuse:	Are receptacles (rubbish bins) available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is there regular and proper disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is proper sorting and recycling implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Construction Waste:	Is generation of construction waste minimized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is waste sorting implemented on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is construction waste reused where practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is construction waste properly disposed of?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
	Are disposal records available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Chemical waste/waste oil	Is there designated storage area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is chemical waste stored properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is there proper disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is chemical waste license available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Excavated Materials	Do excavated materials appear uncontaminated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Are appropriate procedures followed if contaminated materials exist?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Are disposal records available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Chemical/Fuel	Is chemical/fuel stored in bounded area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is bund capacity adequate (>110% of the largest tank)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Are storage areas lockable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is foam, oil, grease or other objectionable matters in water or nearby drains of sewer avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Remarks:

Follow up



1. C&D waste at AIC-4 was cleared.



2. Muddy water at Nam San Wai Pumping station was cleared.

3. Waste batteries at Pok Wai Road were disposed.

Observations Recorded in this Site Inspection:



1. The C&D waste scattered on the site at Sha Po Pumping Station should be disposed properly in order to maintain the site area clean and tidy.



2. Stagnant water cumulated at Sha Po pumping Station should be cleaned to prevent mosquito breeding.

Signatures:

Env. Auditor

Contractor's Representative

IC (E) Auditor

Witness by Representative

RE's

Name: Ben Tam

Name: Edwin Leung

Name:

Name:

TSANG Wing-kai

Project	DC/2005/02 Construction of Sewers, Rising Mains & Sewage Pumping Station at Kam Tin, Nam Sang Wai and Au Tau in Yuen Long	Contractor:	Leader Civil Engineering Corp. Ltd
Inspected by:	ET Auditor: Ben Tam	Engineer:	Babtie Asia Ltd
	Contractor Rep: Edwin Leung	IEC:	Mott MacDonald Hong Kong Ltd
	IEC's Rep:	Environmental Team:	Action-United Environmental Services & Consulting
	RE's Rep:	Inspection Date & Time:	17 September 2009 (09:30)
		Checklist Reference No.:	DSD-AT170909

General Meteorological Information

Weather Sunny Fine Cloudy Overcast Drizzle Rain Hazy
Temp: °C
Humidity: High (RH > 90%) Moderate (90% > RH > 50%) Low (RH < 50%)
Wind: Calm Light Breeze Strong

Air Quality

	Yes	NO	NA	NC	Follow-up	Remarks
Is hoarding of not less than 2.4m provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are site vehicles traveling within controlled speed limit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are site vehicles movement confined to designated haul roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are public roads outside site exits kept clean and free from dust?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are haul roads and unpaved surfaces watered regularly to avoid dust generation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there wheel washing facilities provided at site exits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is water spraying used during the main dust-generating activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the excavated or stockpile of dusty materials kept wet or covered by impermeable/tarpaulin sheet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is exposed area of ground covered or watered frequently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are load on vehicles covered by clean impervious sheeting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicles and equipment switched off while not in use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are smoky emissions from plants/equipment avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is open burning avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Observable dust sources <input type="checkbox"/> Wind erosion	<input checked="" type="checkbox"/>	NA				
<input type="checkbox"/> Loading/unloading of materials	<input type="checkbox"/>	Others				

Construction Noise

Are the construction works scheduled to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the works or equipment sited to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all plant and equipment well maintained and in good operating condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is idle equipment turned off or throttled down?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is powered mechanical equipment covered or shielded by appropriate acoustic materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is silenced equipment used where appropriate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are noise enclosures or noise barriers used where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does specified equipment has valid noise label?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are Construction Noise Permits (CNPs) available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Major Noise Source <input type="checkbox"/> Traffic	<input checked="" type="checkbox"/>	Construction activities inside the site				
<input type="checkbox"/> Construction activities outside of site	<input type="checkbox"/>	Others	Nil			

