

香港電燈有限公司
The Hongkong Electric Co., Ltd.



**Lamma Power Station Extension
Construction Phase
Monthly Environmental Monitoring & Audit Report**

March 2020

香港電燈有限公司
The Hongkong Electric Co., Ltd.



ENVIRONMENTAL IMPACT ASSESSMENT (EIA) ORDINANCE, CAP. 499

ENVIRONMENTAL PERMIT NO. EP-071/2000/C

**LAMMA POWER STATION EXTENSION
ENVIRONMENTAL MONITORING & AUDIT PROGRAMME
AT CONSTRUCTION PHASE**

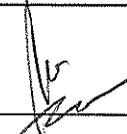
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|--------------|---|
| Report Title | Lamma Power Station Extension – Unit L10 & L11 & L12 Monthly EM&A Report (March 2020) |
| Date | 9 April 2020 |
| Certified by |  (Mr. IP Tat-Yan, Environmental Team Leader) |
| Verified by |  Mr. Y T Tang (AECOM Asia Company Limited, Independent Environmental Checker) |

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EXECUTIVE SUMMARY

This is the 119th monthly Environmental Monitoring and Audit (EM&A) report for the Project “Construction of Lamma Power Station Extension” prepared by the Environmental Team (ET). This report presents the results of impact monitoring on air quality and noise for the said project in March 2020.

The reclamation and submarine pipeline works were completed with the first gas-fired combined cycle unit (viz. Unit L9) commissioned in October 2006, working currently on base load operation. To cope with the scheduled retirement of the existing units at Lamma Power Station, the second gas-fired combined cycle unit (viz. Unit L10) L10 was commissioned for reliable operation in February 2020. The operational EM&A work for L9 and L10 is recorded in the separate monthly EM&A report for the Project “Operation of Lamma Power Station Extension”.

In September 2016, the Government approved HK Electric to construct the third combined cycle gas-fired generating unit (L11) to implement the 2020 Fuel Mix Target. L11 is planned for commercial operation in 2022 and the associated construction work commenced in November 2016.

With the Government’s approval to build the fourth combined cycle gas-fired generating unit (L12) in July 2018, the associated construction work commenced in April 2019. When L12 is commissioned in 2023, the total gas-fired electricity generation will further rise to reach about 70% of our total output.

Air and noise monitoring were performed. The results were checked against the established Action/Limit (AL) levels. An on-site audit was conducted once per week. The implementation status of the environmental mitigation measures, Event/Action Plan and environmental complaint handling procedures were also checked.

Construction Activities Undertaken

Construction activities for Lamma Extension during the reporting month are tabulated as follows:

| Item | Construction Activities |
|--|---|
| Unit L10 Civil and Building Works | Main Station Building, Urea Plant and Store Area (Rectification of defects and road surface paving works), and cable trench (Surface reinstatement works) |
| Unit L10 Mechanical Erection | HRSG lift shaft installation |
| Unit L11 Civil and Building Works | 275kV Station Building Extension works, Main Building Station, CW pipe installation, installation of columns and beams, Site formation works and pipe jacking works |
| Unit L11 Mechanical Erection | Condenser installation, HRSG installation and turbine block installation |
| Unit L11 Electrical, Instrumentation & Control Erection | Cable installation |
| Foundation Works for Lamma Power Station Extension Unit L12 and Cable Bridge | Bored Pile Work and Rock-socketed H-piles Work |

Environmental Monitoring Works

All monitoring work at designated stations was performed as scheduled satisfactorily.

Air Quality

No exceedance of Action/Limit levels on 1-hour TSP and 24-hour TSP for air quality was recorded in the month.

Noise

Construction work for Lamma Extension was carried out during the restricted hours including evening-time, holidays and night-time under valid Construction Noise Permit. No exceedance of Action and Limit levels for noise arising from the construction of Lamma Extension was recorded in the month.

Site Environmental Audit

EPD officials from Regional Office (South) visited Lamma Power Station on 19/03/2020. EPD inspected the Lamma Extension Construction Site. There was no adverse comment from EPD regarding the construction site.

Site audits were carried out on a weekly basis to monitor environmental issues on the construction site. The site conditions were generally satisfactory.

