

ЈОВ 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 | | | |
|----------------------------|-----------------------------|-----------------------|--------------------------------------|
| Date | Reference No. | | |
| 8 October 2009 | TCS00310/06/600/R0964v1 | | |
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| Version No. | Date | Remarks | |
|-------------|----------------|------------------|--|
| Ι | 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.

| Locations | Description of Construction Activities | Environmental Mitigation Measures | EM&A Ref. |
|---|--|--|---|
| P1 (Kam Tin Pumping Station) | Pipe jacking Excavation | 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 | A2 A3 |
| P2 (Sha Po Pumping Station) and | Sheet piling Excavation Backfilling Concreting | • Erect 2.4m high noise barrier hoarding around the works area at P1, P2 and P3 | A2 A3 |
| P3 (Nam Sang Wai Pumping Station | Backfilling Concreting | 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 | Sheet piling Excavation Pipe laying Backfilling Concreting Extract sheet pile | 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) | Sheet piling Excavation Pipe laying Backfilling Concreting Extract sheet pile | 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. | & D4 D5 F9 H1 I1 & I2 - |

 Table 2-1
 Work Undertaken and Illustrations of Mitigation Measures

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 | Nature of Premise | Site Work Description | Station Coordinates | |
|---------|----------------------|-----------------------|---------------------|---------|
| ID | Nature of Trennise | Site Work Description | Northern | Eastern |
| AM1 | Site Boundary in NSW | | 835829 | 822910 |
| AM5 | Site Boundary in FKH | Excavation; | 835121 | 823515 |
| AM6 | Site Boundary in KT | Sheet piling; | 833308 | 823987 |
| AM7 | Site Boundary in NSW | Backfilling; | 836171 | 822586 |
| NM3 | Village House in NSW | Pipe laying; | 835808 | 822817 |
| NM4 | Village House in NSW | Concreting; and | 835282 | 822811 |
| NM6 | Village House in KT | Extract sheet pile | 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 3-1Summary 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.

| Monitoring Locations | Action Level (µg/m ³) | | Limit Level (µg/m ³) | |
|----------------------|-----------------------------------|-------------|----------------------------------|-------------|
| Monitoring Locations | 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 | | d | Action Level | Limit Level | |
|-------------------|-------|----|--------------|-----------------------------|------------|
| 0700-1900 | hours | on | normal | When one or more documented | > 75 dB(A) |
| weekdays | | | | 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 | | 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;
 - $0.6-1.7 \text{m}^3/\text{min}$ (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 (L_{10} and L_{90}) 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.



| | | nent used in impact Linar i rugi ani | | |
|-------------|-------------|--|--|--|
| 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) | | |

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

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 Station | s) |
|------------------------------|--|
| 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.

| Date | | 24-hour | ГSP (µg/m³) | | | | |
|--------------------|----------------|---------------|--------------|--------------|--|--|--|
| Date | 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 | | | |

 Table 5-3
 Summary of Air Quality Monitoring Results

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

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.

| | | | | J | | | | | |
|-----------------|------------------------|------|-------------|-------------|-------------|-------------|-------------|-------|---------------------|
| Date | Start 1st Time 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 | 63.2 62.4 | | 62.8 | 65.8 |
| Limit Le | evel | | | | | | | | 75 |

Table 5-4 Summary of Noise Monitoring Results at NM3

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 | 11:30 59.9 | | 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 Le | evel | | | | | | | | 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.

^{*} Monitoring date for made up the lost sample.

[#] Monitoring was affected due to power failure.



| | | 2 | | • | | | | |
|------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| 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 L | evel | | | | | | | 75 |

Table 5-6 Summary of Noise Monitoring Results at NM6

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

| | | 5 | | 5 | | | | |
|-----------------|-------|------|------|------|------|------|------|-------|
| Date | Start | 1st | 2nd | 3rd | 4th | 5th | 6th | Leq30 |
| Dute | Time | Leq5 | Leq5 | Leq5 | Leq5 | Leq5 | Leq5 | Lequ |
| 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 L | evel | | | | | | | 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 DaySunday 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

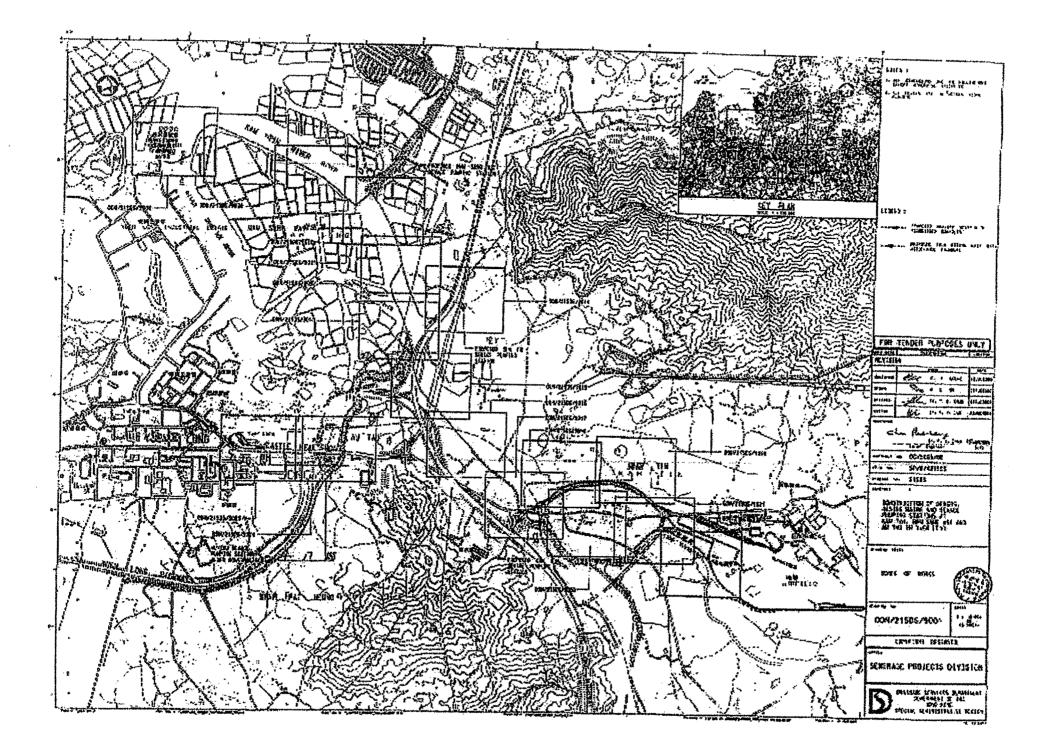
- 7.04 Representatives of the Engineer, the Contractor and ET carried out regular weekly site inspection on 1, 8, 17, 22 and 29 September 2009 to evaluate the site environmental performance. No non-compliance was found in this month. 8 observations were recorded from the ET weekly site inspections. 3 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

 $\hline Z:\label{eq:loss} \end{tabular} $$Z:\below \end{tabular} $$Z:\below \end{tabular} $$ Z:\below \end{tabular} $$ Action-United Environmental Services and Consulting $$ Consulting $$ Description \end{tabular} $$ Action-United Environmental Services and Consulting $$ Description \end{tabular} $$ Descripti$

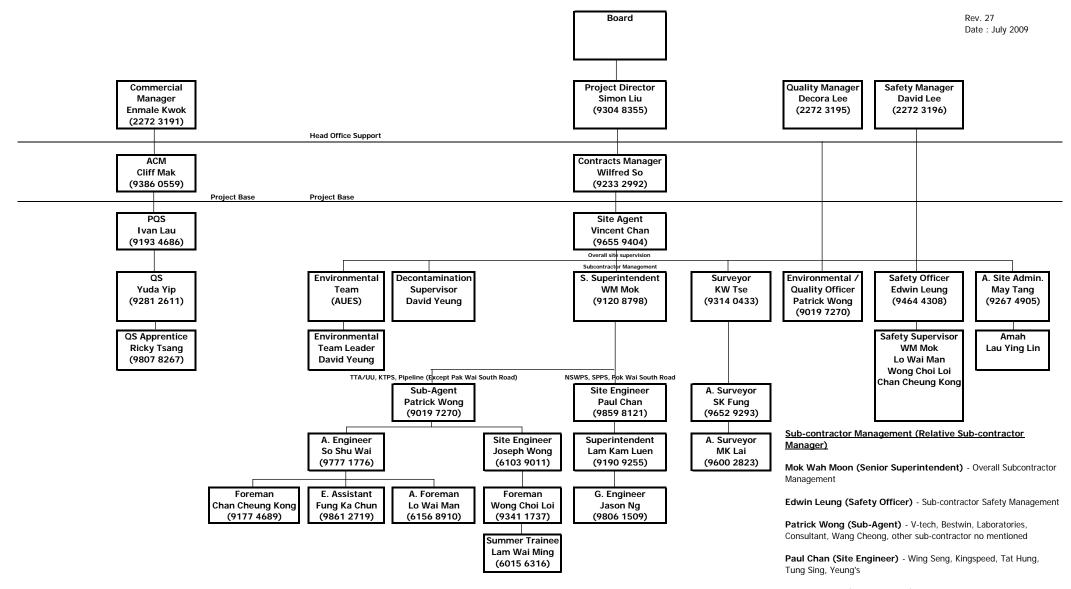




ANNEX B

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 <u>Contractor's Site Organization Chart</u>



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



ANNEX C

CONSTRUCTION PROGRAM

| | Act ID | Description | Orig Dur | Total Float | Percent Earl Complete Star | y Early t Finish | Late Start | Late Finish | JUL 27 | 03 | AU 10 | JG 17 | 24 | 31 | 07 | SEP 14 | 21 | 2009 | 05 | OCT | 19 | 26 | 02 | NO\ 09 | / 16 | 23 |
|------------------|---------------------------|---|-------------|----------------|-------------------------------|---------------------|--------------------|----------------------|-----------|------------|------------|------------|----------|-----------|--------|-----------|---------|----------------|---------------|--------------|--------------|-------------|------------|------------|---------------------------|---------------|
| Sectio | on Completion | /Key Date | | | | | | | | | | 1 | | | | 1 | i I | 1 | | | | | | | | |
| | | | | | | | | | | i i | I | i . | i l | i | i. | i i | i i | i | i i | I I | i i | | i i | i | | 1 |
| | · | | | | | | | | | | | 1 | | | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 |
| | CD5000 | Section 5 | 0 | 0 | 0 | 29AUG09 | | 29AUG09* | | | | l | i l | Section 5 | l | i | l . | l | l | | | | i i | l | | i. |
| Sectio | CD9000 | Handover of TOA | 0 | 0 | 0 | 11NOV09 | | 11NOV09* | | <u> </u> | | | | <u> </u> | 1 | 1 | | 1 | 1 | | | | | ♦Hang | dover of T | ,DA |
| | tion A | | | | | | | | | | | l | i l | l | l I | 1 | 1 | 1 | l | | | | · · | l | | I |
| | rainage and Trench Met | | | | | | | | | | | 1 | | 1 | 1 | 1 | | 1 | 1 | | | | | | | 1 |
| | | | | | | | | | | | | 1 | | | 1 | 1 | | 1 | 1 | | | | | | | i. |
| | | 00 DN1050 Pipe & Manhole (D1 - MH1 - P/S) | 60 | | 20 07SEP | | | | | | | 1 | | | | 1 | 1 | 1 | | | | N1050 Pi | pe & Manho | le (D1 - M | | N600 Pipe |
| | S1AEA11 S1AEA12 | | 70 30 | | 0 28AUG 0 27OC1 | | 28AUG09 27OCT09 | 20NOV09 30NOV09 | - | | | 1 | | | | | | | | | | | | | | |
| | | 00 Construct Flow Meter Chamber (FMC) | 90 | | 75 28JUL | | | 30NOV09 A 22SEP09 | - | <u> </u> | | | | | | | Const | uctFlow N | leter Charr | ber (FMC) | | | | | | 1 |
| P | ipework - Ris | | | | | | | | | | | 1 | | | 1 | 1 | 1 | | 1 | | | | | | | |
| | Trench Met | 00 | | | | | | | | 1 1 | | l | 1 | I | I | 1 | 1 | 1 | l | | | | | l | | 1 |
| | | 0(Twin Rising Main DN700 | 30 | 0 | 0 21NO\ | | | 26DEC09 | | | | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | - | |
| | S1AFA12 | 00 CCTV Inspection of Pipeline | 1 | 0 | 0 23SEP | 9 23SEP09 | 23SEP09 | 23SEP09 | | | | | - | - | | - | CC1 | VInspectio | on of Pipelin | e | | | | | | |
| | · | | | | | | | | | | | 1 | | | 1 | 1 | 1 | 1 | 1 | | | | | | | l I |
| | S1AL211 | 0 ConstructBoundary Wall (stage 2) | 20 | 0 | 0 21NO | 09 14DEC09 | 21NOV09 | 14DEC09 | | 1 1 | | l | 1 | I | I | 1 | 1 | l | I | | | | | l | | <u></u> |
| Ţ | esting | , | | | | | • | 1 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | l | 1 | 1 | l | l. | 1 | l | l | | | | | I | | i - |
| | | 0 Pressure Testing to Twin Rising Main DN70 ks /Disruption | 0 12 | 0 | 0 24SEP | 09OCT09 | 24SEP09 | 09OCT09 | | | | | | | | | | | Pr | essure Te | sting to Tw | in Rising N | Main DN700 |) | | <u> </u> |
| | dollonal won | KS/DISrupiion | | | | | | | | | | 1 | 1 | 1 | | 1 | | l | I. | | | | | l | | 1 |
| | Combine S1AV124 | A4/AIC10 (Claim No. 183) 0 Construction of A1 | 30 | | 70 24AUG | 09 A 01 DEC 09 | 24411609 | A 01DEC09 | | | | 1 | | 1 | | 1 | 1 | | 1 | | | | | | | |
| | | 0 Construction of AIC13 | 45 | | 0 22001 | | | 14DEC09 | - | | | l | | 1 | | 1 | | l | l | | | | | | | |
| | on 2 - Sha Po | Sewage Pumping Station | 10 | Ĵ | 0 22001 | | 2200100 | TIBLOOD | | | | | | | | | | | | | | | | | | |
| | tion B encing | | | | | | | | | | | 1 | | 1 | | 1 | 1 | 1 | 1 | | | | | l | | 1 |
| | | | | | | | | | | | | 1 | | | 1 | 1 | 1 | 1 | 1 | | | | | | | i I |
| | S2BD110 | 00 Install Vehicular Gates | 6 | 0 | 0 27NO\ | 09 03DEC09 | 27NOV09 | 03DEC09 | | | | 1 | | I. | | 1 | 1 | 1 | 1 | | | | | l | | _ |
| | S2BD120 S2BD130 | | 2 | 0 | 0 25NO\ 0 17NO\ | | | 26NOV09 24NOV09 | | | | 1 | | | 1 | 1 | 1 | 1 | 1 | | | | | | | Install |
| | rainage and | | 1 | 0 | 0 1/100 | 2410009 | 17100009 | 24100009 | | | | | | - | - | 1 | | | 1 | | | | | | | |
| | Trench Met | nod | | | | | | | | | 1 | i I | 1 | | I. | 1 | 1 | 1 | i I | | | | ı I | | | i İ |
| | S2BEA10 | | 20 | | 100 11JUL | | | 03AUG09 A | — | DN900 P | Plpe & Man | hole (F1 - | P/S) | | 1 | 1 | 1 | l. | | | | | | l | | 1 |
| | S2BEA11 S2BEA11 | | 12 20 | | 0 18SEP0 0 03OCT | | 18SEP09 03OCT09 | 02OCT09 28OCT09 | | · · | | 1 | i i | I | 1 | | | | N900 Pipe | & Manhole | (P/S - Outta | | C3 & Pipes | (VO) | | i. |
| | S2BEA12 | | 16 | | 0 24NO | | 24NOV09 | 11DEC09 | - | | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| | | 00 CCTV Inspection of Pipeline | 1 | 0 | 0 030C1 | 09 03OCT09 | 03OCT09 | 03OCT09 | | | | | | _ | | | | • (| CCTVInspe | ection of Pi | peline | | | | | |
| | n-Situ Concre | te | | | | | | | | | | 1 | | | 1 | 1 | | 1 | 1 | | | | | | | 1 |
| | SaBI 200 | 0 ConstructBoundary Wall | 47 | 0 | 55 10 JAN | 09 A 21 SEP09 | 12 (4)(00 / | 1218EB00 | | | | | | | | 1 | Constru | , ictBounda | rv Wall | | | | · · | | | I |
| N | liscellaneous | | 47 | 0 | 55 12JAN | 19 A 213EF09 | 12JAN097 | 2132F09 | | | | | | | | 1 | | | | | | | | | | |
| | | | | | | | | | | | | I | · I | l | I | Ì | | I | i | | | | . I | | | 1 |
| Startd | | EC05 | | | | | | | | | 1 | 1 | <u> </u> | - | 1 | 1 | | | 1 | 1 | | | | Ea | arly bar | |
| Finish Data d | ate 28A | AN11 UG09 | | | | | | Leader (| | - | - | - | | | | | | | | | | | | | ogress b ritical bar | ar |
| Page r | number 1A | | | | | | 3-Mon | DSD th Rolling | | tract No | | | | C 2000 | | | | | | | | | | Su | ummary b | |
| c Prir | navera Syste | ms, Inc. | | | | | 3-1011 | itomiti | , FIU | granni | - JIV | J al Z | J AU | G 2003 | | | | | | | | | | 🔷 St | art milesto nish miles | ne point |