Water Quality & Drainage		Yes	NO	NA	NC	Follow-up	Remarks
Is a wastewater discharge license obtained for the Project?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is site effluent discharged in accordance with the discharge license?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is the discharge of silty water avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is drainage adequate?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is drainage system well maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there temporary ditches for runoff discharge into appropriate watercourse?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there sedimentation tanks for settling runoff prior to discharge?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are the sedimentation tanks:	Constructed of pre-formed individual cells?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	With adequate capacity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Free from silt and sediment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there neutralization tanks for concrete batching/mixing discharge?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are there oil interceptors in drainage system?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is wheel wash facility provided at every site exit?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are vehicles and plant cleaned of earth, mud & debris before leaving the site?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are wheel washing facilities regularly inspected and maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are toilets provided on site? If so, are they properly maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Are manholes covered and sealed?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is oil leakage or spillage avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Waste Management and Potential Land Contamination							
General Refuse:	Are receptacles (rubbish bins) available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is there regular and proper disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is proper sorting and recycling implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Construction Waste:	Is generation of construction waste minimized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is waste sorting implemented on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is construction waste reused where practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is construction waste properly disposed of?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Are disposal records available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Chemical waste/waste oil	Is there designated storage area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is chemical waste stored properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is there proper disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is chemical waste license available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Excavated Materials	Do excavated materials appear uncontaminated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Are appropriate procedures followed if contaminated materials exist?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Are disposal records available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Chemical/Fuel	Is chemical/fuel stored in bounded area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is bund capacity adequate (>110% of the largest tank)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Are storage areas lockable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is foam, oil, grease or other objectionable matters in water or nearby drains of sewer avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Remarks:

Follow up

1. C&D waste at Sha Po pumping station was cleared.
2. Stagnant water cumulated at Sha Po pumping Station was cleared.

Observations Recorded in this Site Inspection:

No environmental issue was observed during the site inspection.
As a reminder, stagnant water should be cleared after the rainfall to prevent mosquito breeding.

Signatures:

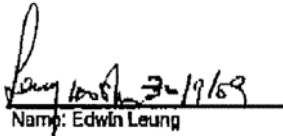
Signatures:

Env. Auditor

Contractor's Representative


iC(E) Auditor

Witness by RE's Representative



Name: Edwin Leung

Name: _____



Name: *(Signature with RE's)*

Project	DC/2005/02 Construction of Sewers, Rising Mains & Sewage Pumping Station at Kam Tin, Nam Sang Wai and Au Tau in Yuen Long	Contractor:	Leader Civil Engineering Corp. Ltd
Inspected by:	ET Auditor: Ben Tam	Engineer:	Babtie Asia Ltd
	Contractor Rep: Edwin Leung	IEC:	Mott MacDonald Hong Kong Ltd
	IEC's Rep: Isaac Chu	Environmental Team:	Action-United Environmental Services & Consulting
	RE's Rep:	Inspection Date & Time:	22 September 2009 (09:30)
		Checklist Reference No.:	DSD-AT220909

General Meteorological Information

Weather Sunny Fine Cloudy Overcast Drizzle Rain Hazy
Temp: °C
Humidity: High (RH > 90%) Moderate (90% > RH > 50%) Low (RH < 50%)
Wind: Calm Light Breeze Strong

Air Quality

	Yes	NO	NA	NC	Follow-up	Remarks
Is hoarding of not less than 2.4m provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are site vehicles traveling within controlled speed limit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are site vehicles movement confined to designated haul roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are public roads outside site exits kept clean and free from dust?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are haul roads and unpaved surfaces watered regularly to avoid dust generation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there wheel washing facilities provided at site exits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is water spraying used during the main dust-generating activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the excavated or stockpile of dusty materials kept wet or covered by impermeable/tarpaulin sheet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is exposed area of ground covered or watered frequently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are load on vehicles covered by clean impervious sheeting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicles and equipment switched off while not in use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are smoky emissions from plants/equipment avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is open burning avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Observable dust sources <input type="checkbox"/> Wind erosion	<input checked="" type="checkbox"/>	NA				
<input type="checkbox"/> Loading/unloading of materials	<input type="checkbox"/>	Others				