Environmental Licensing and Permitting

| Description | Permit No. | Valid Period | | Issued To | Date of Issuance |
|---|----------------------|--------------|----------|-------------|------------------|
| | | From | To | | |
| Varied Environmental Permit | EP-071/2000/C | 18/05/05 | - | HK Electric | 18/05/05 |
| Construction Noise Permit | GW-RS0809-19 | 15/09/19 | 14/03/20 | Contractor | 11/09/19 |
| Construction Noise Permit | GW-RS0132-20 | 15/03/20 | 13/09/20 | Contractor | 12/03/20 |
| Construction Noise Permit | GW-RS1134-19 | 01/01/20 | 30/06/20 | Contractor | 20/12/19 |
| Construction Noise Permit | GW-RS0930-19 | 02/11/19 | 01/05/20 | Contractor | 22/10/19 |
| Construction Noise Permit | GW-RS1064-19 | 04/12/19 | 03/06/20 | Contractor | 26/11/19 |
| WPCO Discharge Licence | WT00027316-2017 | 01/03/17 | 31/03/22 | Contractor | 01/03/17 |
| WPCO Discharge Licence | WT00034006-2019 | 08/08/19 | 31/08/24 | Contractor | 22/08/19 |
| WPCO Discharge Licence | WT00034368-2019 | 11/09/19 | 30/09/24 | Contractor | 11/09/19 |
| Registration of Chemical Waste Producer | WPN5213-912-P2781-22 | 22/02/16 | - | Contractor | 22/02/16 |
| Registration of Chemical Waste Producer | WPN5517-912-T2007-02 | 17/03/05 | | Contractor | 17/03/05 |
| Waste Disposal Billing Account | Account No.: 7026035 | 06/10/16 | - | Contractor | 06/12/16 |
| Waste Disposal Billing Account | Account No.: 7027632 | 20/04/17 | - | Contractor | 20/04/17 |

| Description | Permit No. | Valid Period | | Issued To | Date of Issuance |
|--------------------------------|-------------------------|--------------|----|------------|------------------|
| | | From | To | | |
| Waste Disposal Billing Account | Account No.: 7031135 | 21/06/18 | - | Contractor | 21/06/18 |
| Waste Disposal Billing Account | Account No.: 7027672 | 24/04/17 | - | Contractor | 24/04/17 |
| Waste Disposal Billing Account | Account No.: 7033637 | 01/04/19 | - | Contractor | 01/04/19 |

Implementation Status of Environmental Mitigation Measures

Environmental mitigation measures for the construction activities as recommended in the EM&A manual were implemented in the reporting month.

Environmental Complaints

No complaint against the construction activities was received in the reporting month.

Future Key Issues

The future key issues to be considered in the coming month are as follows:

Unit L10 Civil and Building Works

- to continue monitoring the noise level during construction;
- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary;
- to treat wastewater in sedimentation pit and tanks before discharge and to ensure compliance with the WPCO discharge licence already obtained.

Unit L10 Mechanical Erection

- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Unit L10 Electrical, Instrumentation & Control Erection

- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Unit L11 Civil and Building Works

- to continue monitoring the noise level during construction and to ensure compliance with the CNP's already obtained;
- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary;
- to treat wastewater in sedimentation pit and tanks before discharge and to ensure compliance with the WPCO discharge licence already obtained.

Unit L11 Mechanical Erection

- to continue monitoring the noise level during construction and to ensure compliance with the CNP's already obtained;
- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Unit L11 Electrical, Instrumentation & Control Erection

- to continue monitoring the noise level during construction and to ensure compliance with the CNP's already obtained;
- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Unit L12 Foundation Works

- to continue monitoring the noise level during construction and to ensure compliance with the CNP's already obtained;
- to continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the performance;
- to monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary;
- to treat wastewater in sedimentation pit and tanks for reuse on water spraying and to ensure compliance in accordance with the WPCO discharge licence already obtained.

Concluding Remarks

The environmental performance of the project was generally satisfactory.

1. INTRODUCTION

1.1 Background

The Environmental Team (hereinafter called the “ET”) was formed within the Hongkong Electric Co. Ltd (HEC) to undertake Environmental Monitoring and Audit for “Construction of Lamma Power Station Extension” (hereinafter called the “Project”). Under the requirements of Section 6 of Environmental Permit EP-071/2000/C, an EM&A programme for impact environmental monitoring set out in the EM&A Manual (Construction Phase) is required to be implemented. In accordance with the EM&A Manual, environmental monitoring of air quality, noise and water quality and regular environmental audits are required for the Project. With the completion of reclamation and submarine pipeline works, no further marine water quality monitoring would be required.

The Project involves the construction of a gas-fired power station employing combined cycled gas turbine technology, forming an extension to the existing Lamma Power Station. The key elements of the Project including the construction activities associated with the transmission system and submarine gas pipeline are outlined as follows.

- dredging and reclamation to form approximately 22 hectares of usable area;
- construction of six 300MW class gas-fired combined cycle units;
- construction of a gas receiving station;
- construction of a transmission system linking the Lamma Extension to load centres on Hong Kong Island;
- laying of a gas pipeline for the supply of natural gas to the new power station

This report summarizes the environmental monitoring and audit work for the Project for the month of March 2020.

1.2 Project Organisation

An Environmental Management Committee (EMC) has been set up in HEC to oversee the Project. The management structure includes the following:

- Environmental Protection Department (The Authority);
- Environmental Manager (The Chairman of the Environmental Management Committee);
- Engineer;
- Independent Environmental Checker (IEC);
- Environmental Team (ET);
- Contractor.

The project organisation chart for the construction EM&A programme is shown in [Appendix A](#).