| | Act | Description | Oria | Total | Percent | Early | Early | Late | Late | | | | | 050 | | 2009 | | 0.07 | | | | | | |
|----------|--------------------|--|-------------|----------|----------|----------------------|--------------------|---------------------|--------------------|--------------|---|---------------------------|------------------|--------------------|----------------|-----------------|------------|---------------|-------------------|---------------|----------------|---------------------------|-------------------------------|----------|
| | Act ID | | Orig Dur | | Complete | Early Start | Early Finish | Start | Late Finish | JUL 27 | AUG 03 10 17 | 24 | 31 | SEP 07 14 | 21 | 28 | 05 | 0CT 12 | 19 | 26 | 02 | 09 | 16 | 23 |
| | |) TOA - Reinstatement s / Disruption | 12 | 0 | 0 | 29OCT09 | 11NOV09 | 29OCT09 | 11NOV09 | _ | | _ | | | | <u> </u> | | | 1 | <u> </u> | _ | | Reinstaten | ient |
| Au | JIIONAIWOIP | s/Distupiion | | | | | | | | | | | | | | 1 1 | | | 1 | 1 | 1 | 1 1 | | |
| | Revised F | Wall Details at SPPS (Claim No.030) | | | | | | | | | | | i i | | i i | i i | | i. | i | i i | i - | i i | i i | |
| | | Testing of MD & Submit Assessement Report | 80 | 1 | 100 | 29NOV08 A | 15SEP09 A | 29NOV08 A | 15SEP09 A | 1 | | _ | | T | esting of MD & | SubmitAsses | ssementF | Report | i. | i i | i. | · · | 1 | |
| | S2BV165 | | 14 | 0 | 60 | | 02SEP09 | 18MAY09 A | 02SEP09 | | | | Con | ment/Respond | to EDP to the | Report I | | | 1 | 1 | 1 | 1 I | 1 | |
| | S2BV166 | | 14 | | | 03AUG09 A | 14SEP09 | 03AUG09 A | 14SEP09 | | <u> </u> | _ | | Arr | ange Barging | Point/Dumpin | g Ground | 1 | 1 | 1 | 1 | 1 1 | 1 | |
| | S2BV167 | | 60 | | 70 | | 07OCT09 | 08JUL09 A | 07OCT09 | | | | | L I. | | 1 1 | | 1 | , Marine Du | mping Peri | mit | 1 1 | 1 | |
| | S2BV169 | | 7 | 0 | 0 | 080CT09 | 150CT09 | 080CT09 | 15OCT09 | | | | 1 | I I | 1 | 1 1 | | | 1 | 1 - | g Permit from | m EPD | 1 | |
| | · | Possession of Barging Point | 14 | 0 | 0 | 15SEP09 | 30SEP09 | 15SEP09 | 30SEP09 | | | | | | | Posse | ssion of B | | | `- ` | + | + + | + | |
| | S2BV171 | | 7 | | | 02OCT09 | 10OCT09 | 02OCT09 | 10OCT09 | - | | | | | | | | Echo Sour | l Inding at Ba | arging Poi | nt&Dumpin | a Ground | | |
| | 1 | Marine Dumping Commencement | 1 1 | 0 | | 16OCT09 | 160CT09 | 160CT09 | 16OCT09 | | | | | | | | | | | | nmenceme | | | |
| | | ConstructWall Stem 1st Lift for Bay 1 | | | | 25JUL09 A | 03AUG09 A | 25JUL09 A | 03AUG09 A | | Construct Wall Stem 1 st Lift for | Bay 1 | 1 | | | | | | 1 | 1 | 1 | 1 1 | | |
| | | | ° | | | | | | | | | Day | | | | i i | | i. | i | i i | i - | i i | i i | |
| | S2BV212 | | 8 | | | 25JUL09 A | 29AUG09 A | 25JUL09 A | 29AUG09 A | | | | Construct | Wall Stem 1 st Lif | | ver of Waling 8 | | I | | | \rightarrow | $\rightarrow \rightarrow$ | + | |
| | S2BV213 S2BV214 | , | 20 | 0 | | 28AUG09 A 09SEP09 | 08SEP09 17SEP09 | 28AUG09A 09SEP09 | 08SEP09 17SEP09 | - | | Ĩ | 1 | | | rdam & Extrac | | | 1 | 1 | 1 | 1 I | 1 | |
| | S2BV214 | | 8 | 0 | | 18SEP09 | 26SEP09 | 18SEP09 | 26SEP09 | - | 1 I I I | | 1 | I I | | Construct W | | | Bay 1 | 1 | 1 | 1 1 | 1 | |
| | S2BV216 | | 8 | 0 | | 28SEP09 | 08OCT09 | 28SEP09 | 08OCT09 | | | | 1 | I I | 1 | | - Con | structWa | all Stem 2n | d lift for Ba | y 2 | 1 1 | 1 | |
| | S2BV217 | | 8 | 0 | | 09OCT09 | 17OCT09 | 09OCT09 | 17OCT09 | | | | | | | 1 1 | | | Construc | t Wall Ster | n 2nd lift for | Bay 3 | | |
| | S2BV218 | Construct Wall Stem 2nd lift for Bay 4 | 8 | 0 | 0 | 19OCT09 | 28OCT09 | 19OCT09 | 28OCT09 | | | | | | | | | | <u> </u> | C۰ 🛋 | | ll Stem 2nd lift i | | |
| | S2BV219 | | 6 | 0 | | 29OCT09 | 04NOV09 | 29OCT09 | 04NOV09 | | | | | | | | | | 1 | : = | Bac | k fill to ground | level | |
| | S2BV220 |) Sheetpiling of Bay 5-6 | 7 | | 100 | 10AUG09 A | 15AUG09 A | 10AUG09 A | 15AUG09 A | | Sheetpiling of | ofBay | 5-6 | | | | | | 1 | ÷ | 1 | | | |
| | S2BV221 | Excavation and Wailing Install to formation | 8 | 0 | 80 | 17AUG09 A | 19SEP09 | 17AUG09 A | 19SEP09 | | | - | | | 🛏 Excavati | on and Wailing | - | | | i. | i | · · | | |
| | S2BV223 | Construct Base Slab for Bay 5 | 8 | 0 | 0 | 21SEP09 | 29SEP09 | 21SEP09 | 29SEP09 | | | | i | I I | | Constru | ictBaseS | ab for Ba | iy 5 | i. | i | i i | i | |
| | S2BV224 | ConstructBase Slab for Bay 6 | 8 | 0 | 0 | 30SEP09 | 10OCT09 | 30SEP09 | 10OCT09 | | | | | | | | | | | b for Bay 6 | | T T T T | ī | |
| | S2BV225 | | 6 | 0 | | 12OCT09 | 17OCT09 | 12OCT09 | 17OCT09 | | | | 1 | I I | 1 | 1 1 | | _ | Backfill & | | Naling & Str | | 1 | |
| | S2BV226 | , | 8 | 0 | | 19OCT09 | 28OCT09 | 19OCT09 | 28OCT09 | | | | 1 | I I | 1 | 1 1 | | L | | | | Il Stem for Bay | | |
| | S2BV227 | | 8 | 0 | | 29OCT09 | 06NOV09 | 29OCT09 | 06NOV09 | - | | | 1 | I I | 1 | 1 1 | 1 | 1 | 1 | 1 | | ConstructWal | ll Stem for I Back filling | |
| | S2BV228 |) Backfilling to Ground Level) ExtractSheetpile | 8 | 0 | | 07NOV09 17NOV09 | 16NOV09 | 07NOV09 | 16NOV09 | | | | | !! | | -!! | | | | | <u> </u> | | | Extract |
| Section | | ng Wai Sewage Pumping Station | 0 | 0 | 0 | 17NOV09 | 23NOV09 | 17NOV09 | 23100009 | | | | _ | | _ | | | | - | <u> </u> | <u> </u> | | | Extracto |
| Porti | | | | | | | | | | | | | - i | | | | | | 1 | 1 | i i | | | |
| Dr | ainage and | Ducts | | | | | | | | | · · · · | | i i | I I | i | i i | | i | i | i | i | i i | i | |
| | rench Meth | od | | | | | | | | | I I I I | | 1 | L L | 1 | 1 1 | | | 1 | 1 | 1 | 1 I | 1 | |
| | 0005444 | | 1 50 | 1 0 | | | | | | | | | 1 | I I | | | | 1 | 1 | | 1200 Pino | & Manhole (P | S- SC 1- C |)uttall) |
| | | 0 DN1200 Pipe & Manhole (P/S - SC1 - Outfall) 0 Construct U-channel, Dish Channel & | 50 27 | | | 28AUG09 26NOV09 | 28OCT09 28DEC09 | 28AUG09 26NOV09 | 28OCT09 28DEC09 | - | | Ĩ | | | | | | | | | 1200 Fipe | | 3-301-0 | Juliali) |
| | | Constructo-channel, Dish Channel & | 21 | 0 | 0 | 2010/009 | 20DEC09 | 2010/009 | 2006009 | | | _ | | | | <u> </u> | | | | | | <u> </u> | | |
| Ea | rthworks | | | | | | | | | | | | | | | | | | - | - | - | | | |
| | | | | | | | | | | | | | | | | | | | 1 | 1 | | | | |
| | S3CG300 | 0 Trim & Compact Formation of Paved Areas | 6 | 0 | 20 | 06JAN10 A | 09JAN10 | 06JAN10 A | 09JAN10 | | | | i i | | i | | | | 1 | 1 | i | 1 1 | | |
| Ste | elReinforce | ment | | | | | | | | | | | 1 | I I | 1 | 1 1 | | | 1 | 1 | 1 | 1 1 | 1 | |
| | | | | | | | | | | | 1 I I I | | 1 | I I | 1 | 1 1 | | 1 | 1 | 1 | 1 | 1 I | 1 | |
| | | - | | | | | | | | | | | | | 1 | 1 1 | | 1 | 1 | 1 | 1 | 1 1 | 1 | |
| | | D Fix Re-bar to RoofSlab | 8 | | 100 | 28FEB09 A | 28AUG09 | 28FEB09 A | 28AUG09 | | | | Fix Re-bar | o RoofSlab | | | | | 1 | | _ | ++ | | |
| in- | Situ Concre | | | | | | | | | | | | 1 | | 1 | 1 1 | 1 | 1 | 1 | 1 | I | I I | 1 | |
| | | | | | | | | | | | | | | | | 1 1 | | | 1 | 1 | 1 | | | |
| | S3CL190 | Apply Anticorrosion Concrete Coating | 24 | | 100 | 24APR09A | 17AUG09 A | 24APR09 A | 17AUG09 A | <u> </u> | Apply An | ticorro | sion Concre | te Coating Syste | m | | | | - | - | - | | | |
| | 2 | 0 ConstructBoundary Wall | 24 | | | | 25NOV09 | | 25NOV09 | | | | | | | | | | 1 | | <u> </u> | | _ | 💻 Cons |
| Fir | ishings | | | | | | | | | | | | | | | | | | | - | | | | |
| | | | | | | | | | | | | | i i | | i | · · · | | | i | i i | i. | · · | | |
| | 00000 | | | | | | | Linut | | | | | - Destruction | | | | | I | i. | i. | i. | | i i | |
| | S3CQ105 | 0 Apply RoofFinishes | 10 | <u> </u> | 100 | 13JUL09 A | 24AUG09 A | 13JUL09 A | 24AUG09 A | | + + + + | Apply | y Roof Finish | + | | | | | 1 | | | ++ | | |
| | -cenarieous | | | | | | | | | | | | 1 | I I | 1 | 1 1 | | 1 | 1 | I. | I. | 1 1 | 1 | |
| Startdat | ə 19D | EC05 | | | | | | | | | | _ | | | | | | | | | | Ea | rly har | |
| Finish d | ate 25J | AN 11 | | | | | | | Leader (| Civil | l Engineering Corp. L | td | | | | | | | | | | | ogress ba | r |
| Data da | | JG09 | | | | | | | | | ntract No. DC/2005/02 | | | | | | | | | | | | itical bar | |
| rage nu | mber 2A | | | | | | | 2 Mant | | | | | C 2000 | | | | | | | | | | mmary ba | r |
| c Prim | ivera Syste | ns, Inc. | | | | | | 3-101011[| ט וווטח וו | <i>j</i> Pr0 | ogramme - 3M01 at 29 | AU | G 2009 | | | | | | | | | - | rtmileston | |
| | |]] | | | | | | | | | | | | | | | | | | | | A Fin | ish milestr | ine noin |

| | Act ID | Description | Orig Dur | Total Float | Percent Complete | Early Start | Early Finish | Late Start | Late Finish | JUL 27 | AUG | à | | | | SEP | | 2009 | 05 | 0CT | | | | NOV | | |
|------------------|-------------------------------|--|-------------|----------------|---------------------|----------------------|--------------------|------------------------|----------------------|-----------|---------------|-------------|---------|-------------|------------------|-----------------|-------------|---------------------------|---------------|----------------|--------------------------|-----------|-----------------|------------------|-----------------------|------------|
| | | | | | | | | | | 2/ | 03 10 | 17 | 24 | 31 | 07 | 14 | 21 | 28 | 05 | 12 | 19 | 26 | 02 | 19 | 16 | 23 |
| | S3CT1300 | Plumbing Work | 24 | 0 | 40 | 18JUN09 A | 12SEP09 | 18JUN09 A | A 12SEP09 | | | | - | - | - | Plumbing V | Vork | 1 | 1 | I I | I I | 1 | 1 | 1 | 1 | l |
| | | Electrical and Mechanical Installations | 24 | 0 | | 28AUG09 | 24SEP09 | 28AUG09 | 24SEP09 | | | 1 | - | - | | | | ectrical and | Mechanic | al Installatio | ons | | | | 1 | l |
| Soci | | Install FRP Water Storage Tanks BMin Portion D. E.G. H. I | 12 | 0 | (| 28AUG09 | 10SEP09 | 28AUG09 | 10SEP09 | | | | | 1 | ins | tall FRPW | ater Storaç | ge lanks | 1 | | | | | | | |
| | tion D | | | | | | | | | | | i | | i i | i | i i | 1 | 1 | 1 | i | · · | i | i i | i i | i i | l |
| | Prainage and D | ucts | | | | | | | | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | I I | I I | 1 | 1 | 1 | 1 | l |
| | Trench Method | j | | | | | | | | 1 | | 1 | | 1 | I | 1 | 1 | 1 | 1 | I I | I I | 1 | 1 | 1 | 1 | l |
| | S4DEA100 | DN1000 Pipe & Manhole (G1-G2-YLSTP) | 50 | 0 | 90 | 27APR09 A | 02NOV09 | 27APR09 A | 02NOV09 | | | | | 1 | | | 1 | 1 | 1 | | | 1 | DN1000 | Pipe & Man | hole (G1-0 | G2-YI ST |
| | | Reinstatement of the road at G1 | 10 | | | 24JUL09 A | 03NOV09 | 24JUL09 A | 02NOV09 | _ | | | | | | | | | | | | | | tementofth | | |
| | | CCTV Inspection of Pipeline | 1 | 0 | | 03NOV09 | 03NOV09 | | 03NOV09 | | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | I I | 1 | | nspection o | | 1 |
| F | Pipework - Risin | | | - | | | | | | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | I I | | I | 1 | 1 | 1 | |
| | Trench Method | t de la construcción de la const | | | | | | | | | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | l |
| | SADEA110 | Twin Rising Main DN900 (ChA1850- WOIC1 | 1) 101 | 0 | 1 or | 15DEC06 A | 02NOV09 | 15DEC06/ | A 02NOV09 | | | 1 | | | | 1 | | 1 | | | | | ∣ ∎Twin Risi | ا ing Main D۱ | N900 (Ch4 | A1850- W |
| | | Twin Rising Main DN900 (ChA2095 - | 148 | 0 | | 20DEC07 A | | 20DEC07 / | | | | | _ | - | | | | | - | | 💻 Twin Ris | sing Main | | hA2095 - C | | |
| | | CCTV Inspection of Plpeline | 5 | | | 16AUG08 A | - | | A 28AUG09 | | | | | CTV Inspe | ection of Plp | peline | 1 | 1 | 1 | I I | I I | 1 | 1 | 1 | 1 | |
| | Trenchless Me | ethod | | | | | | | | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | I I | | 1 | 1 | 1 | 1 | |
| | SADER120 | CCTV Inspection of Pipeline | 3 | | 100 | 28411009 4 | 131411009 | A 28AUG09 A | | | | 1 | | | Inspection (| nf Pineline | 1 | 1 | 1 | | | | | | | l |
| 4 | dditonal Works | | ۳ ۱ | | 100 | 20/10/00037 | (BING GUS | 20/10/00007 | 1011100007 | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | - | | <u> </u> | - | |
| | | | | | | | | | | | I I | i i | | 1 | I | I. | I. | 1 | i. | | I I | i i | 1 | I. | i. | |
| | AIC2 | Confirmation of Tree Obstruction | | | L | | | | | | | 1 | | | nation of Tre | | tion | 1 | 1 | I I | I I | 1 | 1 | 1 | 1 | |
| | | | 30 | 0 | | 13FEB09 A | | 13FEB09 A | | | | | 1 | | | 0000100 | | 1 | 1 | | | | 1 | | | |
| | S4DV1540 | Revise hoarding layout | 7 | | 100 | | 18AUG09 | A 10AUG09 A | A 18AUG09 A | <u> </u> | | Revise | noardin | g layout | 1 | | | 1 | 1 | | | | | | | rge Coffer |
| | S4DV1560 | Enlarge Cofferdam | 18 | 0 | 20 | | 19NOV09 | 27AUG09 / | A 19NOV09 | | | i | | 1 | 1 | 1 | 1 | 1 | 1 | I I | I I | 1 | | 1 | Eniar | ge Collei |
| | S4DV1590 | Construction of AIC 2 | 75 | 0 | 60 | 25APR09 A | 24DEC09 | 25APR09 A | 24DEC09 | | | | | | | 1 | | | | | | | - | | | |
| | | Construction of WOIC1 Remaining | 60 | 0 | 90 | 26JUN09 A | 03SEP09 | 26JUN09 A | A 03SEP09 | | | | _ | - Co | nstruction | of WOIC1 | Remaining |]. | 1 | | | | 1 | | 1 | l |
| | rtion F | | | | | | | | | | | | | 1 | 1 | | 1 | - | | | | | | | | |
| | Drainage and Di | | | | | | | | | i | | i | | i. | i. | i i | i. | i. | i. | i i | i i | i | i i | i | i. | |
| | Trench Method | 3 | | | | | | | | 1 | | 1 | | 1 | I. | I. | 1 | 1 | I. | I I | I I | 1 | 1 | 1 | 1 | l |
| | S4FEA100(| DN900 Pipe & Manhole (H8- H7) Stage 1 | 53 | | 100 | 10JUN09 A | 13AUG09 | A 10JUN09 A | A 13AUG09 A | | DN9 | 00 Pipe & | Manhole | (H8-H7) | Stage 1 | | 1 | 1 | 1 | | | | | | | l |
| | | DN900 Pipe & Manhole (H8 - H7) Stage 2 | 53 | | | 19JUN09 A | | | | | DN9 | 00 Pipe & N | | | | 1 | 1 | 1 | 1 | | I I | | 1 | | | |
| | S4FEA120(Pipework - Risin | CCTV Inspection of Pipeline | 1 | 0 | (| 28AUG09 | 28AUG09 | 28AUG09 | 28AUG09 | | | | | CTVInspe | ection of Pip | eline | | 1 | | | | | | | | |
| | Trench Method | | | | | | | | | 1 | | 1 | | 1 | I. | 1 | 1 | 1 | 1 | I I | I I | 1 | 1 | 1 | 1 | |
| | | | | | | | | | | | | 1 | | | 1 | | 1 | 1 | 1 | | | | 1 | | | ľ |
| | | Twin Rising Main DN700 (WOIC5 - | 80 | 0 | | 05JUN08 A | | 05JUN08 / | | | | | | 1 | | | | rin Rising N 00 (ChC26 | | (WOIC5 - | ChC2000) | · · · · · | | i i | i i | l |
| | | Twin Rising Main DN700 (ChC2639 - H7) Construct AVIC5 | 52 30 | 0 | | 29MAY09 A | 11SEP09 28AUG09 | 29MAY09 A 22JAN09 A | 11SEP09 28AUG09 | | ; | | | ConstructA | | win Rising | | 00 (ChC26 | | I I | I I | i | 1 | i | i | l |
| | | CCTV Inspection of Pipeline | 8 | 0 | | 25SEP09 | 06OCT09 | 25SEP09 | 06OCT09 | - | | 1 | | 1 | I. | 1 | | 4 | ссти | Inspection | of Pipeline | 1 | 1 | 1 | 1 | |
| 1 | Additonal Works | /Disruption | | | | | | | | | | | | | 1 | 1 | 1 | 1 | | | | | | | | |
| | AIC 5 | | | | | | | | | | | i i | | i i | 1 | i i | 1 | 1 | 1 | | | i i | | i i | i i | l |
| | | Engineer Instruction for pipe connection | 14 | 0 | (| 12SEP09 | 28SEP09 | 12SEP09 | 28SEP09 | - | I I | i | | 1 | | _ | - | Engine | er Instructio | n for pipe o | connection | I | 1 | I | i. | |
| | S4FV1050 | Pipe Connection inside Chamber | 20 | 0 | 4(| 25AUG09 A | A 14OCT09 | 25AUG09 A | A 14OCT09 | | | 1 | | | 1 | | 1 | 1 | 1 | Pipe (| , Connection | inside Ch | amber | 1 | 1 | l |
| | | CastofChamber Top Slab | 30 | 0 | | 15OCT09 | 19NOV09 | | | | | | | | 1 | 1 | | | | | | | | <u>+</u> | Cast | ofChamb |
| | rtion G | | | | | | | | | | | i i | | 1 | 1 | 1 | 1 | 1 | 1 | | , , , , | i | 1 | i i | i i | |
| | Pipework - Risin | g Main | | | | | | | | i | I I | i | | 1 | I | I. | I. | 1 | i. | i i | I I | i | I. | i. | i. | |
| | | - | | | | | | | | 1 | | 1 | | 1 | I | 1 | 1 | 1 | 1 | | I I | 1 | 1 | 1 | 1 | ľ |
| | | Twin Rising Main DN500 (ChB550 - ChB650 | | 0 | | 27JUL06 A | | 27JUL06 A | | | | | | | Twin F | Rising Mair | n DN500 (| ChB550 - C | | | | | | | | ľ |
| | | Construct WOIC3 CCTV Inspection of Pipeline | 30 9 | 0 | | 28AUG09 06MAR07 A | 02OCT09 28AUG09 | 28AUG09 | 02OCT09 A 28AUG09 | | | | | CTVInso | ection of Pip | eline | 1 | | onstructW | 0103 | . I | 1 | 1 | | i i | |
| Startd | | | Э | | 100 | UOWARU/ A | 2840609 | UDIVIARU/ A | ~ 28AUG09 | | | | | 201 v #13pt | | | | | | | | | | | | |
| Finish | date 25JAN | J11 | | | | | | | l eader (| Civil F | Engineering (| orn I | td. | | | | | | | | | | | Ear | rly bar ogress bai | r |
| Data d Page I | late 28AU number 3A | 309 | | | | | | | | | ract No. DC/2 | • | | | | | | | | | | | | Cri | - | |
| - | | | | | | | | 3-Mont | | | gramme - 3M | | | 2009 | | | | | | | | | | | mmary bai | |
| c Pri | mavera Systems | s, Inc. | | | | | | | | 9 | | | | | | | | | | | | | | - | urt mileston | e point |