Construction Noise

Are the construction works scheduled to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the works or equipment sited to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all plant and equipment well maintained and in good operating condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is idle equipment turned off or throttled down?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is powered mechanical equipment covered or shielded by appropriate acoustic materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is silenced equipment used where appropriate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are noise enclosures or noise barriers used where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does specified equipment has valid noise label?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are Construction Noise Permits (CNPs) available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Major Noise Source <input type="checkbox"/> Traffic	<input checked="" type="checkbox"/>	Construction activities inside the site				
<input type="checkbox"/> Construction activities outside of site	<input type="checkbox"/>	Others	Nil			

Water Quality & Drainage		Yes	NO	NA	NC	Follow-up	Remarks
Is a wastewater discharge license obtained for the Project?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is site effluent discharged in accordance with the discharge license?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the discharge of silty water avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is drainage adequate?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is drainage system well maintained?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Remarks 1
Are there temporary ditches for runoff discharge into appropriate watercourse?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there sedimentation tanks for settling runoff prior to discharge?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the sedimentation tanks:	Constructed of pre-formed individual cells?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	With adequate capacity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Free from silt and sediment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there neutralization tanks for concrete batching/mixing discharge?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there oil interceptors in drainage system?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is wheel wash facility provided at every site exit?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicles and plant cleaned of earth, mud & debris before leaving the site?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are wheel washing facilities regularly inspected and maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are toilets provided on site? If so, are they properly maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are manholes covered and sealed?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is oil leakage or spillage avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Waste Management and Potential Land Contamination							
General Refuse:	Are receptacles (rubbish bins) available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is there regular and proper disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is proper sorting and recycling implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Construction Waste:	Is generation of construction waste minimized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is waste sorting implemented on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is construction waste reused where practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is construction waste properly disposed of?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Remarks 2
	Are disposal records available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Chemical waste/waste oil	Is there designated storage area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is chemical waste stored properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is there proper disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is chemical waste license available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Excavated Materials	Do excavated materials appear uncontaminated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Are appropriate procedures followed if contaminated materials exist?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Are disposal records available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Chemical/Fuel	Is chemical/fuel stored in bounded area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is bund capacity adequate (>110% of the largest tank)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Are storage areas lockable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is foam, oil, grease or other objectionable matters in water or nearby drains of sewer avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Remarks:

Follow up
Nil

Observations Recorded in this Site Inspection:



1. Stagnant water cumulated at Nam San Wai Road, the contractor was reminded to clean to prevent mosquito breeding.



2. Stagnant water cumulated inside the waste skip, the contractor was reminded to clean ASAP.

Signatures:

Signatures:

Env. Auditor

Name: Ben Yam

Contractor's Representative

Name: Edwin Leung

IC(E) Auditor

Name:

Witness by
Representative RE's

Name:

TSANG Wing-kai
SLOW

Project	DC/2005/02 Construction of Sewers, Rising Mains & Sewage Pumping Station at Kam Tin, Nam Sang Wai and Au Tau in Yuen Long	Contractor:	Leader Civil Engineering Corp. Ltd
Inspected by:	ET Auditor: Ben Tam	Engineer:	Babtie Asia Ltd
	Contractor Rep: Edwin Leung	IEC:	Mott MacDonald Hong Kong Ltd
	IEC's Rep:	Environmental Team:	Action-United Environmental Services & Consulting
	RE's Rep:	Inspection Date & Time:	29 September 2009 (09:30)
		Checklist Reference No.:	DSD-AT290909

General Meteorological Information

Weather Sunny Fine Cloudy Overcast Drizzle Rain Hazy
Temp: °C
Humidity: High (RH > 90%) Moderate (90% > RH > 50%) Low (RH < 50%)
Wind: Calm Light Breeze Strong

Air Quality

	Yes	NO	NA	NC	Follow-up	Remarks
Is hoarding of not less than 2.4m provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are site vehicles traveling within controlled speed limit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are site vehicles movement confined to designated haul roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are public roads outside site exits kept clean and free from dust?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are haul roads and unpaved surfaces watered regularly to avoid dust generation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there wheel washing facilities provided at site exits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is water spraying used during the main dust-generating activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the excavated or stockpile of dusty materials kept wet or covered by impermeable/tarpaulin sheet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is exposed area of ground covered or watered frequently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are load on vehicles covered by clean impervious sheeting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicles and equipment switched off while not in use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are smoky emissions from plants/equipment avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is open burning avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Observable dust sources <input type="checkbox"/> Wind erosion	<input checked="" type="checkbox"/>	NA				
<input type="checkbox"/> Loading/unloading of materials	<input type="checkbox"/>	Others				

Construction Noise

Are the construction works scheduled to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the works or equipment sited to minimize noise nuisance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all plant and equipment well maintained and in good operating condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is idle equipment turned off or throttled down?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is powered mechanical equipment covered or shielded by appropriate acoustic materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is silenced equipment used where appropriate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are noise enclosures or noise barriers used where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does specified equipment has valid noise label?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are Construction Noise Permits (CNPs) available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Major Noise Source <input type="checkbox"/> Traffic	<input checked="" type="checkbox"/>	Construction activities inside the site				
<input type="checkbox"/> Construction activities outside of site	<input type="checkbox"/>	Others	Nil			

Water Quality & Drainage		Yes	NO	NA	NC	Follow-up	Remarks
Is a wastewater discharge license obtained for the Project?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is site effluent discharged in accordance with the discharge license?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the discharge of silty water avoided?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Remarks 1
Is drainage adequate?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is drainage system well maintained?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Remarks 1
Are there temporary ditches for runoff discharge into appropriate watercourse?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there sedimentation tanks for settling runoff prior to discharge?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the sedimentation tanks: Constructed of pre-formed individual cells?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
With adequate capacity?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Free from silt and sediment?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there neutralization tanks for concrete batching/mixing discharge?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are there oil interceptors in drainage system?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is wheel wash facility provided at every site exit?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicles and plant cleaned of earth, mud & debris before leaving the site?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are wheel washing facilities regularly inspected and maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are toilets provided on site? If so, are they properly maintained?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are manholes covered and sealed?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is oil leakage or spillage avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Waste Management and Potential Land Contamination							
General Refuse:	Are receptacles (rubbish bins) available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is there regular and proper disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is proper sorting and recycling implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Construction Waste:	Is generation of construction waste minimized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is waste sorting implemented on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is construction waste reused where practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is construction waste properly disposed of?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Are disposal records available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Chemical waste/waste oil	Is there designated storage area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is chemical waste stored properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is there proper disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is chemical waste license available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Excavated Materials	Do excavated materials appear uncontaminated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Are appropriate procedures followed if contaminated materials exist?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Are disposal records available for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Chemical/Fuel	Is chemical/fuel stored in bounded area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is bund capacity adequate (>110% of the largest tank)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Are storage areas lockable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is foam, oil, grease or other objectionable matters in water or nearby drains of sewer avoided?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Remarks:

Follow up

Stagnant water at Nam San Wai Road was cleared.
Stagnant water inside the waste skip was removed.

Observations Recorded in this Site Inspection:



1. Surface runoff was observed at the public road near Nam San Wai pumping station, the contractor was reminded to provide sand bags to prevent surface runoff discharged..