| | Act ID | Description | Orig Dur | Total Float | Percent Complete | Early Start | Early Finish | Late Start | Late Finish | 2009 NI AUG SEP OCT NOV 7 03 10 17 24 31 07 14 21 28 05 12 19 26 02 09 16 23 |
|----------|------------------|---|-------------|----------------|---------------------|------------------------|------------------------|---------------|--------------------|--|
| Additon | al Works / | Disruption | | | | | | | | |
| | | | | | | | | | | |
| AIC | | | | | | | | | | |
| | | Construction of AIC6 | 280 | | | 02OCT08 A | | 02OCT08 A | 28AUG09 A | Construction of AIC6 |
| S4 | GV1025 | Extraction of Sheet Pile | 24 | 4 C | 0 0 | 28AUG09 | 24SEP09 | 28AUG09 | 24SEP09 | Extraction of Sheet Pile |
| _ | | Engineer Instruction of Pipe Connection | 14 | | 0 0 | 25SEP09 | 13OCT09 | 25SEP09 | 13OCT09 | Engineer Instruction of Pipe Connection |
| S4 | GV1040 | Pipe Connection inside Chamber | 20 | 0 0 | 0 0 | 14OCT09 | 06NOV09 | 14OCT09 | 06NOV09 | Pipe Connection inside Ch |
| ion H | | | | | | | | | | |
| around | l Investiga | tion | | | | | | | | |
| | | | | | | | | | | |
| I.— | | | | - | - | | | | | |
| | | Install Settlement Markers | 727 | 7 C | 85 | 26MAY06 A | 08JAN10 | 26MAY06 A | 08JAN10 | |
| | ge and Du | | | | | | | | | |
| Trend | ch Method | | | | | | | | | |
| 1 64 | | DNEOO Pro & Marchala (A4 AC) | 1 00 | 1 | 100 | | | | | DN500 Pipe & Manhole (A4 - A6) |
| | | DN500 Pipe & Manhole (A4 - A6) DN300 Pipe & Manhole (A3 - B2) (Deleted | 90 | _ | 100 | 03OCT08 A 28AUG09 A | 01SEP09 A 27AUG09 A | 03OCT08 A | 01SEP09 A | DN300 Pipe & Manhole (A3 - B2) (Deleted SA2) |
| | | DN300 Pipe & Manhole (B2 - B4) (Deleted | | | 100 | - | 27AUG09A 27AUG09A | 28AUG09 A | 27AUG09 A | DN300 Pipe & Manhole (B = E4) (Deleted SA2) |
| | | DN300 Pipe & Manhole (B2 - B4) (Deleted | | | | 28AUG09 A | 27AUG09 A | 28AUG09 A | 27AUG09 A | DN300 Pipe & Manhole (LE D+1) (Deleted SA2) |
| | | DN300 Plpe & Manhole (B6 - B8) (Deleted | | | 100 | - | 27AUG09 A | 28AUG09 A | 27AUG09 A | DN300 Pipe & Manhole (B6 - B8) (Deleted SA2) |
| | | CCTV Inspection of Pipeline | | - | - | 28AUG09 A | | 28AUG09 A | | CCTVInspection of Pipeline |
| | chless Me | | | 1 | 100 | 20/10/0000 // | ETHOUGUT | 20/10/0000 | 21110 000 1 | |
| | | | | | | | | | | |
| S4 | HEB110 | CCTV Inspection of Pipeline | 1 | | 0 0 | 28AUG09 | 28AUG09 | 28AUG09 | 28AUG09 | CCTV Inspection of Pipeline |
| | rk - Rising | | | | | | | | | |
| _ | ch Method | | | | | | | | | |
| | | | | | | | | | | |
| 1 64 | HFA100 | Twin Rising Main DN700 (ChC100 - | 1 45 | 5 0 | | 080CT08 A | 01SEP09 | 080CT08 A | 01SEP09 | Twin Rising Main DN700 (ChC100 - ChC170) |
| | | Twin Rising Main DN700 (ChC850 - | 45 | | | 14APR09 A | 11NOV09 | 14APR09 A | 11NOV09 | Twin Rising Main D |
| | | Twin Rising Main DN700 (ChC1450 - | 110 | | | 28AUG09 | 08JAN10 | 28AUG09 | 08JAN10 | |
| _ | | Twin Rising Main DN700 (ChC17450 - | 80 | - | ° | 27JUN09 A | 24SEP09 | 27JUN09 A | 24SEP09 | Twin Rising Main DN700 (ChC1715 - ChC1790) |
| | | Twin Rising Main DN700 (ChC1790 - | 90 | - | | 22JUN09 A | 19NOV09 | 22JUN09 A | 19NOV09 | Twin Ri |
| | | Construct AVIC9 (combined with WOIC8) | 0 | - | 100 | - | 01AUG09 A | 13MAY09 A | 01AUG09 A | |
| | | | | <u> </u> | | | | | | Construct AIC7 (AVIC6) |
| | | Construct AIC7 (AVIC6) | 91 | 1 0 | 70 | 05MAY09 A | 28SEP09 | 05MAY09 A | 28SEP09 | |
| Irenc | chless Me | nod | | | | | | | | |
| | | 0 | | | 1 (0 | | 4000700 | | Lingator | ConstructWOIC7 |
| <u> </u> | | ConstructWOIC7 | 60 | | 1 | 11MAY09 A | 10OCT09 | 11MAY09 A | 10OCT09 | |
| | | CCTV Inspection of Pipeline | 2 | 2 0 | 0 0 | 28AUG09 | 29AUG09 | 28AUG09 | 29AUG09 | CCTV Inspection of Pipeline |
| Geotec | hnical wo | rks | | | | | | | | |
| | | | | | | | | | | |
| | | | 1.44 | | | | LIASSDIA | Leavenage | | |
| | | Monitoring of Instruments | 947 | 7 C | 85 | 26MAY06 A | 19FEB10 | 26MAY06 A | 19FEB10 | |
| Additon | al Works / | /Disruption | | | | | | | | |
| | and in the state | | | | | | | | | |
| | | AIC10 (Claim No. 183) | 1 | | <u> </u> | | Loon Citer | | Laguicurer | Cons |
| <u></u> | HV1510 | Constructcombine A4/AIC10 | 100 | | 30 | 28JUL09 A | 20NOV09 | 28JUL09 A | 20NOV09 | |
| 0.1 | | Extraction of Sheetpile | 12 | | | 28AUG09 | 1085000 | 28AUG09 | 1085000 | Extraction of Sheetpile |
| | | | 12 | _ | | 11SEP09 | 10SEP09 26SEP09 | 11SEP09 | 10SEP09 26SEP09 | Confirmation of Delay Pipe connection |
| | | Confirmation of Delay Pipe connection Delay Pipe Connection | 14 | _ | | 28SEP09 | 100CT09 | 28SEP09 | 100CT09 | |
| rtion I | 110000 | | 1 10 | <u> </u> | <u>'I</u> | 20JEPU9 | 1000109 | 2032709 | 1000109 | |
| | l Investiga | tion | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| S4 | UB1300 | Install Settlement Markers | 736 | 6 0 |) 82 | 26JUN06 4 | 06FEB10 | 26JUN06 A | 06FEB10 | |
| | ge and Du | | , 30 | | 02 | 1-0001100 A | 201 2010 | 20001000 | 100.2010 | |
| | ch Method | | | | | | | | | |
| | | | | | | | | | | |
| ate | 19DEC | 005 | | | | | | | | Early bar |
| date | 25JAN | 11 | | | | | | | l eader (| /il Engineering Corp. Ltd. |
| late | 28AUG | 609 | | | | | | | | |
| numbe | r 4A | <u> </u> | | | | | | | | |
| | | - | | | | | | 3-Mont | n Rolling | Programme - 3M01 at 29 AUG 2009 |
| mayor | a Systems | | | | | | | | | |

| | Act ID | Description | Orig T Dur F | loat C | Percent Early Complete Star | Early Finish | Late Start | Late Finish | JUL 27 | AUG | 2009 SEP OCT NOV 31 07 14 21 28 05 12 19 26 02 09 16 23 |
|--------|------------------------|--|-----------------|--------|--------------------------------|-----------------|---------------|----------------|-----------|---------------------------------------|--|
| | | | | iour o | cimplette citali | | orun | | 27 | 03 10 17 24 | 31 07 14 21 28 05 12 19 26 02 09 16 23 |
| | S4IEA1200 | DN400 Pipe & Manhole (C7a - C7) (Deleted | 0 | | 100 28AUG | 09 A 27AUG09 | A 28AUG09 | A 27AUG09 A | | IIII <mark>D</mark> | N400 Pipe & Manhole (C7a - C7) (Deleted SA2) |
| | S4IEA1330 | DN500 Pipe & Manhole (C11 - C12) (Deleted | 1 0 | | 100 28AUG | 09 A 27AUG09 | A 28AUG09 | A 27AUG09 A | | | N500 Pipe & Manhole (C11 - C12) (Deleted SA2) |
| | S4IEA1600 | DN500 Plpe & Manhole (C14 - C15) (Deleted | | | 100 28AUG | | | | | | N500 Plpe & Manhole (C14 - C15) (Deleted SA2) |
| | S4IEA2320 | DN500 Plpe & Manhole (C31 - C32) (Deleted | <u> </u> | | 100 28AUG | | _ | | - | | N500 Pipe & Manhole (C31 - C32) (Deleted SA2) |
| | S4IEA2400 | DN500 Plpe & Manhole (C32 - C34) (Deleted | 0 | | 100 28AUG | | | | | | CCTV Inspection of Pipeline |
| | Trenchless M | CCTV Inspection of Pipeline | 8 | 0 | 0 28AUG | 09 05SEP09 | 28AUG09 | 05SEP09 | | | |
| | | eniod | | | | | | | | | |
| | S4IEB1000 | ConstructJack/Receive Pits (C1 - C2) | 30 | 0 | 0 28AUG | 02OCT09 | 28AUG09 | 02OCT09 | | i i i i <mark>e</mark> | ConstructJack/Receive Pits (C1 - C2) |
| | S4IEB1020 | Jacking DN500 (C1 - C2) | 78 | 0 | 0 03OCT | 06JAN10 | 03OCT09 | 06JAN10 | | | |
| F | ipework - Risin | g Main | | | | | | | | | |
| | Trench Metho | d | | | | | | | | | |
| | CAIEA1000 | Twin Rising MainDN250 (ChD55 -81) | | - | 100 00000 | 09 A 05NOV09 | A 06NOV09 | A 05NOV09 A | | | Twin Rising MainDN250 (ChD55 - |
| | | CCTV Inspection of Pipeline (Deleted SA2) | 0 | | | 05NOV09 | | | - | | CCTV Inspection of Pipeline (Delete |
| | Trenchless M | | l ° | | | 00110100 | 100110100 | 1 001101001 | | | |
| | | | | | | | | | | | |
| | S4IFB1000 | ConstructJ/P&R/P(ChD0 - ChD55) | 0 | | 100 28AUG | 09 A 27AUG09 | A 28AUG09 | A 27AUG09 A | | | onstructJ/P&R/P(ChD0 - ChD55) (Deleted SA2) |
| | | Jacking Twin DN250 (ChD0 - ChD55) | 0 | | | 09 A 27AUG09 | | | | | acking Twin DN250 (ChD0 - ChD55) (Deleted SA2) |
| | | CCTV Inspection of Pipeline (Deleted SA2) | 0 | | 100 28AUG | 09 A 27AUG09 | A 28AUG09 | A 27AUG09 A | | C | CTV Inspection of Pipeline (Deleted SA2) |
| C C | eotechnicalwo | orks | | | | | | | | | |
| | | | | | | | | | | | |
| | CAID1000 | Monitoring of Instruments | 827 | 0 | 05 1 00 IUN | | | | | | |
| Mis | cellaneous | Monitoring of instruments | 827 | 0 | 85 28JUN | 06 A 26JAN10 | 28JUN06 | A 26JAN TU | | | |
| Г | esting | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | S4PS1000 | Pressure Testing to 2xDN250 (Deleted SA2) | 0 | | 100 28AUG | 09 A 27AUG09 | A 28AUG09 | A 27AUG09 A | | · · · · P | ressure Testing to 2xDN250 (Deleted SA2) |
| | | Pressure Testing to Twin Rising Main DN500 | | 0 | 0 03OCT | | | | | | Pressure Testing to Twin Rising Main DN500 |
| Cast | | Pressure Testing to Twin Rising Main DN900 | 12 | 0 | 0 21OCT | 09 04NOV09 | 21OCT09 | 04NOV09 | | I I I I I I I I I I I I I I I I I I I | Pressure Testing to Twin Rising Mai |
| Por | tion E | RM in Portion E | | | | | | | | | |
| | reliminaries | | | | | | | | | | |
| l I | | | | | | | | | | | |
| | | | | | | - | | - | | i i i i | |
| | | Non Work Period 01 Nov 08 - 31 Mar 09 | 121 | 0 | 98 01NOV | 08 A 31 AUG 09 | 01NOV08 | A 31AUG09 | | | Non Work Period 01 Nov 08 - 31 Mar 09 |
| | esting | | | | | | | | | | |
| | | | | | | | | | | | |
| | S5ES1000 | Pressure Testing to Twin Rising Main DN900 | 12 | 0 | 83 17MAB | 09 A 29AUG09 | 17MAB09 | A 29AUG09 | | | Pressure Testing to Twin Rising Main DN900 |
| ļ | dditonal Works | | | | | | | | | | |
| | | | | | | | | | | | |
| | | hambers (ClaimNo.151) | | | | | | | | | |
| | S5EV1070 | ConstructAIC4 (VO) | 150 | 0 | 75 01APR0 | 9 A 150CT09 | 01APR09 | A 15OCT09 | | | ConstructAIC4 (VO) |
| | on 6 - Sewers in | Portion J | | | | | | | | | |
| | tion J | | | | | | | | | | |
| | Trench Metho | ucts | | | | | | | - | | |
| | | u | | | | | | | | | |
| | S6JEA1000 | DN500 Pipe & Manhole (C1 - D2) (Deleted | 80 | 0 | 0 04NOV | 09 06FEB10 | 04NOV09 | 06FEB10 | | | |
| | S6JEA1010 | DN1050 Pipe & Manhole (D2 - D3) (Deleted | 78 | 0 | 0 28AUG | | | | 1 | | |
| | S6JEA1300 | DN1050 Pipe & Manhole (D8 - D9) (Deleted | 0 | | 100 28AUG | 09 A 27AUG09 | A 28AUG09 | | | | N1050 Pipe & Manhole (D8 - D9) (Deleted SA2) |
| | S6JEA1400 | TTAJA4-2 DN1050 (D9 - D10) (deleted SA2 | | | 100 28AUG | | | | 4 | | TA JA4-2 DN1050 (D9 - D10) (deleted SA2) |
| | S6JEA1420 | TTA JA4-1 DN1050 (D9 - D10) (deleted SA2 | 0 | | 100 28AUG | | | - | | | TA JA4-1 DN 1050 (D9 - D10) (deleted SA2) TA JA5-1 DN 1050 (D10 - D12) (deleted SA2) TA JA5-1 DN 1050 (D10 - D12) (deleted SA2) |
| | S6JEA1500 S6JEA1520 | TTAJA5-1 DN1050 (D10 - D12) (deleted TTAJA5-2 DN1050 (D11 - D12) (deleted | 0 | | 100 28AUG | | | | - | | TAJAS-1 DINTUSU (DTU-DT2) (deleted SA2) |
| Startd | | | U | | 100 28AUG | 33 A 27 AUG09 | ~ 20AUG09 | A LSI WORDA V | 1 | · · · · · · | |
| inish | | | | | | | | Loader | - | Engineering Corp. Ltd. | Early bar |
| Data c | | G09 | | | | | | | | • • • | Frigress bar |
| age i | number 5A | — | | | | | | - | | tract No. DC/2005/02 | Summer ber |
| c Pri | navera System | s, Inc. | | | | | 3-Mon | th Kolling | g Pro | gramme - 3M01 at 29 AU | G 2009 Start milestone point |
| | | <u> </u> | | | | | | | | | |