Signatures:

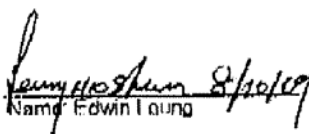
Env. Auditor

Contractor's Representative


IC(E) Auditor

Witness by RE's
Representative


Name: Ben Tam


Name: Edwin Loung

Name: _____


Name: _____

TSANG Wing-kai
Signed

**Agreement No. CE37/2005 (EP)
Environmental Monitoring and Audit for
Kam Tin Trunk Sewerage Phase 1 and Au Tau Trunk sewers**

MONTHLY SITE INSPECTION CHECKLIST

Inspection Date	22/9/2009	Time	9:30 - 11:40	Inspected By	Leader: Edwin Leung ET: Ben Tam DSD: W.K. Tang IEC: Isaac Chu
Site Location	Nan Sun Wai Road Pak Wai South Road Nan Sun Wai Pumping Station Site P2, Kam Tin Pump Station				

Weather

Condition Sunny Fine Overcast Drizzle Rain Storm Hazy

Temperature 31°C Humidity High Moderate Low

Wind Calm Light Breeze Strong Direction NW

EIA ref:		Close-out on last comments Y/N	N/A or not obs	Yes	No	Photo/Remarks
Construction Phase						
Air Quality - Construction Phase						
3.5	• Are hoardings of not less than 2.4m high provided along the site boundary?			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3.5	• Is the portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit kept clear of dusty materials?			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3.5	• Are stockpiled dusty materials covered by impervious sheeting and placed in an area sheltered on top and 3 sides or sprayed with water?	Y		<input checked="" type="checkbox"/>	<input type="checkbox"/>	See photo.
3.5	• Are dusty material loads on vehicles sprayed with water prior to loading and unloading?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.5	• Are all vehicles washed to remove dusty materials from its body and wheels before leaving site?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.5	• Are vehicles which are carrying dusty materials covered entirely by impervious sheeting when leaving site?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.5	• Are surfaces where any mechanical breaking operation takes place sprayed?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.5	• Are working area of any excavation sprayed with water, immediately before, during and immediately after the operation?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.5	• Where a scaffolding is erected around the perimeter of a building under construction, are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the SPS, or a canopy from the first floor level up to the highest level of the scaffolding?			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3.5	• Are skip hoists for material transport totally enclosed?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3.7	<ul style="list-style-type: none"> Have dust monitors been provided at the following locations: <ul style="list-style-type: none"> Boundary facing scattered house in NSW (AM1) Boundary facing Fung Kai Hsing (AM5) Boundary facing scattered house near route 3 (AM6) 			✓	
Construction Noise					
Demolition works					
4.7.1	<ul style="list-style-type: none"> Are quiet PME which meet the SWLs from BS 5228:Part 1: 1997 used? 			✓	
Sewage Pumping Stations P1, P2 & P3					
4.7.1	<ul style="list-style-type: none"> Are quiet PME which meet the SWLs from BS 5228:Part 1: 1997 used? 			✓	
4.7.1	<ul style="list-style-type: none"> Are temporary noise barrier, in the form of a site hoarding (with superficial density of at least 20kg/m2, with no substantial gaps), along the site boundaries of the pumping station sites adopted? 			✓	
Sewers and Rising Mains using Open Trench					
4.7.1	<ul style="list-style-type: none"> Are quiet PME which meet the SWLs from BS 5228:Part 1: 1997 used? 			✓	
4.7.1	<ul style="list-style-type: none"> Are handhold breakers used for all initial road opening activities, when breaking tarmac/concrete road surface to a depth of 300mm or when granular material is reached? 			✓	
4.7.1	<ul style="list-style-type: none"> Are movable noise barriers or 3 sided enclosures installed for all initial road opening activities (breaking tarmac/concrete road surface to a depth of 300mm or when granular material is reached) where there NBRs within 60m of the line of sight? 			✓	
Sewers and Rising Mains using Pipe Jacking					
4.7.1	<ul style="list-style-type: none"> Are quiet PME which meet the SWLs from BS 5228:Part 1: 1997 used? 			✓	
Road Pavement and Finishes					
4.7.1	<ul style="list-style-type: none"> Are quiet PME which meet the SWLs from BS 5228:Part 1: 1997 used? 			✓	
4.9.1	<ul style="list-style-type: none"> Have noise monitors been provided at the following locations: <ul style="list-style-type: none"> (NM3) Scattered house in NSW (NM4) Scattered house in NSW (NM6) Scattered house near Route 3 (NM7) Fung Kai Hsing 			✓	
Construction Runoff and Site Drainage					
	<ul style="list-style-type: none"> Are perimeter cut-off drains to direct off-site water around the site constructed with internal drainage works and erosion and sedimentation control facilities implemented. Are channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers provided on site to direct stormwater to silt removal facilities? 			✓	
	<ul style="list-style-type: none"> Are dikes or embankments for flood protection implemented around the boundaries of earthwork areas. Are sediment/silt traps incorporated in the permanent drainage channels to enhance deposition rates? 			✓	
	<ul style="list-style-type: none"> Are silt removal facilities provided with retention time for silt/sand traps of 5 minutes under maximum flow conditions? 			✓	
	<ul style="list-style-type: none"> Are construction works programmed to minimize surface excavation works during the rainy seasons (April to September)? 			✓	
	<ul style="list-style-type: none"> Are slopes minimised and erosion potential reduced? 			✓	
	<ul style="list-style-type: none"> Is deposited silt and grit removed regularly and disposed of by spreading evenly over stable, vegetated areas? 			✓	

• Are measures taken to minimise the ingress of site drainage into excavations? Is water pumped out from trenches or foundation excavations discharged into storm drains via silt removal facilities?			✓	
• Are open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50m ³ covered with tarpaulin or similar fabric during rainstorms?			✓	
• Are manholes (including newly constructed ones) adequately covered and temporarily sealed?			✓	
• Are precautions taken before rainstorms?		✓		
• Are all vehicles and plant cleaned before leaving site?		✓		
• Is solid waste, debris and rubbish on site appropriately collected, handled and disposed of properly to avoid water quality impacts?		✓		
• Are all fuel tanks and storage areas provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby?		✓		

Sewage Effluent - Construction Phase

1) Are portable chemical toilets and sewage holding tanks provided? Is handling the construction sewage generated for collection and disposal of this waste? Is a licensed contractor employed?			✓	
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Waste Management - Construction Phase

6.6.2	• Are the necessary waste disposal permits from the appropriate authorities in place for chemical and C&D wastes, in accordance with the Waste Disposal (Chemical Waste) (General) Regulations and the Land (Miscellaneous Provisions) Ordinance (Cap 28)?			✓	
6.6.2	• Is chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, being handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes?	Y		✓	
6.6.2	• Are containers used for the storage of chemical wastes suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; have a capacity of less than 450 liters unless the specification has been approved by the EPD; and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the regulation?			✓	
6.6.2	• Is the storage area for chemical wastes clearly labelled and used solely for the storage of chemical waste; enclosed on at least 3 sides; have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20 % of the total volume of waste stored in that area, whichever is the greatest; have adequate ventilation; covered to prevent rainfall entering; and arranged so that incompatible materials are adequately separated?		✓		
6.6.2	• Is disposal of chemical waste via a licensed waste collector, be to a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Centre which also offers a chemical waste collection service and can supply the necessary storage containers; or be to a reuser of the waste, under approval from the EPD?		✓		
6.6.2	• Are trip tickets for disposal available to monitor disposal of C&DM and solid wastes at public filling and landfills, and to control fly tipping?		✓		

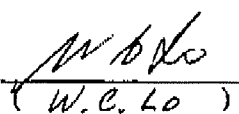
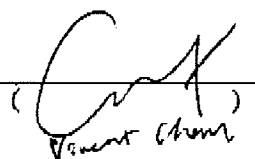
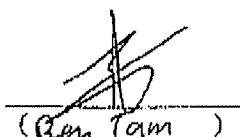