| 0112 - D10 (debed SQ) 0 1103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D11 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D21 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0112 - D21 (debed SQ) 0 103 (debed SQ) 1114 (debed SQ) 0113 - D11 (debed SQ) | 0112-07) selected SQL 1 100 224/0004 17.1.4.2 | BULANG TALAD DNALO (10: 2-10) (selected S0) 0 100 PRAUGE 27 (ALX): PLANE DNALO (10: 1-10) (selected S0) BULANG TALAD DNALO (10: 1-10) (selected S0) 0 1100 PRAUGE 27 (ALX): PLANE DNALO (10: 1-10) (selected S0) BULANG TALAD DNALO (10: 1-10) (selected S0) 0 1100 PRAUGE 27 (ALX): PLANE DNALO (10: 1-10) (selected S0) BULANG TALAD DNALO (10: 1-10) (selected S0) 0 1100 PRAUGE 27 (ALX): PLANE DNALO (10: 1-10) (selected S0) BULANG TALAD DNALO (10: 1-10) (selected S0) 0 1100 PRAUGE 27 (ALX): PLANE DNALO (10: 1-10) (selected S0) BULANG TALAD DNALO (10: 1-10) (selected S0) 0 1100 PRAUGE 27 (ALX): PLANE DNALO (10: 1-10) (selected S0) BULANG TALB DNALO (10: 1-10) (selected S0) 0 1100 PRAUGE 27 (ALX): PLANE DNALO (10: 1-10) (selected S0) BULANG TALB DNALO (10: 1-10) (selected S0) 0 1100 PRAUGE 27 (ALX): PLANE DNALO (10: 1-10) (selected S0) BULANG TALB DNALO (10: 1-10) (selected S0) 11-100 PRAUGE 27 (ALX): PLANE DNALO (10: 1-10) (selected S0) BULANG TALB DNALO (10: 1-10) (selected S0) 0 11-100 PRAUGE 27 (ALX): PLANE DNALO (10: 1-10) (selected S0) BULANG TALB DNALO (10: 1-10) (selected S0) 0 1100 PRAUGE 27 (ALX): PLANE DNALO (1 | | Description | Orig Dur | Total Perc Float Comp | ent Early Dete Start | Early Finish | Late Start | Late Finish | 2009 AUG SEP OCT NOV |
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| accing 1:0:1:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0 | 1000000000000000000000000000000000000 | SQLMSS 1 1 1 1 2 <td></td> <td>TTA 146 DN400 (D12 - D12) (delated SA2)</td> <td>0</td> <td>- lout oom</td> <td></td> <td></td> <td></td> <td></td> <th></th> | | TTA 146 DN400 (D12 - D12) (delated SA2) | 0 | - lout oom | | | | | |
| add (1) - 101 (dested S40) 0 101 244.000 × 274.000 | 100 100 100 274.0008 274.0008 274.0008 274.0008 274.0008 274.0084 </td <td>SUBJECHI TILAR 2 (2014) 1</td> <td></td> <td>. ,, ,, ,,</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <th></th> | SUBJECHI TILAR 2 (2014) 1 | | . ,, ,, ,, | | | | | | | |
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| dor (120-120) (desked S42) 0 100 224.0009A 274.0009A | TAJB: 10 M00 (D20: D21) (deleta SS2); TAJB: 10 M00 (D20: D21) (deleta SS2); TAJB: 10 M00 (D20: D21) (deleta SS2); 00 (D2: D22) (deleta SS2); E None SS2; TAJB: 10 M00 (D20: D21) (deleta SS2); 00 (D2: D22) (deleta SS2); E None SS2; TAJB: DM00 (D20: D21) (deleta SS2); 00 (D2: D22) (deleta SS2); E E None SS2; TAJB: DM00 (D20: D21) (deleta SS2); 00 (D2: D21) (deleta SS2); E E E E E 00 (D2: D21) (deleta SS2); E E E E E 00 (D2: D21) (deleta SS2); E </td <td>SUBJERG THAUB1 - DINEO (2021: 00): 000: 000: 000: 000: 000: 000: 00</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <th></th> | SUBJERG THAUB1 - DINEO (2021: 00): 000: 000: 000: 000: 000: 000: 00 | | | 0 | | | | | | |
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| 100122-1021 (deleted SQL) 0 1002 224/0024 & 244/0026 & 274/0024 & 244/0026 & 274/0024 & 244/0026 & 274/0024 & 244/0026 & 274/0024 & 244/0026 & 274/0024 & 244/0026 & 274 | 0000202.029:(debed 592) 0 1000 284.000 A 274009A 3 274009A 3 274009A TAGRE 20 Non00 (022 - 02) (debed 592) 0.00120-102) (debed 592) 0 1000 284.000 (a 274009A 3 274009A 3 274009A A 274009A A 274009A A 17408A TAGRE 20 Non00 (022 - 02) (debed 592) 0.00126-102) (debed 592) 0 1000 284.000 (a 274009A 3 274009A 3 274009A A 274009A A 17408A TAGRE 20 Non00 (022 - 02) (debed 592) 0.00126-102) (debed 592) 0 1000 284.000 (a 274009A 3 274009A A 274009A A 17409A A 17400A A 1740 | Billebox Pikalika Diversity Pikalika | S6JEA1900 | TTAJB1-1 DN400 (D20 - D21) (deleted SA2) | 0 | | 100 28AUG09 A | 27AUG09 A | 28AUG09 A | 27AUG09 A | |
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| Instructure | Dest Dest <th< td=""><td>Subject 20 NUSD (228): -039 (select Skg) 0 110 Subject 20 Subj</td><td>S6JEA200(</td><td>TTAJB2-2 DN400 (D22 - D23) (deleted SA2)</td><td>0</td><td></td><td>100 28AUG09 A</td><td>27AUG09 A</td><td>28AUG09 A</td><td>27AUG09 A</td><th>TTAJB2-2 DN400 (D22 - D23) (deleted SA2)</th></th<> | Subject 20 NUSD (228): -039 (select Skg) 0 110 Subject 20 Subj | S6JEA200(| TTAJB2-2 DN400 (D22 - D23) (deleted SA2) | 0 | | 100 28AUG09 A | 27AUG09 A | 28AUG09 A | 27AUG09 A | TTAJB2-2 DN400 (D22 - D23) (deleted SA2) |
| Instructure | Dest Dest <th< td=""><td>Subject 20 NUSD (228): -039 (select Skg) 0 110 Subject 20 Subj</td><td>S6.JEA210(</td><td>TTA. IB3-2 DN400 (D23 - D25) (deleted SA2)</td><td>0</td><td></td><td>100 28AUG09 A</td><td>27AUG09A</td><td>28AUG09A</td><td>27AUG09A</td><th>TTA JB3-2 DN400 (D23 - D25) (deleted SA2)</th></th<> | Subject 20 NUSD (228): -039 (select Skg) 0 110 Subject 20 Subj | S6.JEA210(| TTA. IB3-2 DN400 (D23 - D25) (deleted SA2) | 0 | | 100 28AUG09 A | 27AUG09A | 28AUG09A | 27AUG09A | TTA JB3-2 DN400 (D23 - D25) (deleted SA2) |
| adp(1d25) 100 28AU(008 A 27AU(009 A | 000000000000000000000000000000000000 | SUB202 TAUBS 10 Mo00 (28: 0.09) (detes Skp) 0 100 (28: 0.000 A TAUBS 10 Mo00 (28: 0.09) (detes Skp) SUB203 TAUBS 10 Mo00 (28: 0.09) (detes Skp) 0 100 (28: 0.000 A TAUBS 10 Mo00 (28: 0.09) (detes Skp) SUB204 TAUBS 10 Mo00 (28: 0.09) (detes Skp) 0 100 (28: 0.000 A TAUBS 10 Mo00 (28: 0.09) (detes Skp) SUB204 TAUBS 10 Mo00 (28: 0.09) (detes Skp) 100 (28: 0.000 A TAUBS 10 Mo00 (28: 0.09) (detes Skp) SUB204 TAUBS 10 Mo00 (28: 0.09) (detes Skp) 100 (28: 0.000 A TAUBS 10 Mo00 (28: 0.09) (detes Skp) SUB204 TAUBS 10 Mo00 (28: 0.09) (detes Skp) 100 (28: 0.000 A TAUBS 10 Mo00 (28: 0.09) (detes Skp) SUB204 TAUBS 10 Mo00 (28: 0.000 A 100 (28: 0.000 A TAUBS 10 Mo00 (28: 0.00) (detes Skp) SUB204 TAUBS 10 Mo00 (28: 0.000 A 100 (28: 0.000 A TAUBS 10 Mo00 A SUB204 TAUBS 10 Mo00 (28: 0.000 A 100 (28: 0.000 A 100 (28: 0.000 A SUB204 TAUBS 10 Mo00 (28: 0.000 A 100 (28: 0.000 A 100 (28: 0.000 A SUB204 TAUBS 10 Mo00 (28: 0.000 A 100 (28: 0.000 A 100 (28: 0.000 A SUB2040 TAUBS 10 Mo00 (28: 0.000 A | | | Ň | | | | | | |
| and (122: D28) (adverted S20) 0 100 284/1009 & 274/1009 & 284/1009 & 274/1009 A and (122: D28) (adverted S20) 0 100 284/1009 & 274/1009 A 274/1009 A and (122: D28) (adverted S20) 0 100 284/1009 A 274/1009 A 274/1009 A and (122: D28) (adverted S20) 0 100 284/1009 A 274/1009 A 274/1009 A and (122: D28) (adverted S20) 0 100 284/1009 A 274/1009 A 274/1009 A and (122: D28) (adverted S20) 0 100 284/1009 A 274/1009 A 274/1009 A 328: D33) Stage (104med 0 100 286/1009 A 284/1009 A 274/1009 A 274/1009 A 328: D33) Stage (104med 0 100 200/078 A 270/078 A 270/078 A 270/078 A 328: D33) Stage (104med 0 100 200/078 A 270/078 A 270/078 A 270/078 A 328: D33) Stage (104med 0 100 200/078 A 270/078 A 270/078 A 270/078 A 328: D33) Stage (104med 02) 0 100 280/078 A 270/078 A 270/078 A 328: D33) Stage (104med 02) 100 284/098 A 7 | 000000000000000000000000000000000000 | Sulf2ed TA, BP 2 DN40 (D28: D28) (debted SW) 0 100 (28/L0984 (27/L0994 (27/L099 | | | | | | | | | |
| 40/102-80-100 100 24AUG09A 27AUG09A 27AUG09A 40/102-00-001 100 28AUG09A 27AUG09A 27AUG09A 40/102-001 100 28AUG0A 27AUG09A 27AUG09A 40/102-001 100 28AUG0A 27AUG09A 27AUG09A 40/102-001 100 28AUG0A 27AUG09A 27AUG09A 52/102 100 28AUG0A 27AUG09A 27AUG09A 27AUG09A 52/102 100 28AUG0A 27AUG09A 27AUG09A 27AUG09A 27AUG09A 52/102 100 28AUG0A 100 28CUT09A 27AUG09A 27AUG09A 27AUG09A 27AUG09A 52/103 5380ge 2 (celeted 0 100 BeC1T08 A 07OCT09A BeCT078 A 07OCT09A DN400 Pe (D2- D33) Bage 3 (celeted S2) DN400 Pe (D32- D33) Bage 3 (celeted S2) </td <td>100 (120 - 201) (dested SA2) 0 1002 abulades (SA2) 1002 abulades (SA2) 101 (20 - 201) (dested SA2) 1002 (abulades (SA2) 1002 (abulades (SA2) 1002 (abulades (SA2) Manchel D21 & D22 (dested A 0 1002 (abulades (SA2) 1002 (abulades (SA2) 1002 (abulades (SA2) Manchel D21 & D22 (dested A 0 1002 (abulades (SA2) 1002 (abulades (SA2) 1002 (abulades (SA2) Manchel D21 & D22 (dested A 0 1002 (abulades (SA2) 1002 (abulades (SA2) 1000 (abulades (SA2) 22. D333 Singa 1 (dested A 0 1000 (abortran A (obcotran A (obcotra</td> <td>SULE200 ThU/BE:1 DNAGO (122: 03) (notes 532) 0 100 28/4007A 27/4007A 28/4007A 28/400</td> <td></td> <td></td> <td>U U</td> <td></td> <td></td> <td></td> <td></td> <td></td> <th></th> | 100 (120 - 201) (dested SA2) 0 1002 abulades (SA2) 1002 abulades (SA2) 101 (20 - 201) (dested SA2) 1002 (abulades (SA2) 1002 (abulades (SA2) 1002 (abulades (SA2) Manchel D21 & D22 (dested A 0 1002 (abulades (SA2) 1002 (abulades (SA2) 1002 (abulades (SA2) Manchel D21 & D22 (dested A 0 1002 (abulades (SA2) 1002 (abulades (SA2) 1002 (abulades (SA2) Manchel D21 & D22 (dested A 0 1002 (abulades (SA2) 1002 (abulades (SA2) 1000 (abulades (SA2) 22. D333 Singa 1 (dested A 0 1000 (abortran A (obcotran A (obcotra | SULE200 ThU/BE:1 DNAGO (122: 03) (notes 532) 0 100 28/4007A 27/4007A 28/4007A 28/400 | | | U U | | | | | | |
| 400(1030-1031) (deleted SA2) 0 1100 254/1009A 274/1009A | 001000-0211/defined S820; 0 100 28AUG96A 27AUG96A | Sub260 Thu/BP 2 DN400 (D30 - 031 (debug 584)) 0 100 PANUGRA 2 PANUGRA PANUGRA PANUGRA 2 PANUGRA 2 PANUGRA 2 PANUGRA 2 PANUGRA 2 PANUGRA | | | 0 | | | | | | |
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| Namino D24 D26 (deleted 0 100 282/UG09A 274/UG09A 282/UG09A 274/UG09A 274/UG09A <t< td=""><td>Manche D24 6024 (debed S24) 0 100 28AUG09A 27AUG09A 27AUG</td><td>SubJecks Tapping Pipe L Munche D24 D2G (deeled S40) O <th< td=""><td>S6JEA250(</td><td>TTAJB7-2 DN400 (D30 - D31) (deleted SA2)</td><td>0</td><td></td><td>100 28AUG09 A</td><td>27AUG09 A</td><td>28AUG09 A</td><td>27AUG09 A</td><th>TTAJB7-2 DN400 (D30 - D31) (deleted SA2)</th></th<></td></t<> | Manche D24 6024 (debed S24) 0 100 28AUG09A 27AUG09A 27AUG | SubJecks Tapping Pipe L Munche D24 D2G (deeled S40) O <th< td=""><td>S6JEA250(</td><td>TTAJB7-2 DN400 (D30 - D31) (deleted SA2)</td><td>0</td><td></td><td>100 28AUG09 A</td><td>27AUG09 A</td><td>28AUG09 A</td><td>27AUG09 A</td><th>TTAJB7-2 DN400 (D30 - D31) (deleted SA2)</th></th<> | S6JEA250(| TTAJB7-2 DN400 (D30 - D31) (deleted SA2) | 0 | | 100 28AUG09 A | 27AUG09 A | 28AUG09 A | 27AUG09 A | TTAJB7-2 DN400 (D30 - D31) (deleted SA2) |
| balancke 302 (deleted SA2) 0 100 827.U039 A 27.U039 A | Mamhole D30 (deberd SA2) 0 1100 254/009A 274/009A 274/009A 274/009A 274/009A 776/000A 32: D33) Stage 1 (deberd dse) 0 100 050/078A 070CT09A | Ski Heshel Tapping Pee to Manhole D30 (debed S42) 0 100 28.1/000 Al 27.01/00 Al 27. | S6JEA254(| Tapping Pipe to Manhole D21 & D22 (deleted | 0 | i | 100 28AUG09 A | 27AUG09 A | 28AUG09 A | 27AUG09 A | Tapping Pipe to Manhole D21 & D22 (deleted SA2) |
| blambob D30 (deled 542) 0 100 26AU069A 27AUG9A | Manhole D30 (deleted SA2) 0 1102 28/L/1009 A 27/L/1009 A 27/L/1009 A 27/L/1009 A 77/L/1009 A < | SpLEeSes Transping Piere Mannole Do3 (deleted Sk2) 0 100 28/L0009A 27/L0009A 27/L0009 | S6JEA255(| Tapping Pipe to Manhole D24 & D26 (deleted | 0 | | 100 28AUG09 A | 27AUG09 A | 28AUG09 A | 27AUG09A | Tapping Pipe to Manhole D24 & D26 (deleted SA2) |
| 322 333 Stage 1 (deleted 0 100 080CT09 A 070CT09 A 070CT09 A 322 0333 Stage 2 (deleted 0 100 080CT09 A 070CT09 A 070CT09 A 322 0333 Stage 1 (deleted 0 100 080CT09 A 070CT09 A 070CT09 A 070CT09 A Manhole (D40 040 0 100 800CT09 A 070CT09 A 070CT | 32: D33: Stage 1 (deleted 40 0 100 080CT09A 070CT09A 070CT09A 070CT09A 070CT09A | Sul-EdeOD Ph400 Ppc (032-033 Sage 1 (deleted S42) 0 106 0000000 A 0000000 A 0000000 A 0000000 A 000000 | S6.(EA256(| | 0 | - 1 | | 27AUG09A | 28AUG09 A | 27AUG09A | Tapping Pipe to Manhole D30 (deleted SA2) |
| D32: 033(90) 02: 2(delead 0 100 080CT09.A 070CT09.A 070CT09.A <td>32. D33) Sags 2 (deleted 0 100 080CT094 070CT09A 070CT09A 070CT09A 070CT09A 080CT09A 070CT09A 070CT09A 080CT09A 070CT09A 070CT09A</td> <td>SH124200 DH400 Pbc (032: 033 Stage 2 (deleted SA2) DH400 Pbc (032: 033 Stage 2 (deleted SA2) DH400 Pbc (032: 033 Stage 2 (deleted SA2) SH124000 DH400 Pbc (032: 033 Stage 2 (deleted SA2) DH400 Pbc (032: 033 Stage 2 (deleted SA2) DH400 Pbc (032: 033 Stage 2 (deleted SA2) SH124000 DH400 Pbc Munole (04: 0-04) 65 0 50 0JAM0A A OFCOTTAA A</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <th></th> | 32. D33) Sags 2 (deleted 0 100 080CT094 070CT09A 070CT09A 070CT09A 070CT09A 080CT09A 070CT09A 070CT09A 080CT09A 070CT09A | SH124200 DH400 Pbc (032: 033 Stage 2 (deleted SA2) DH400 Pbc (032: 033 Stage 2 (deleted SA2) DH400 Pbc (032: 033 Stage 2 (deleted SA2) SH124000 DH400 Pbc (032: 033 Stage 2 (deleted SA2) DH400 Pbc (032: 033 Stage 2 (deleted SA2) DH400 Pbc (032: 033 Stage 2 (deleted SA2) SH124000 DH400 Pbc Munole (04: 0-04) 65 0 50 0JAM0A A OFCOTTAA A | | | | | | | | | |
| 328 233 State 3 (deleted 40 0 100 80CC1094 00CC1094 00CCC1094 00CC1094 00CC1094< | 32. 1033 Stand 3 (deleted 0 108 BOCT09 A 07OCT09 A | Sult2300 DNADO Pre (D22: D33) Same 3 (deleted 34) D Into 0 (pac (D22: D33) Same 3 (deleted 342) Sult2300 Phase A Manche (D4: D-42) 6 0 000 (pac (D22: D33) Same 3 (deleted 342) DNADO Pre (D22: D33) Same 3 (deleted 342) Sult2300 DN300 Pre & Manche (D4: D-42) 0 100 (pac (D23: D33) Same 3 (deleted 342) DN300 Pre & Manche (D4: D-42) DN300 Pre & Manche (D4: D4: D3) (deleted 342) Sult2300 DN300 Pre & Manche (D4: D4: D3) (deleted 342) 0 100 (pac (D23: D33) Same 3 (deleted 342) DN300 Pre & Manche (D4: D4: D4) (deleted 342) Sult2300 DN300 Pre & Manche (D4: D5: D3) (deleted 342) 0 100 (pac (D23: D3) (deleted 342) DN300 Pre & Manche (D4: D4: D4: D4: D4: D4: D4: D4: D4: D4: | | | | | | | | | |
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| 7750 (EB : E9) (deleted SA2) 0 100 28AUG09 A 27AUG09 A 28AUG09 A 27AUG09 A< | TO: (EB - E) (deleted SA2) 0 100 28AUG09 A 27AUG09 A <td>SBJEA424 TTAJD5-1 DN750 (E8 - E9) (deleted SA2) 0 100 28AUG09A 27AUG09A 27AUG09A TTAJD5-2 DN750 (E9 - E10) (deleted SA2) 0 100 28AUG09A 27AUG09A 27AUG09A TTAJD5-2 DN750 (E10 - E11) (deleted SA2) 0 100 28AUG09A 27AUG09A 27AUG09A</td> <td></td> <td>. , , , , , , , , , , , , , , , , , , ,</td> <td>1 0</td> <td>i</td> <td></td> <td></td> <td></td> <td></td> <th>TTA J D 4-2 DN 750 (E7 - E9) (deleted SA2)</th> | SBJEA424 TTAJD5-1 DN750 (E8 - E9) (deleted SA2) 0 100 28AUG09A 27AUG09A 27AUG09A TTAJD5-2 DN750 (E9 - E10) (deleted SA2) 0 100 28AUG09A 27AUG09A 27AUG09A TTAJD5-2 DN750 (E10 - E11) (deleted SA2) 0 100 28AUG09A 27AUG09A | | . , , , , , , , , , , , , , , , , , , , | 1 0 | i | | | | | TTA J D 4-2 DN 750 (E7 - E9) (deleted SA2) |
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| | Act | | Oria | Total | Percent | Early | Early | Lato | Lato | | | | | | | | | 2009 | | | | | | | | |
|--------|---------------|--|---------|----------------|----------|----------------|-----------------|---------------|----------------|-------|----|-----|-----|--------|--------------|-------|----|------|----|-----|----|----|----|----|----|----|
| | Act ID | Description | Dur | Total Float | Complete | Early Start | Early Finish | Late Start | Late Finish | JUL | | AUG | | | | SEP | | | | 00 | т | | | N | VO | |
| | | | Dui | Tioat | complete | Start | 1 111511 | Start | 1 111511 | 27 03 | 10 | 17 | 24 | 31 | 07 | 14 | 21 | 28 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 |
| La | ndscape Softv | vorks and Establishment Works | | | | | | | | | | | | | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | |
| | | | | | | | | | | - I | 1 | - I | 1 | - T - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
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| | S8QR1100 | Preservation & Protection of Preserved Tre | es 1192 | 2 0 | 79 | 29JUL06 A | 28JUN10 | 29JUL06 A | 28JUN10 | | | - | | | | | - | - | | | | - | - | | - | |
| Decon | tamination Wo | rks | | | | | | | | 1 | | | 1 | | | | | | | | 1 | 1 | | | 1 | |
| Portio | an E | | | | | | | | | | | | | | | | | 1 | | | | | | 1 | 1 | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | Decontamination Works | 48 | B C | 95 | 28AUG09 A | 29AUG09 | 28AUG09 A | 29AUG09 | | | | | Deco | ontamination | WOrks | | | | | | | | | 1 | |
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| De | contamination | 1 | | | | | | | | - I | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
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| Startdate | 19DEC05 |
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| Finish date | 25JAN11 |
| Data date | 28AUG09 |
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| c Primavera S | Systems, Inc. |