Land Contamination - Construction Phase					
7.5.6	• Is a revised CAP submitted to the EPD before commencement of construction works? Is the CAP implemented and findings of the investigations reported in the CAR, before ground disturbance is allowed?		✓		
7.5.6	• If land contamination is confirmed, has a RAP been prepared and submitted to EPD?		✓		
7.5.6	• Are contaminated sites remediated in accordance with the approved CAR/RAP?		✓		
Ecology - Construction Phase					
8.7.1	• Are construction activities prohibited during November to March for the sections of works within the WCA and WBA, and close to locations of ecologically sensitive species			✓	
8.7.1	• During November to March periods, are regular site inspections (at least twice a month) undertaken by ET to ensure proper implementation of this restriction?		✓		
8.7.2	• Is pipe jacking method used for sewers and rising mains crossing over MDC within the WCA and WBA?			✓	
8.7.2	• During November to March, are regular site inspections (at least twice a month) undertaken by ET for the remaining sewerage sections (including parts of S4, S5 and S6) within the WCA and WBA where construction activities cannot be rescheduled?		✓		
8.7.2	• The site inspections shall check and report the number of workfronts and implementation of mitigation measures in the monthly EM&A Report.			✓	
8.7.3	• Are quietened construction plant and equipment used for PS (P2 and P3) and sewers (S4, S5, S6) within the WCA and WBA?		✓		
8.7.4	• For P1-P3, have fences along the boundary of the pumping stations construction sites been erected?			✓	
8.7.4	• There shall be no filling and dumping to the remaining abandoned fishpond at P2.			✓	
8.7.4	• Are all removal facilities, designed to the ProPECC Note PN1/B4, installed and operated at the P1 to P3 sites? The minimal total combined volume of the silt removal facilities at P3 (NSW SPS) should be 15m ³ .			✓	
8.7.4	• There shall be no open fires within the site boundary.			✓	
8.7.4	• Have temporary fire fighting equipment provided in the works areas.			✓	
Landscape and Visual - Construction Phase					
	• Have the implementation of mitigation measures (i.e., top soil reused, new compensatory planting) been reported in the monthly EM&A?			✓	
	• The first monthly EM&A Report should report on the appearance of the temporary hoarding barriers.			✓	
	• Are screen planting (3m wide) and trees with dense canopy (up to 5m) provided?		✓		
	• Is felling of mature trees kept to a minimum?			✓	

OTHER OBSERVATIONS**This month's observations (22 September 2009)**

1. Ponding water was observed at various locations at Nam San Wai Road. The Contractor was recommended to clear the water as soon as possible. Mosquito oils should be applied if the ponding water was not cleared.
2. A steel skip containing mixed waste and blackish water was observed at Pok Wai South Road. The Contractor was recommended to dispose the waste urgently.

Follow-up last month's observation (25 August 2009)






1. Stockpile of excavated materials observed at Nam San Wai Road has been used to level the ground.
2. The pile of construction waste observed at Nam San Wai Road has been cleared.
3. Spent chemical container observed at Pok Wai South Road has been removed.

DSID Representative	Contractor Representative	ETL	IEC
 (W.C. Lo)	 (Vincent Chan)	 (Ben Lam)	 Isaac Chen (22/9/2009)

Agreement No. CE37/2005 (EP)
Environmental Monitoring and Audit for
Kam Tin Trunk Sewerage Phase 1 and Au Tau Trunk Sewers

MONTHLY SITE INSPECTION PHOTOS
22 September 2009
Environmental Observations

This month's observations

<p>Air Quality</p> 	<p>Waste Management</p> 
<p>Stockpile of excavated materials observed at Nam San Wai Road has been used to level the ground.</p>	<p>The pile of construction waste observed at Nam San Wai Road has been cleared.</p>
<p>Waste Management</p> 	<p>Water Quality</p> 
<p>Spent chemical container observed at Pok Wai South Road has been removed.</p>	<p>Ponding water was observed at various locations at Nam San Wai Road. The Contractor was recommended to clear the water as soon as possible. Mosquito oils should be applied if the ponding water was not cleared.</p>
<p>Waste Management</p> 	
<p>A steel skip containing mixed waste and blackish water was observed at Pok Wai South Road. The Contractor was recommended to dispose the waste urgently.</p>	