Leader Civil Engineering Corp. Ltd. DSD Contract No. DC/2005/02 3-Month Rolling Programme - 3M01 at 29 AUG 2009





ANNEX D

PHOTOGRAPHICAL RECORDS – NOISE BARRIER ON-SITE

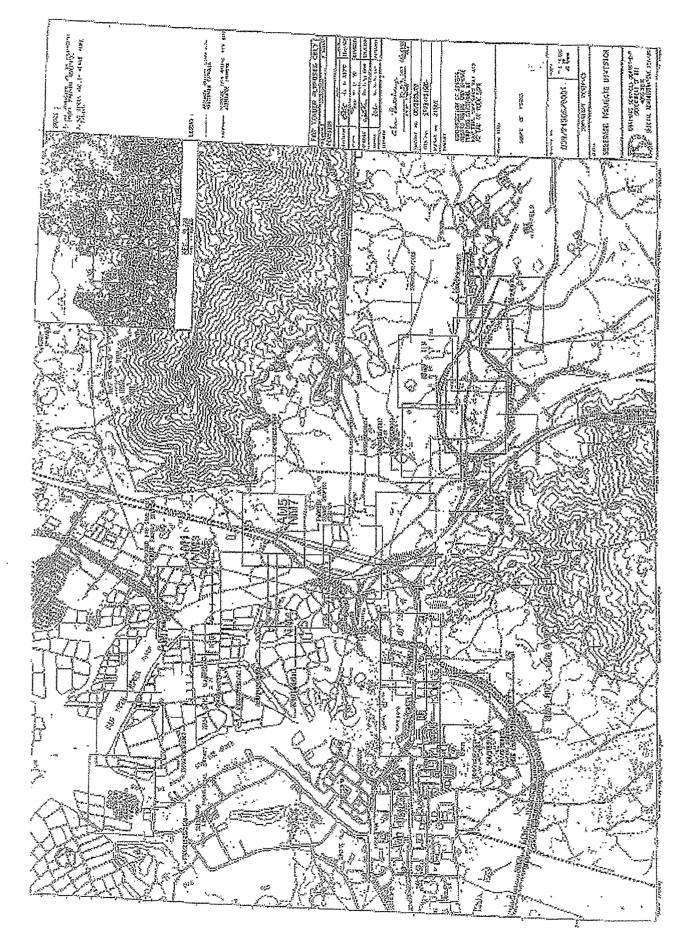


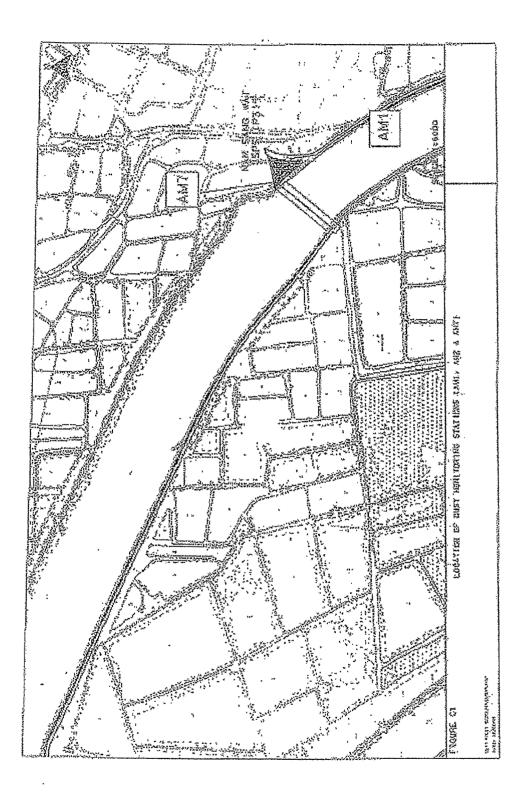


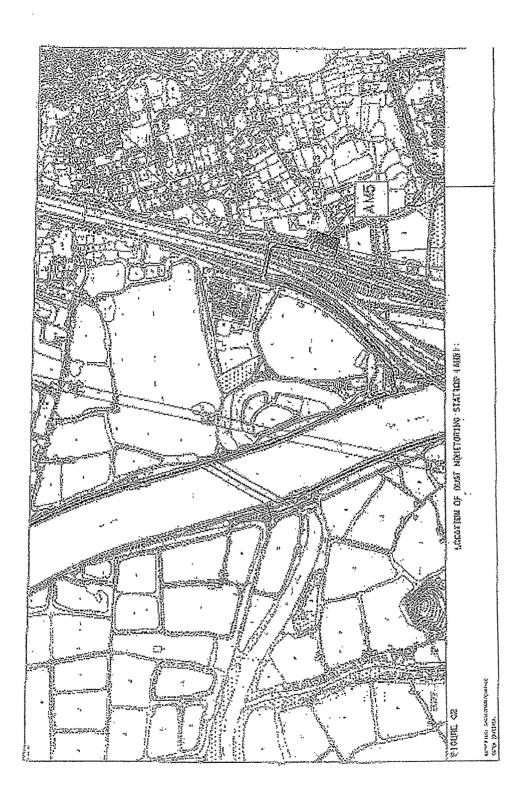


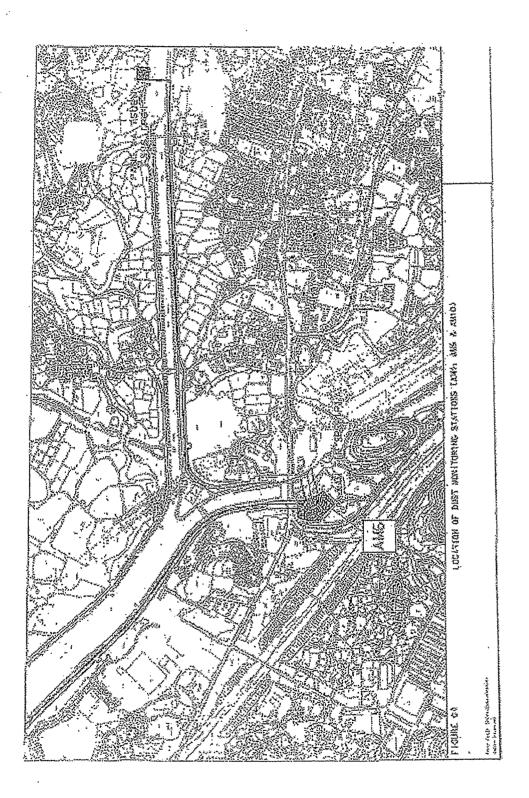
ANNEX E

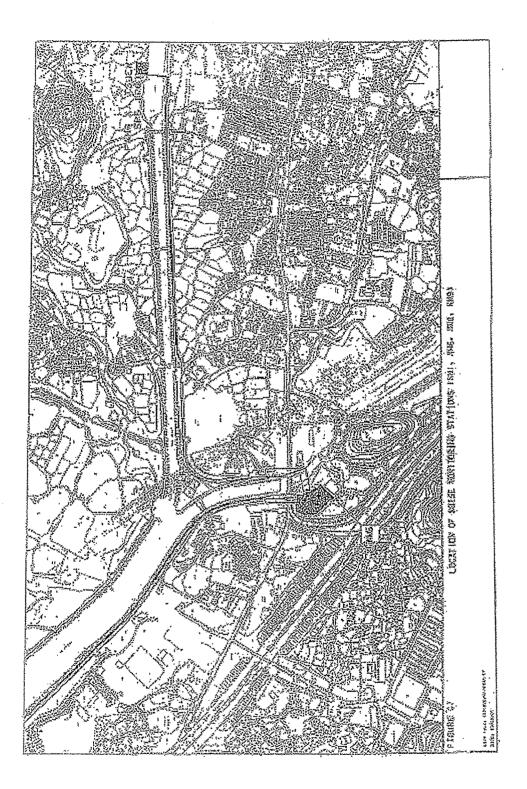
LOCATIONS OF MONITORING STATIONS

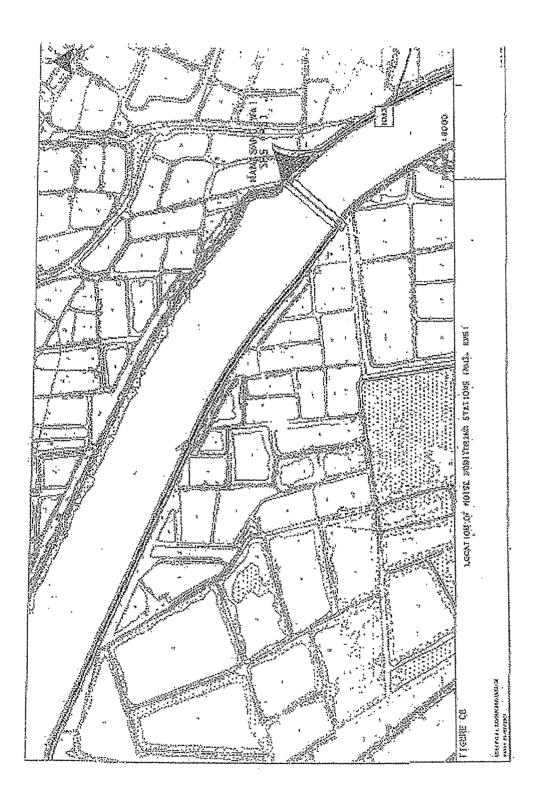


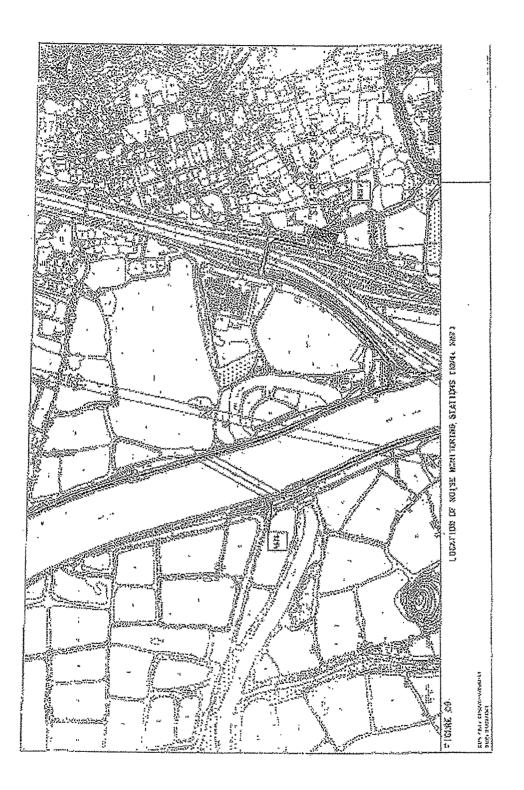














ANNEX F

EVENT AND ACTION PLAN

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

AUES

Event and Action Plan for Construction Phase Air Quality

| EVENT | | AC | CTION | | | | | | |
|---|---|--|---|---|--|--|--|--|--|
| | ET Leader | IEC | Engineer | Contractor | | | | | |
| Action Level | | | | | | | | | |
| Exceedance for one sample | 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 | 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 | 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 | 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 | 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 | 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 | 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. | 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 | | | | | |
| Limit Level | | | | | | | | | |
| Exceedance for one sample | 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, Engineer and EPD informed | 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 Check and confirm Contractors proposed remedial measures are appropriate Determine the efficacy of remedial actions and keep the Engineer informed | 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. | Take immediate action to avoid further exceedance 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 | | | | | |
| Exceedance for two or more consecutive samples | 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. | 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 | 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 If exceedance continues, instruct the Contractor to stop the relevant portion of work until the exceedance is abated Inform complainant of actions taken, if necessary. | 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 | | A | CTION | |
|---|---|--|---|--|
| | ET Leader | IEC | Engineer | Contractor |
| Limit Level | | | | |
| Exceedance for one sample | Identify source (s) of exceedance and inform IEC, Contractor and Engineer Repeat dust measurements to confirm findings If repeat measurements confirm exceedance ,increase monitoring frequency to daily Assess efficacy of remedial measures and keep the Contractor, IEC, and Engineer informed If exceedance stops, inform Contractor and cease additional noise monitoring | 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 | 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 | Rectify any unacceptable practice Liaise with Engineer and IEC to develop appropriate remedial measures to reduce noise 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 | Identify source (s) of exceedance and inform IEC, Contractor and Engineer Repeat measurements to confirm findings Increase the monitoring frequency to daily Discuss remedial actions with IEC, Engineer and the EPD Assess the efficacy of remedial measures and keep the Contractor informed 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. | 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 | 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 If exceedance continues, instruct the Contractor to stop the relevant portion of work until the exceedance is abated Inform complainant of actions taken, if necessary. | 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 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 | Imple Stage | | tatio | n | Relevant Legislation & Guidelines |
|--------------|----------|---|--|--|-------------------------|----------------|---|-------|-----|--|
| | | | | | | Des | С | 0 | Dec | |
| | | CONSTRUCTION PHASE | | | | | | | | |
| 3.5 | A1 | AIR QUALITY - Construction Phase The following measures are enforceable under the Air Pollution Control (Construction Dust) Regulations Site boundary and entrance 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 | | ~ | | | Part III, Clause 13 (c), Air Pollution Control (Construction Dust) Regulations |
| 3.5 | A2 | Access Road 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 | | ~ | | | Part III, Clause 14, (b), Air Pollution Control (Construction Dust) Regulations |
| 3.5 | A3 | Stockpiling of Dusty Materials 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 | | ~ | | | Part IV, Clause 18, (a, b & c), Air Pollution Control (Construction Dust) Regulations |
| 3.5 | A4 | Loading, unloading or transfer of dusty materials 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 | | ~ | | | Part IV, Clause 19, Air Pollution Control (Construction Dust) Regulations |
| 3.5 | A5 | Use of vehicles 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 | | √ | | | Part IV, Clause 21, (1), Air Pollution Control (Construction |

| EIA* Ref. | EM&A Ref | Environmental Protection Measures | Objectives of the Recommended Measures & Main Concerns | Location of the measure | Implementation Agent | Imple Stage | | tatio | n | Relevant Legislation & Guidelines |
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| 3.5 | A6 | 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 | | ~ | | | Dust) Regulations Part IV, Clause 21, (2), Air Pollution Control (Construction Dust) Regulations |
| 3.5 | A7 | Power-driven drilling, and cutting 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 | | ~ | | | Part IV, Clause 22, Air Pollution Control (Construction Dust) Regulations |
| 3.5 | A8 | Excavation and earth moving 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 | | ~ | | | Part IV, Clause 24, Air Pollution Control (Construction Dust) Regulations |
| 3.5 | A9 | Construction of the superstructure of a building 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 a 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 | | ~ | | | Part I, Clause 6, (a), Air Pollution Control (Construction Dust) Regulations |
| 3.5 | A10 | 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 | | ~ | | | Part I, Clause 6, (b), Air Pollution Control (Construction Dust) Regulations |

| 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 |
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| | | | | | | | | | | |
| | | NOISE - Construction Phase | | | | | | | | |
| 4.7.1 | B1 | General Site Clearance – Demolition Works Use of quiet PME which meet the SWLs taken from British Standard, Noise and Vibration Control on Construction Open Sites, BS 5228: Part 1: 1997 (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 | | ~ | | | Annex 5 of EIAO-TM |
| 4.7.1 | B2 | Construction of Sewage Pumping Stations P1, P2 & P3 Use of quiet PME which meet the SWLs taken from British Standard, Noise and Vibration Control on Construction Open Sites, BS 5228: Part 1: 1997, | To minimise potential noise impacts arising during the construction of <i>P1, P2 & P3</i> | Site wide and throughout the full duration of the construction contract. | The Contractor | | * | | | Annex 5 of EIAO-TM |
| | | 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 <i>P1, P2 & P3</i> | Site wide and throughout the full duration of the construction contract. | The Contractor | | ~ | | | Annex 5 of EIAO-TM |
| | | Sewers and Rising Mains using Open Trench | | | | | | | | |
| 4.7.1 | В3 | Method Use of quiet PME which meet the SWLs taken from British Standard, Noise and Vibration Control on Construction Open Sites, BS 5228: Part 1: 1997, | To control potential noise impacts during excavation works. | Site wide and throughout the full duration of the construction contract. | The Contractor | | ~ | | | Annex 5 of EIAO-TM |
| 4.7.1 | B4 | • 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 | | ~ | | | |
| 4.7.1 | B5 | 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 | | ~ | | | |

| EIA* Ref. | EM&A Ref | Environmental Protection Measures | Objectives of the Recommended Measures & Main Concerns | Location of the measure | Implementation Agent | Imple Stage | | tatio | n | Relevant Legislation & Guidelines |
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| | | 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. | activities. | line of sight. Throughout the full duration of the road opening activities. | | | | | | |
| | | Sewers and Rising Mains using Pipe Jacking Method | | | | | | | | |
| 4.7.1 | | Use of quiet PME which meet the SWLs taken from British Standard, Noise and Vibration Control on Construction Open Sites, BS 5228: Part 1: 1997, Road Pavement and Finishes | To control potential noise impacts from PME during construction works | Site wide and throughout the full duration of the construction contract. | The Contractor | | ~ | | | Annex 5 of EIAO-TM |
| 4.7.1 | | Use of quiet PME which meet the SWLs taken from British Standard, Noise and Vibration Control on Construction Open Sites, BS 5228: Part 1: 1997, | 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 | | ~ | | | Annex 5 of EIAO-TM |
| | | WATER QUALITY - Construction Phase No water quality monitoring is required under this study. | | | | | | | | |
| | | WASTE - Construction Phase | | | | | | | | |
| 6.6.2 | | 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 (Waste Disposal (Chemical Waste) (General) Regulations); and Dumping Licence (Land (Miscellaneous Provisions) Ordinance (Cap 28)) | 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 | ~ | ~ | | | Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste)(General) Regulation (Cap 354), the Land (Miscellaneous Provisions) Ordinance (Cap 28)) |

| EIA* Ref. | EM&A Ref | Environmental Protection Measures | Objectives of the Recommended Measures & Main Concerns | Location of the measure | Implementation Agent | Imple Stage | | tatio | n | Relevant Legislation & Guidelines |
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| 6.6.2 | D2 | Chemical Waste Chemical waste that is produced, as defined by Schedule 1 of the <i>Waste Disposal (Chemical</i> <i>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. | 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 | | ~ | | | Part II, (6) Waste Disposal (Chemical Waste) (General) Regulation |
| 6.6.2 | D3 | Storage, Packaging and Labelling of Chemical Waste Containers used for storage of chemical wastes should: 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 | | ~ | | | Part IV, (9, 10, 11 & 12) Waste Disposal (Chemical Waste) (General) Regulation |
| 6.6.2 | D4 | Storage of chemical waste The storage area for chemical wastes should: 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 | | ~ | | | Part IV, (13,14, 15, 16, 17, & 18) Waste Disposal (Chemical Waste) (General) Regulation |

| EIA* Ref. | EM&A Ref | Environmental Protection Measures | Objectives of the Recommended Measures & Main Concerns | Location of the measure | Implementation Agent | Imple Stage | | tatio | n | Relevant Legislation & Guidelines |
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| | | adequately separate | | | | | | | | |
| | | Disposal of chemical waste The Contractor should ensure that the disposal of chemical waste is via a licensed Waste Collector and in accordance with the Waste Disposal (Chemical Waste) (General) Regulations. | To control the disposal of chemical waste in accordance with the Regulations. | To be implemented at all worksites throughout the full duration of the construction phase. | The Contractor | | ~ | | | Part IV, (20 -25) Waste Disposal (Chemical Waste) (General) Regulation |
| 6.6.2 | D5 | Management of Waste Disposal 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 Land (Miscellaneous Provisions) Ordinance (Cap28) and the Works Bureau Technical Circular No. 5/99. | To monitor the disposal of C&DM and solid wastes at public filling facilities and landfills and to control fly-tipping. | To be implemented at all worksites throughout the full duration of the construction phase. | The Engineer/ Contractor | | ~ | | | Land (Miscellaneous Provisions) Ordinance (Cap 295) and Works Bureau Technical Circular No. 5/99. |
| 7.5.6 | E1 | 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 | To determine the presence of soil and groundwater contamination and remedy any potential concerns to acceptable levels. | 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. | ~ | | | | EIAO TM Annex 19/3.1.1 & 3.1.2 |

| 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 |
|--------------|----------|---|--|--|-------------------------|---------------------------|---|---|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------------------------------|
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| | | EPD, the contaminated site(s) shall be remediated in accordance with the approved CAR/RAP. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.7.1 | F1 | 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 | 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 | <i>Mitigation Measures Adopted - Minimisation</i> Pipe jacking method should be used instead of dredging where sewers and rising mains cross over existing MDC within the WCA and WBA. | 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 | 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. The site inspections shall check and report the number of workfronts and implementation of | 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</i> <i>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 |
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| | | mitigation measures (i.e. erection of movable noise barriers with a suitable footing along the sites) in the monthly EM&A reports. <i>Mitigation Measures Adopted</i> | | | | | | | | | | | | | | | | | | | | |
| 8.7.3 | F5 | 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 . | | 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 | | ✓ | | | Air Pollution Control | | | | | | | | | | | | |

| EIA* Ref. | EM&A Ref | Environmental Protection Measures | Objectives of the Recommended Measures & Main Concerns | Location of the measure | Implementation Agent | Imple Stage | | tatio | n | Relevant Legislation & Guidelines |
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| 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. | To minimise potential landscape and visual impacts. | To be implemented during the construction phases of the project. | The Contractor | | ~ | | | |
| | | The first monthly EM&A Report should also report the appearance of the temporary hoarding barriers. | | | | | | | | |
| | 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 Stage** | | | | Relevant Legislation & Guidelines |
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| | | submitted for approval by the EPD. | | project. | | | | | | |
| | | The landscape plans and pumping station elevations should demonstrate that the following elements are considered: existing landscape elements (such as mature trees), transplantation of valuable trees, new compensatory planting | | | | | | | | |
| | | 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. | | | | | | | | |
| | | EM&A REQUIEMENTS - Construction Phase | | | | | | | | |
| 3.7 | 11 | Air Quality 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. Worksite boundary facing Scattered house in Nam Sang Wai (AM1); | 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 | | ~ | | | Air Pollution Control (Construction Dust) Regulations |
| | | Worksite boundary facing Fung Kat Heung (AM5); Worksite boundary facing Scattered House near Route 3 (AM6); | | | | | | | | |

| EIA* Ref. | EM&A Ref | Environmental Protection Measures | Objectives of the Recommended Measures & Main Concerns | Location of the measure | | | | | Relevant Legislation & Guidelines | |
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| | | | | | | Des | С | ο | Dec | |
| 4.9.1 | | at any additional locations, where considered necessary, in agreement with EPD. <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. (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. | throughout the duration of the construction works. | To be undertaken by the Environmental Team (ET) and reviewed and audited by the Engineer | | ✓ | | | Noise Control Ordinance |
| Des = I | Design, C = (| Construction, O = Operation, Dec = Decommissioning | 1 | | | | | | | |



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** | | 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** | All | 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 | noise | Bruel & Kjaer 2238 Integrating Sound Level Meter | T212509 | 28 Apr 09 | 28 Apr 10 | | | | | |
| Note: | Note: Calibration certificates will only be provided if monitoring equipment is re-calibrated or new. | | | | | | | | | |

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

| | | | | Lau Fau Shan Weather Station | | | | | | |
|-----------|-----|--|---------------------------|---------------------------------|-------------------------|-------------------------------|-------------------|--|--|--|
| Date | | Weather | 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 | Е | | | |
| 12-Sep-09 | Sat | a few showers/sunny intervals/moderate/fresh | 5.7 | 30.5 | 20 | 78.2 | Е | | | |
| 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 | | Mai | ntenance | L | | | |
| 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

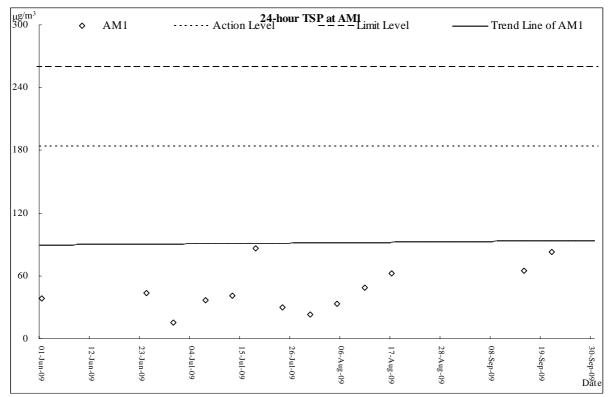
GRAPHICAL PLOTS OF AIR QUALITY AND CONSTRUCTION NOISE MONITORING RESULTS



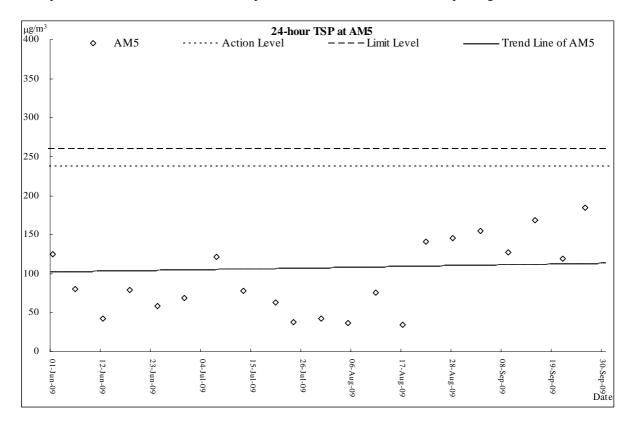
AIR QUALITY



Air Quality Monitoring Results

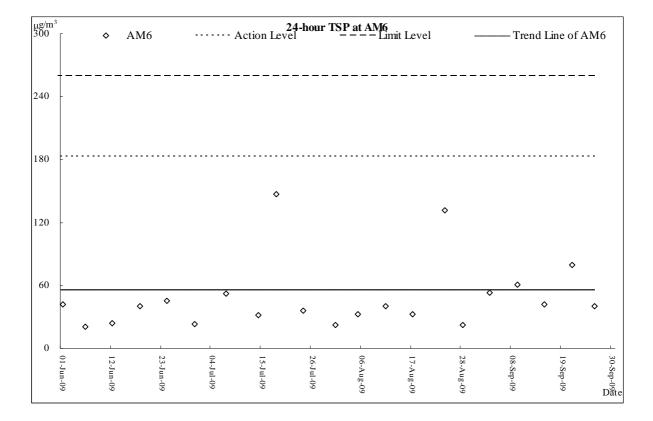


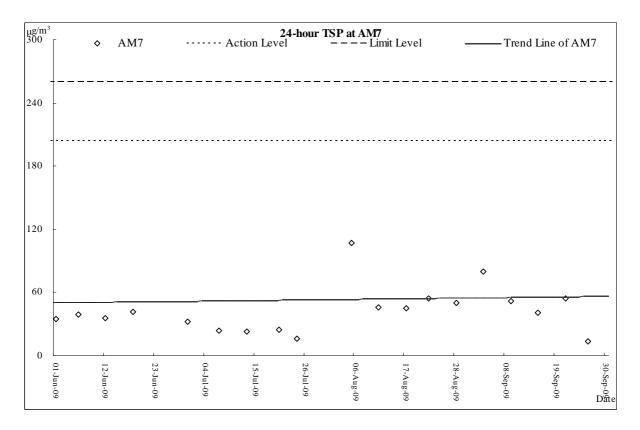
Note: power failure occurred on 9 and 26 September 2009, therefore no result on plotting is shown.





Air Quality Monitoring Results





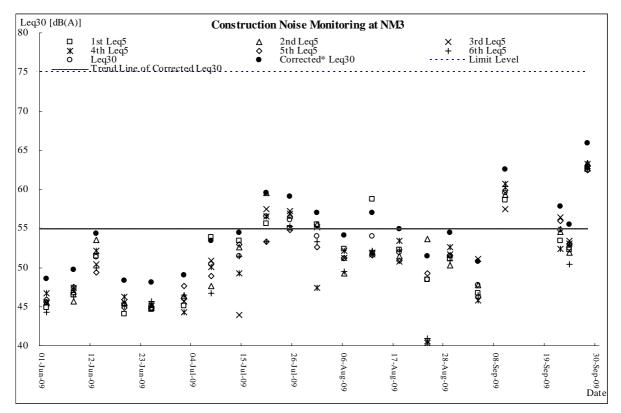


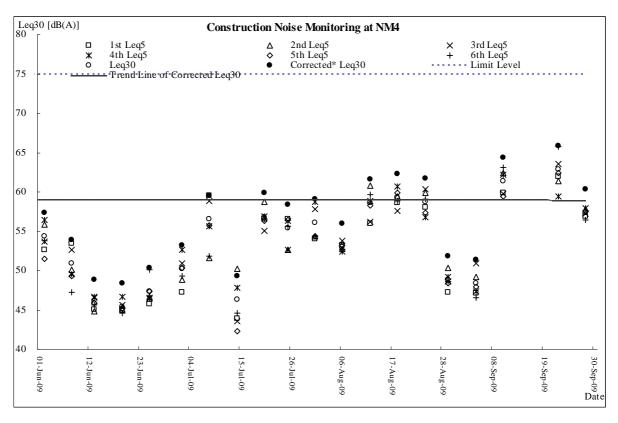
CONSTRUCTION NOISE

DSD Contract DC/2005/02 Construction of Sewers, Rising Mains & Sewage Pumping Station at Kam Tin, Nam Sang Wai and Au Tau in Yuen Long Monthly EM&A Report for September 2009 (No. 42) (Designated Elements)

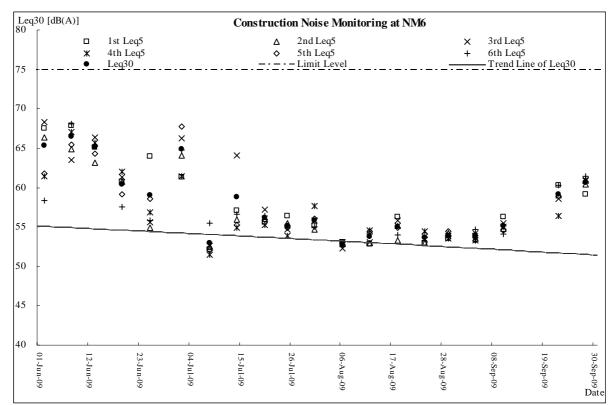


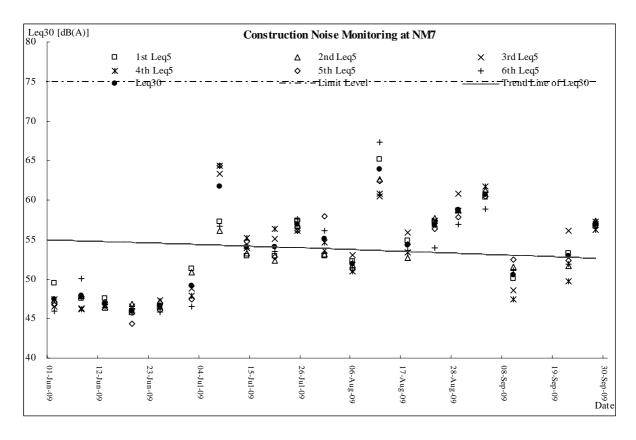
Construction Noise Monitoring Results















ANNEX K

PROFORMA OF SITE INSPECTION & IEC AUDIT

Site Inspection Checklist (SF-17)

| 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: | Sang wai and | Au Tau in Yuen Lo | ong | Engin | eer: | | Babtie Asia Ltd | | | | |
| Inspected by: | ET Auditor: Ben Tam Contractor Rep: | | | | | | Mott MacDonald Hong Kong Ltd | | | | |
| | | | | | Environmental Team: | | | Action-United Environmental Services & | | | |
| | IEC's Rep: | Edwin Leung | <u> </u> | Inspe | ction Date | & Time: | Consulting 1 September 2009 (09:30) | | | | |
| General Meteor Weather Temp: Humidity: Wind: Air Quality Is hoarding of no Are site vehicles Are public roads Are haul roads a Are there wheel Is water spraying Are the excav impermeable/tar Is exposed area Are load on vehi Are vehicles and Are vehicles and Are smoky emiss Is open burning Observable dust Construction N Are the construct Are the works or Are all plant and Is idle equipmen Is powered mech materials? | RE's Rep: | | | | dist Refere | | DSD-AT01 | | () | | |
| | | | | No.: | | | | | | | |
| General Meteor | ological Informatio | n | | | | | | | | | |
| Weather | ✓ Sunny | Fine | Cloudy | | Overcast | | Drizzle | | Rain | Hazy | |
| Temp: | 32 °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 no | ot less than 2.4m pro | ovided? | | | \checkmark | | | | · | | |
| Are site vehicles | traveling within con | trolled speed limit? | | | \checkmark | | | | | | |
| Are site vehicles | movement confined | to designated haul ro | bads? | | \checkmark | | | | | | |
| Are public roads | outside site exits ke | ept clean and free fron | n dust? | | \checkmark | | | | | | |
| Are haul roads a | and unpaved surface | s watered regularly to | avoid dust generation? | | \checkmark | | | | | | |
| Are there wheel | washing facilities pro | ovided at site exits? | | | \checkmark | | | | \Box _ | | |
| Is water spraying | g used during the ma | ain dust-generating ac | tivities? | | \checkmark | | | | | | |
| | | of dusty materials | kept wet or cover | ed by | \checkmark | | | | | | |
| Is exposed area | of ground covered c | or watered frequently? | | | \checkmark | | | | | | |
| Are load on vehic | cles covered by clea | an impervious sheeting | g? | | ✓ | | | | | | |
| Are vehicles and | equipment switched | d off while not in use? | | | \checkmark | | | | | | |
| Are smoky emiss | sions from plants/eq | uipment avoided? | | | \checkmark | | | | | | |
| Is open burning a | avoided? | | | | \checkmark | | | | | | |
| Observable dust | sources | Wind erosion | | | ✓ NA | | | | | | |
| | | Loading/unloading | of materials | | Oth | ers | | | | | |
| Construction No | oise | | | | | | | | | | |
| Are the construct | tion works schedule | d to minimize noise n | uisance? | | \checkmark | | | | | | |
| Are the works or | equipment sited to | minimize noise nuisar | ice? | | ✓ | | | | \Box _ | | |
| Are all plant and | equipment well mai | ntained and in good o | perating condition? | | \checkmark | | | | | | |
| Is idle equipment | t turned off or throttl | ed down? | | | ✓ | | | | \Box _ | | |
| | hanical equipment c | overed or shielded by | appropriate acoustic | | | | \checkmark | | | | |
| Is silenced equip | oment used where a | ppropriate? | | | | | \checkmark | | | | |
| Are noise enclos | sures or noise barrie | rs used where necess | ary? | | | | \checkmark | | | | |
| Does specified e | equipment has valid | noise label? | | | | | \checkmark | | | | |
| Are Construction | n Noise Permits (CN | Ps) available for inspe | ection? | | | | \checkmark | | | | |
| Major Noise Sou | e there wheel washing facilities provided at site exits? water spraying used during the main dust-generating activities? e the excavated or stockpile of dusty materials kept wet or bermeable/tarpaulin sheet? exposed area of ground covered or watered frequently? e load on vehicles covered by clean impervious sheeting? e vehicles and equipment switched off while not in use? e smoky emissions from plants/equipment avoided? open burning avoided? eservable dust sources Wind erosion Loading/unloading of materials enstruction Noise e the construction works scheduled to minimize noise nuisance? e the works or equipment sited to minimize noise nuisance? e all plant and equipment well maintained and in good operating condition dle equipment turned off or throttled down? powered mechanical equipment covered or shielded by appropriate acou terials? silenced equipment used where appropriate? e noise enclosures or noise barriers used where necessary? es specified equipment has valid noise label? e Construction Noise Permits (CNPs) available for inspection? | | | | ✓ Cor | nstruction | activities ins | ide the site | l | | |
| Loading/unloading of materials Construction Noise Are the construction works scheduled to minimize noise nuisance? Are the works or equipment sited to minimize noise nuisance? Are all plant and equipment well maintained and in good operating conditi s idle equipment turned off or throttled down? s powered mechanical equipment covered or shielded by appropriate acc naterials? s silenced equipment used where appropriate? Are noise enclosures or noise barriers used where necessary? Does specified equipment has valid noise label? Are Construction Noise Permits (CNPs) available for inspection? | | | ties outside of site | | Oth | ers N | lil | | | | |

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

, grease or other objectionable matters in water or nearby drains of sewer avoided?

Remarks:

Follow up

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

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

Name : Ban Tain

Nama: Edwin Loung

Contractor's Representativo

Name:

IC(E) Auditor

Wilness Representative RE's

W

Nama

TSANG Wing-bal

Site Inspection Checklist (SF-17)

| 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: | Sang wara | nd Au Tau in Yuen L | long | Engir | eer: | | Babtie Asia Ltd | | | | | |
| Inspected by: | ET Auditor: | Ben Tam | IEC: | | | Mott MacDonald Hong Kong Ltd | | | | | | |
| | Contractor Rep: | | | | Environmental Team: | | | Action-United Environmental Services & | | | | |
| | IEC's Rep: | Edwin Leung | | Inspe | ction Date | & Time: | Consulting 8 September 2009 (09:30) | | | | | |
| General Meteor Weather Temp: Humidity: Wind: Air Quality Is hoarding of no Are site vehicles Are public roads Are haul roads a Are there wheel Is water spraying Are the excav impermeable/tar Is exposed area Are load on vehi Are vehicles and Are vehicles and Are vehicles and Are smoky emiss Is open burning Observable dust Construction N Are the construc Are the works or Are all plant and Is idle equipmen | RE's Rep: | | | | klist Refere | | DSD-AT08 | | () | | | |
| | | | No.: | .: | | | | | | | | |
| General Meteor | ological Inform | ation | | | | | | | | | | |
| Weather | ✓ Sunny | Fine | Cloudy | | Overcast | | Drizzle | | Rain | Hazy | | |
| Temp: | 30 °C | | | | | | | | | | | |
| Humidity: | High (R | :H > 90%) | ✓ Moderate (90 | 0% > RH | > 50%) | | Low (RH | < 50%) | | | | |
| Wind: | Calm | ✓ Light | Breeze | | Strong | | | | | | | |
| Air Quality | | | | | Yes | NO | NA | NC | Follow- up | Remarks | | |
| Is hoarding of no | ot less than 2.4m | provided? | | | \checkmark | | | | | | | |
| Are site vehicles | traveling within | controlled speed limit? | | | \checkmark | | | | | | | |
| Are site vehicles | movement confi | ined to designated haul | roads? | | \checkmark | | | | | | | |
| Are public roads | outside site exit | s kept clean and free fro | m dust? | | \checkmark | | | | | | | |
| Are haul roads a | nd unpaved surf | aces watered regularly t | o avoid dust generation? | • | \checkmark | | | | | | | |
| Are there wheel | washing facilities | s provided at site exits? | | \checkmark | | | | | | | | |
| Is water spraying | g used during the | e main dust-generating a | ctivities? | | \checkmark | | | | | | | |
| | | pile of dusty materia | ls kept wet or cover | red by | \checkmark | | | | | | | |
| Is exposed area | of ground covere | ed or watered frequently | ? | | \checkmark | | | | | | | |
| Are load on vehic | cles covered by | clean impervious sheetii | ng? | | \checkmark | | | | | | | |
| Are vehicles and | l equipment swite | ched off while not in use | ? | | \checkmark | | | | | | | |
| Are smoky emiss | sions from plants | s/equipment avoided? | | | \checkmark | | | | | | | |
| Is open burning a | avoided? | | | | \checkmark | | | | | | | |
| Observable dust | sources | Wind erosion | | | ✓ NA | | | | | | | |
| | | Loading/unloading | g of materials | | Oth | ners _ | | | | | | |
| Construction No | oise | | | | | | | | | | | |
| Are the construct | tion works sched | duled to minimize noise | nuisance? | | \checkmark | | | | \Box _ | | | |
| Are the works or | equipment sited | to minimize noise nuisa | ance? | | \checkmark | | | | | | | |
| Are all plant and | equipment well | maintained and in good | operating condition? | | \checkmark | | | | | | | |
| Is idle equipment | t turned off or the | rottled down? | | | \checkmark | | | | \Box _ | | | |
| | nanical equipme | nt covered or shielded b | y appropriate acoustic | | | | | | | | | |
| Is silenced equip | oment used wher | re appropriate? | | | | | \checkmark | | | | | |
| Are noise enclos | ures or noise ba | arriers used where neces | sary? | | | | \checkmark | | | | | |
| Does specified e | equipment has va | alid noise label? | | | | | \checkmark | | | | | |
| Are Construction | n Noise Permits (| (CNPs) available for insp | pection? | | | | \checkmark | | | | | |
| Major Noise Sou | Loading/unloading of materials onstruction Noise e the construction works scheduled to minimize noise nuisance? e the works or equipment sited to minimize noise nuisance? e all plant and equipment well maintained and in good operating condition? idle equipment turned off or throttled down? powered mechanical equipment covered or shielded by appropriate acous | | | | ✓ Co | nstruction | activities ins | ide the site | • | | | |
| | | Construction activ | vities outside of site | | Oth | ners N | lil | | | | | |

| Water Qual | ity & Drainage | Yes | NO | NA | NC | Follow- up | Remarks |
|--------------------------------|--|--------------|--------------|--------------|----|----------------------|---------|
| Is a wastewater discharge I | icense obtained for the Project? | \checkmark | | | | · | |
| Is site effluent discharged in | n accordance with the discharge license? | \checkmark | | | | | |
| Is the discharge of silty wat | er avoided? | \checkmark | | | | | |
| Is drainage adequate? | | \checkmark | | | | | |
| Is drainage system well ma | intained? | | | | | \checkmark | |
| Are there temporary ditches | s for runoff discharge into appropriate watercourse? | \checkmark | | | | | |
| Are there sedimentation tar | nks for settling runoff prior to discharge? | \checkmark | | | | | |
| Are the sedimentation tanks | s: Constructed of pre-formed individual cells? | \checkmark | | | | | |
| | With adequate capacity? | \checkmark | | | | | |
| | Free from silt and sediment? | \checkmark | | | | | |
| Are there neutralization tan | ks for concrete batching/mixing discharge? | | | \checkmark | | | |
| Are there oil interceptors in | drainage system? | | | \checkmark | | | |
| Is wheel wash facility provid | led at every site exit? | \checkmark | | | | | |
| Are vehicles and plant clear | ned of earth, mud & debris before leaving the site? | \checkmark | | | | | |
| Are wheel washing facilities | regularly inspected and maintained? | \checkmark | | | | | |
| Are toilets provided on site? | \checkmark | | | | | | |
| Are manholes covered and | | | \checkmark | | | | |
| Is oil leakage or spillage av | oided? | \checkmark | | | | | |
| Waste Management and F | Potential Land Contamination | | | | | | |
| General Refuse: | Are receptacles (rubbish bins) available? | \checkmark | | | | | |
| | Is there regular and proper disposal? | \checkmark | | | | | |
| | Is proper sorting and recycling implemented? | \checkmark | | | | | |
| Construction Waste: | Is generation of construction waste minimized? | \checkmark | | | | | |
| | Is waste sorting implemented on site? | \checkmark | | | | | |
| | Is construction waste reused where practicable? | \checkmark | | | | | |
| | Is construction waste properly disposed of? | | | | | | |
| | Are disposal records available for inspection? | \checkmark | | | | | |
| Chemical waste/waste oil | Is there designated storage area? | \checkmark | | | | | |
| | Is chemical waste stored properly? | \checkmark | | | | □ _ | |
| | Is there proper disposal? | \checkmark | | | | | |
| | Is chemical waste license available for inspection? | \checkmark | | | | □ _ | |
| Excavated Materials | Do excavated materials appear uncontaminated? | \checkmark | | | | □ _ | |
| | Are appropriate procedures followed if contaminated materials exist? | | | \checkmark | | □ _ | |
| | Are disposal records available for inspection? | \checkmark | | | | | |
| Chemical/Fuel | Is chemical/fuel stored in bounded area? | \checkmark | | | | \Box _ | |
| | Is bund capacity adequate (>110% of the largest tank)? | \checkmark | | | | | |
| | Are storage areas lockable? | \checkmark | | | | | _ |
| Is foam, oil, grease or other | r objectionable matters in water or nearby drains of sewer | \checkmark | | | | | |

, grease or other objectionable matters in water or nearby drains of sewer avoided?

Remarks:



- 1. C&D waste at AIC-4 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. Muddy water at Nam San Wai Pumping station was cleared.



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

Signatures:

Env. Auditor

Name : Ben Tam

Contractor's Representative

Namo: Eliwin Loung

IC(E) Auditor

Nome:

Wilmess b Representative

RE's

200-

Nam TSA

Site Inspection Checklist (SF-17)

| 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: | Sang wara | | ong | Engin | eer: | | Babtie Asia Ltd | | | | | |
| Inspected by: | ET Auditor: | Ben Tam | IEC: | | | Mott MacDonald Hong Kong Ltd | | | | | | |
| | Contractor Rep: | | | | Environmental Team: | | | Action-United Environmental Services & | | | | |
| | IEC's Rep: | Edwin Leung | | Inspe | ction Date | & Time: | Consulting 17 September 2009 (09:30) | | | | | |
| Inspected by: General Meteor Weather Temp: Humidity: Wind: Air Quality Is hoarding of no Are site vehicles Are site vehicles Are public roads Are there wheel Is water spraying Are the excav impermeable/tar Is exposed area Are load on vehi Are the excav impermeable/tar Is exposed area Are load on vehi Are the excav impermeable/tar Is open burning Observable dust Construction N Are the construc Are the works or Are the works or Are all plant and Is idle equipmen Is powered mect materials? Is silenced equip Are noise enclos Does specified e | RE's Rep: | | | | Checklist Reference DSD-AT170909 No.: | | | | | | | |
| General Meteor | ological Inform | ation | | | | | | | | | | |
| Weather | Sunny | ✓ Fine | Cloudy | | Overcast | | Drizzle | | Rain | Hazy | | |
| Temp: | 28 °C | | | | | | | | _ | | | |
| Humidity: | High (R | :H > 90%) | ✓ Moderate (90 | 0% > RH | > 50%) | | Low (RH | < 50%) | | | | |
| Wind: | Calm | ✓ Light | Breeze | | Strong | | | | | | | |
| Air Quality | | | | | Yes | NO | NA | NC | Follow- up | Remarks | | |
| Is hoarding of no | ot less than 2.4m | provided? | | | \checkmark | | | | | | | |
| Are site vehicles | traveling within | controlled speed limit? | | | \checkmark | | | | | | | |
| Are site vehicles | movement confi | ined to designated haul I | oads? | | \checkmark | | | | | | | |
| Are public roads | outside site exits | s kept clean and free fro | m dust? | | \checkmark | | | | | | | |
| Are haul roads a | nd unpaved surf | aces watered regularly to | o avoid dust generation? | | \checkmark | | | | | | | |
| Are there wheel | washing facilities | s provided at site exits? | | | \checkmark | | | | | | | |
| Is water spraying | g used during the | e main dust-generating a | ctivities? | | \checkmark | | | | | | | |
| | | pile of dusty material | s kept wet or cover | red by | Ý | | | | | | | |
| Is exposed area | of ground covere | ed or watered frequently | ? | | \checkmark | | | | | | | |
| Are load on vehic | cles covered by | clean impervious sheetir | ng? | | \checkmark | | | | | | | |
| Are vehicles and | l equipment swite | ched off while not in use | ? | | \checkmark | | | | | | | |
| Are smoky emiss | sions from plants | s/equipment avoided? | | | \checkmark | | | | | | | |
| Is open burning a | avoided? | | | | \checkmark | | | | \Box _ | | | |
| Observable dust | sources | Wind erosion | | | ✓ NA | | | | | | | |
| | | Loading/unloading | g of materials | | Oth | ners | | | | | | |
| Construction No | oise | | | | | | | | | | | |
| Are the construct | tion works sched | duled to minimize noise r | nuisance? | | \checkmark | | | | □ _ | | | |
| Are the works or | equipment sited | to minimize noise nuisa | nce? | | \checkmark | | | | \Box _ | | | |
| Are all plant and | equipment well | maintained and in good | operating condition? | | \checkmark | | | | \Box _ | | | |
| Is idle equipment | t turned off or th | rottled down? | | | \checkmark | | | | \Box _ | | | |
| Is powered mech materials? | nanical equipmer | nt covered or shielded by | / appropriate acoustic | | | | ~ | | | | | |
| Is silenced equip | ment used wher | re appropriate? | | | | | \checkmark | | \Box _ | | | |
| Are noise enclos | sures or noise ba | arriers used where neces | sary? | | | | \checkmark | | | | | |
| Does specified e | equipment has va | alid noise label? | | | | | \checkmark | | | | | |
| Are Construction | Noise Permits (| (CNPs) available for insp | ection? | | | | \checkmark | | \Box _ | | | |
| Major Noise Sou | ir Quality hoarding of not less than 2.4m provided? re site vehicles traveling within controlled speed limit? re site vehicles movement confined to designated haul roads? re public roads outside site exits kept clean and free from dust? re haul roads and unpaved surfaces watered regularly to avoid dust gener re there wheel washing facilities provided at site exits? water spraying used during the main dust-generating activities? re the excavated or stockpile of dusty materials kept wet or permeable/tarpaulin sheet? re vehicles and equipment switched off while not in use? re smoky emissions from plants/equipment avoided? open burning avoided? bservable dust sources | | | | Co | nstruction | activities ins | ide the site |) | | | |
| | | Construction activ | ities outside of site | | Oth | ners N | Jil | | | | | |

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

, grease or other objectionable matters in water or nearby drains of sewer avoided?



2. Stagnant water cumulated at Sha Po pumping Station was cleared.

Observations Recorded in this Site Inspection:

1. C&D waste at Sha Po pumping station was cleared.

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

Qualmastor's Representative

Nome : Bon Tom

159 Edwin Leuna

Name:

C(E) Auditor

RÉ's Wilness by Ruprosentative

Nanie; 1A 22 Heren bi

Site Inspection Checklist (SF-17)

| 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: Engineer: IEC: | | | Leader Civil Engineering Corp. Ltd Babtie Asia Ltd Mott MacDonald Hong Kong Ltd | | | | |
|--|---|----------------------------|----------------------------------|--------------|--------------|---|------------------------|--------------|---------------|------------|
| | ET Auditor: Ben Tam | | | | | | | | | |
| Inspected by: | | | | | | | | | | |
| | Contractor Re | ep: Edwin Leung | | Envir | onmental 1 | Гeam: | | | rironmenta | Services & |
| | IEC's Rep: | Isaac Chu | | Inspe | ction Date | & Time: | Consultin 22 Septen | |) (09:30) | |
| | RE's Rep: | | | Chec No.: | klist Refere | ence | DSD-AT22 | 20909 | | |
| General Meteor | ological Informa | ation | | | | | | | | |
| Weather | ✓ Sunny | Fine | Cloudy | | Overcast | | Drizzle | | Rain | Hazy |
| Temp: | 31 °C | | | | | | | | | |
| Humidity: | High (R | H > 90%) | ✓ Moderate (90 | 0% > RH | > 50%) | | Low (RH | < 50%) | | |
| Wind: | Calm | ✓ Light | Breeze | | Strong | | | | | |
| Air Quality | | | | | Yes | NO | NA | NC | Follow- up | Remarks |
| Is hoarding of no | ot less than 2.4m | provided? | | | \checkmark | | | | | |
| Are site vehicles | traveling within o | controlled speed limit? | | | \checkmark | | | | | |
| Are site vehicles | movement confi | ined to designated haul r | oads? | | \checkmark | | | | | |
| Are public roads | outside site exite | s kept clean and free fro | m dust? | | \checkmark | | | | | |
| Are haul roads a | nd unpaved surf | aces watered regularly to | o avoid dust generation? | • | \checkmark | | | | | |
| Are there wheel washing facilities provided at site exits? | | | | \checkmark | | | | | | |
| Is water spraying used during the main dust-generating activities? | | | | \checkmark | | | | | | |
| Are the excave impermeable/tarp | | pile of dusty material | s kept wet or cover | red by | V | | | | | |
| Is exposed area | of ground covere | ed or watered frequently | ? | | \checkmark | | | | | |
| Are load on vehic | cles covered by o | clean impervious sheetin | ıg? | | \checkmark | | | | | |
| Are vehicles and | l equipment swite | ched off while not in use' | ? | | \checkmark | | | | | |
| Are smoky emiss | sions from plants | s/equipment avoided? | | | \checkmark | | | | | |
| Is open burning a | avoided? | | | | \checkmark | | | | \Box _ | |
| Observable dust | sources | Wind erosion | | | ✓ NA | | | | | |
| | | Loading/unloading | g of materials | | Oth | iers | | | | |
| Construction No | oise | | | | | | | | | |
| Are the construct | tion works sched | duled to minimize noise r | nuisance? | | \checkmark | | | | \Box _ | |
| Are the works or | equipment sited | I to minimize noise nuisa | nce? | | \checkmark | | | | \square _ | |
| Are all plant and | equipment well i | maintained and in good | operating condition? | | \checkmark | | | | \square _ | |
| Is idle equipment | t turned off or thr | rottled down? | | | \checkmark | | | | \Box _ | |
| Is powered mech materials? | nanical equipmer | nt covered or shielded by | appropriate acoustic | | | | × | | | |
| Is silenced equip | ment used wher | e appropriate? | | | | | \checkmark | | \square _ | |
| Are noise enclos | sures or noise ba | rriers used where neces | sary? | | | | \checkmark | | | |
| Does specified e | equipment has va | alid noise label? | | | | | \checkmark | | | |
| Are Construction | Noise Permits (| (CNPs) available for insp | ection? | | | | \checkmark | | | |
| Major Noise Sou | irce | Traffic | | | ✓ Cor | nstruction | activities ins | ide the site | ! | |
| | | Construction activ | ities outside of site | | Oth | iers N | lil | | | |

Site Inspection Checklist (SF-17)

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

Is foam, oil, grease or other objectionable matters in water or nearby drains of sewe avoided?



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:

Signaturent

Env, Audilor

Name : Ben Tam

Contractor's Representative

IC(E) Auditor

Wimese by AE's Representative

Name Edwin Leung

Name:

02-Namo:

TSANG Wing-kai

Site Inspection Checklist (SF-17)

| Project | DC/2005/02 Construction of Sewers, Rising Mains & Sewage Pumping Station at Kam Tin, Nam Sang Wai and Au Tau in Yuen LongET Auditor:Ben TamContractor Rep:Edwin Leung | | | Contractor: Engineer: IEC: Environmental Team: | | | Leader Civil Engineering Corp. Ltd Babtie Asia Ltd Mott MacDonald Hong Kong Ltd Action-United Environmental Services & Consulting | | | |
|---------------------------------|---|-----------------------------|--------------------------|---|--------------|------------|---|--------------|---------------|---------|
| | | | | | | | | | | |
| Inspected by: | | | | | | | | | | |
| | | | | | | | | | | |
| | IEC's Rep: | | | | | | 29 Septen | | 9 (09:30) | |
| | RE's Rep: | | | Chec No.: | klist Refere | ence | DSD-AT29 | 90909 | | |
| General Meteor | ological Inform | ation | | | | | | | | |
| Weather | Sunny | Fine | Cloudy | | Overcast | | Drizzle | \checkmark | Rain | Hazy |
| Temp: | 28 °C | | | | | | | | | |
| Humidity: | ✓ High (R | RH > 90%) | Moderate (9 | 0% > RH | > 50%) | | Low (RH | < 50%) | | |
| Wind: | Calm | ✓ Light | Breeze | | Strong | | | | | |
| Air Quality | | | | | Yes | NO | NA | NC | Follow- up | Remarks |
| Is hoarding of no | ot less than 2.4m | n provided? | | | \checkmark | | | | | |
| Are site vehicles | traveling within | controlled speed limit? | | | \checkmark | | | | | |
| Are site vehicles | movement conf | ined to designated haul r | oads? | | \checkmark | | | | | |
| Are public roads | outside site exit | ts kept clean and free from | m dust? | | \checkmark | | | | | |
| Are haul roads a | nd unpaved surf | faces watered regularly to | o avoid dust generation? | ? | \checkmark | | | | | |
| Are there wheel | washing facilities | s provided at site exits? | | | \checkmark | | | | \Box _ | |
| Is water spraying | g used during the | e main dust-generating a | ctivities? | | \checkmark | | | | | |
| Are the excave impermeable/tarp | | pile of dusty material | s kept wet or cove | red by | ✓ | | | | | |
| Is exposed area | of ground cover | ed or watered frequently | ? | | \checkmark | | | | | |
| Are load on vehic | cles covered by | clean impervious sheetin | ıg? | | \checkmark | | | | | |
| Are vehicles and | l equipment swite | ched off while not in use? | ? | | \checkmark | | | | | |
| Are smoky emiss | sions from plants | s/equipment avoided? | | | \checkmark | | | | | |
| Is open burning a | avoided? | | | | \checkmark | | | | | |
| Observable dust | sources | Wind erosion | | | ✓ NA | | | | | |
| | | Loading/unloading | g of materials | | Oth | ners | | | | |
| Construction No | oise | | | | | | | | | |
| Are the construct | tion works sched | duled to minimize noise r | nuisance? | | \checkmark | | | | \Box _ | |
| Are the works or | equipment sited | d to minimize noise nuisa | nce? | | \checkmark | | | | \Box _ | |
| Are all plant and | equipment well | maintained and in good of | operating condition? | | \checkmark | | | | \Box _ | |
| Is idle equipment | t turned off or th | rottled down? | | | \checkmark | | | | \Box _ | |
| Is powered mech materials? | nanical equipme | nt covered or shielded by | appropriate acoustic | | | | \checkmark | | | |
| Is silenced equip | ment used wher | re appropriate? | | | | | \checkmark | | \Box _ | |
| Are noise enclos | sures or noise ba | arriers used where neces | sary? | | | | \checkmark | | | |
| Does specified e | equipment has va | alid noise label? | | | | | \checkmark | | \Box _ | |
| Are Construction | Noise Permits (| (CNPs) available for insp | ection? | | | | \checkmark | | \Box _ | |
| Major Noise Sou | irce | Traffic | | | ✓ Cor | nstruction | activities ins | ide the site | • | |
| | | Construction activ | ities outside of site | | Oth | ners N | lil | | | |

Site Inspection Checklist (SF-17)

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

Is foam, oil, grease or other objectionable matters in water or nearby drains of sewer avoided?

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) Audior

RE's Witness Ь¥ Representative

Name

TSANG Wing-kai

Name flon Tam

Hoghun Edwin Laung

Name

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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 Inopected By | Leader: Edwir Lewig ET: Ben Toun |
|-------------|--|--|-------------------------------------|
| Site Locati | IDT Per wai south Read New south Read New south Read She to, Kennitin Pump station | | DSD: WK Jiang IEO: Truce Chu |
| Weathor | | | |
| Condition | Bunny Fine Ovarcast | Rain | Storm Htizy |
| Temperaturi | Humidity | figh / Moderate | Low |
| Wind | Calm V Light Brooze | Birong Direction | NW |
| EIA ret: | Construction Phase | Close-out N/A Yos on last or comments not Y/N obs | No Photo/Remarks |
| | Air Quality - Construction Phase | | |
| 3.5 | Are heardings of not less than 2.4m high provided along the site boundary? | e 🗌 🗸 | |
| 3.5 | Is the portion of any road leading only to construction si that is within 30m of a vehicle entrance or exit kept clear ducty materials? | | Ì |
| 35 | Are stockpilled dusty materials covered by impervious sheeting and placed in an area sheltered on top and 3 sld or sprayed with water? | | Sea olu . |
| 3.5 | Are dusty material loads on vehicles sprayed with water pri- to loading and unloading? | or 🖉 📝 | |
| 3.5 | Are all vehicles washed to remove dusty materials from body and wheels before leaving site? | | |
| 3.5 | Are vehicles which are carrying duety materials cover entirely by impervious sheeting when leaving site? | d V | |
| 3.5 | Are surfaces where any mechanical breaking operation tak place sprayed? | | |
| 3.5 | Are working area of any excavation sprayed with wate immediately before, during and immediately after to operation? | | |
| 3.5 | Where a scatfolding is eracted around the perimeter of building under construction, are effective dust acrear cheeting or notting provided to enclose the scatfolding ind the ground floor level of the SPS, or a canopy from the fi floor level up to the highest level of the scatfolding? | s, m | |
| 3.5 | Are skip holsts for material transport totally enclosed? | | |

| 3 .7 | Have dust monitors been provided at the following locations: Boundary facing scattered house in NSW (AM1) Boundary facing Fung Kat Houng (AM5) Boundary facing scattered house near route 3 (AM6) |
|-------------|---|
| 4,7,1 | Construction Noise Demolition works • Are quiet PME which meet the SWLs from BS 5228:Part 1: |
| | |
| 4.7.1 | Sewege Pumping Stationa P1, P2 & P3 Are quist PME which meet the SWLs from BS 5228:Part 1: 1997 used? |
| 4.7.1 | Are temperary noise barrier, in the form of a site hearding (with superficial density of at least 20kg/m2, with no evidetantial gaps), along the site boundaries of the purriping station sites adopted? |
| 4.7.1 | Sowers and Rising Mains using Open Trench Are quiet PME which meet the SWLs from BS 5228 Part 1: 1997 used? |
| 4.7.1 | Are handhold breakers used for all initial road opening activities, when breaking termac/concrete road surface to a depth of 300mm or when granular material is reached? |
| 4.7.1 | Are movable noise barriers or 3 alded enclosures installed for all initial road opening activities (breaking tarmac/concrete road surface to a depth of 300mm or whon granular material is reached) where there NBRs within 50m of the line of sight? |
| 4.7.1 | Sewers and Rieling Mains using Pipe Jacking Are guilot PME which meet the SWLs from BS 5228:Part 1: 1997 used? |
| 4.7.1 | Are guiet PME which meet the SWLs from BS 5228:Part 1: 1997 used? |
| 4.Đ.1 | Have noise monitors been provided at the following locations: (NM3) Scattered house in NSW (NM4) Scattered house in NSW (NM6) Scattered house near Route 3 (NM7) Fung Kat Houng |
| | Construction Runoff and Site Drainage |
| | 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 stomwater to sitt removal facilities? |
| | Are dikes or embankments for flood protection implemented around the boundaries of parthwork areas. Are sedimenvalit traps incorporated in the permanent drainage channels to enhance deposition rates? |
| | Are all removal facilities provided with retention time for |
| | Are construction works programmed to minimize surface excevation works during the rainy seasons (April to September)? |
| | Are slopes minimized and prosion potential reduced? |
| | Is deposited silt and grit removed regularly and disposed of by spreading evenly over stable, vagetated areas? |
| | |

P (Hong Keng)(NEVProjects2:226181-KemTin (EC)monthly sile sublit(Site Audits)2009(Bop 2009),510 Chock Lief, 20090022 dive

P.4/7

Are measures taken to minimise the ingress of site drainage into excevations? is water pumped out from trenches or foundation excavations discharged into storm drains via slit i. romoval (acilitios? Are open stockpilos of construction materials (for example, appregates, sand and fill material) of more than 50m3 covered with torpaulin or similar fabric during rainstorms? Are manholas (including newly constructed ones) adequately covered and temporarily scaled? Are precautions taken before rainstorms? Are all vehicles and plant cleaned before loaving site? 14 is solid waste, debria and rubbish on site appropriately collected, handled and disposed of property 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 tuel oils from reaching water sensitive receivers nearby? Sewage Effluent - Construction Phase 1) Are pertable 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? Waste Management - Construction Phase 6,6,2 Are the necessary waste disposel permits from the appropriate authorities in placed for chemical and C&D V wastes, in accordance with the Waste Disposal (Chemical Wasto) (General) Regulations and the Land (Miscellaneous Provisions) Ordinance (Cap 28)? Is chemical wasto that is produced, as defined by Schedule 1 of the Wasto Disposal (Chemical Wasto) (General) Regulation, being handled in accordance with the Code of 6.6.2 \checkmark Y Practice on the Packaging, Lebelling and Storage of Chemical Wastos? 0.0.2 Are containers used for the storage of chemical wastes sultable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; have a capacity of tess than 450 liters unless the V specification has been approved by the EPD; and display a label in English and Chinese In accordance with instructions preacribed in Schedule 2 of the regulation? 6.6.2 is the storage area for chemical wastee clearly lobolled 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 V 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 apparated? 8 6.2 la 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 i/ 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 tickots for disposal available to monitor disposal of C&DM and solid wastes at public filling and landfills, and to control lly tipping? F-Vieng KongVNP/Projects2/220101-KemTin II/C/menthy eth euclis/Bite Audits/2009/Sep 2004/51_Check List_2009/922.dog

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| 7.5.6 | Land Contamination - Construction Phase Is a revised CAP submitted to the EPD before commencement of construction works? Is the CA | |
|---------------|---|-------|
| | Implemented and findings of the investigations reported the CAR, before ground disturbance is allowed? | |
| 7.5.6 | If land contamination is confirmed, has a RAP body prepared and submitted to EPD? | |
| 7.5.6 | Are contaminated sites remediated in accordance with th approved CAR/IRAP? | |
| | Ecology - Construction Phase | |
| 8.7.1 | Are construction activities prohibited during November i March for the sections of works within the WCA and WB/ and close to locations of acologically sensitive species | |
| | | |
| B.7.1 | During November to March periods, are regular sit inspections (at least twice a month) undertaken by ET t ensure proper implementation of this restriction? | |
| 8.7.2 | Is pipe jacking method used for sewers and rising main crossing over MDC within the WCA and WBA? | |
| 8.7.2 | During November to March, are regular site inspections (least twice a month) undertaken by ET for the remaining severage sections (including parts of S4, S5 and S6) with the WCA and WBA where construction activities cannot be reacheduled? | |
| 8. 7.2 | The site inspections shall check and report the number of workfronts and implementation of mitigation measures if the monthly EM&A Report. | |
| 873 | Are quietened construction plant and equipment used to PS (P2 and P3) and cowers (S4, S5, S6) within the WC and WBA? | A V |
| 8.7.4 | For P1-P3, have fonces along the boundary of the pumple stations construction sites been erected? | 9 |
| 8.74 | There shall be no tilling and dumping to the remainin abandoned flahpond at P2. | g / |
| B.7.4 | Are all ramoval facilities, designed to the ProPECC Not PN1/84, installed and operated at the P1 to P3 sites? The minimal total combined volume of the sill removal facilities at P3 (NSW SPS) should be 15m3. | o , |
| 8.7.4 | There shall be no open fires within the site boundary. | |
| 8.7.4 | Have temporary fire fighting equipment provided in th works areas. | |
| | Landscape and Visual - Construction Phose | |
| | Have the implementation of mitigation measures (i.e., to soil reused, new compensatory planting) been reported i the monthly EM&A? | |
| | The first monthly EM&A Report should report on th appearance of the temporary hoarding barriers. | • V |
| | Are screen planting (3m wido) and trocs with dens canopy (up to 5m) provided? | ° |
| | Is felling of mature trace kept to a minimum? | |
| | | |
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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.

IEC DSD Representative Contractor Representative EIL Isaac Chu 22/9 (2009) (am

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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

| Air Quality | Waste Management |
|--|---|
| | |
| Stockpile of excavated materials observed at Nam San Wai Road has been used to level the ground. | The pile of construction waste observed at Nam San Wai Road has been cleared. |
| Waste Management | Water Quality |
| Spent chemical container observed at Pok Wai South Road has been removed. | 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 |
| Waste Management | |
| 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 | |

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