1.3 Construction Works undertaken during the Reporting Month

Construction activities for Unit L10 civil and building works were carried out for Main Station Building, Urea Plant and Store Area (Rectification of defects and road surface paving works), and for Cable Trench (surface reinstatement works). Construction activity for Unit L10 mechanical erection was HRSG lift shaft installation.

Construction activities for Unit L11 civil and building works were, 275kV station building extension works, Main Station Building, CW pipe installation, installation of columns and

beams, site formation works and pipe jacking works. Construction activities for Unit L11 mechanical erection were condenser installation, HRSG installation and turbine block installation. Construction activity for Unit L11 electrical, instrumentation & control erection was cable installation. Construction activities for foundation works for Lamma Power Station Extension Unit L12 and cable bridge were bored pile work and rock-socketed H-piles work. Layout plan for construction site is shown in [Figure 1.1](#).

The main construction activities carried out during the reporting month and the corresponding environmental mitigation measures are summarized in [Table 1.1](#). The implementation of major mitigation measures in the month is provided in [Appendix I](#).

Table 1.1 Construction Activities and Their Corresponding Environmental Mitigation Measures

| Item | Construction Activities | Environmental Mitigation Measures |
|-----------------------------------|---|---|
| Unit L10 Civil and Building Works | | |
| 1. | Main Station Building, Urea Plant and Store Area (Rectification of defects and road surface paving works) | <p>Air</p> <ul style="list-style-type: none"> – All regulated machine attached with valid exception/approval NRMM labels. – Water truck was used for water spraying of the haul road. – Sand stock covered with cement or tarpaulin. – Backfilled surface was compacted. – Wheel washing facilities was provided. <p>Noise</p> <ul style="list-style-type: none"> – General noise mitigation measures employed at all work sites throughout the construction phase. <p>Waste Management</p> <ul style="list-style-type: none"> – Scrape metal will be recycled. – Timber will be reused as much as possible. |
| 2. | Cable Trench (Surface reinstatement works) | <p>Air</p> <ul style="list-style-type: none"> – All regulated machine attached with valid exception/approval NRMM labels. <p>Wastewater</p> <ul style="list-style-type: none"> – Wastewater should be treated in sedimentation pit and tanks before discharge. Solution should be added to speed up the sedimentation process. Sediment in pit and tanks must be removed regularly. – |

| Item | Construction Activities | Environmental Mitigation Measures |
|-----------------------------------|---|--|
| Unit L10 Mechanical Erection | | |
| 3. | HRSG lift shaft installation | <p>Air</p> <ul style="list-style-type: none"> - Dust suppression measures implemented according to the EMP. <p>Noise</p> <ul style="list-style-type: none"> - General noise mitigation measures employed at all work sites throughout the construction phase. <p>Waste Management</p> <ul style="list-style-type: none"> - Waste Management Plan submitted and implemented. |
| Unit L11 Civil and Building Works | | |
| 4. | 275kV Station Building Extension Works | <p>Air</p> <ul style="list-style-type: none"> - All regulated machine attached with valid exception/approval NRMM labels. - Wheel washing facility was provided. <p>Noise</p> <ul style="list-style-type: none"> - Works conducted during holiday should comply with the valid CNP. <p>Wastewater</p> <ul style="list-style-type: none"> - Wastewater should be treated in desilting pit and tanks for reuse on water spraying. <p>Waste Management</p> <ul style="list-style-type: none"> - Scrape metal will be recycled. - Timber will be reused as much as possible. - Chemical waste should be collected by licensed collector |
| 5. | Main Station Building, CW Pipe Installation, Installation of Columns and Beams, Site Formation Works and Pipe Jacking Works (Set up of jacking and receiving pit) | <p>Air</p> <ul style="list-style-type: none"> - All regulated machine attached with valid exception/approval NRMM labels. - Water truck and water sprinkler system was used. - Water spraying for concrete breaking of pile head. - Excavated slope and soil stock covered with cement or tarpaulin. - Backfilled surface was compacted. - Wheel washing facility was provided. <p>Noise</p> <ul style="list-style-type: none"> - Works conducted during holiday should comply with |

| Item | Construction Activities | Environmental Mitigation Measures |
|--|---|---|
| | | <p>the valid CNP.</p> <p>Wastewater</p> <ul style="list-style-type: none"> - Wastewater should be treated in desilting pit and tanks before discharge. Solution should be added to speed up the sedimentation process. Sediment in pit and tanks must be removed regularly. <p>Waste Management</p> <ul style="list-style-type: none"> - Excavated soil was temporary stored for backfilling. - Scrape metal will be recycled. - Timber will be reused as much as possible. |
| Unit L11 Mechanical Erection | | |
| 6. | Condenser installation HRSG installation Turbine block installation | <p>Air</p> <ul style="list-style-type: none"> - Dust suppression measures implemented according to the EMP. <p>Noise</p> <ul style="list-style-type: none"> - General noise mitigation measures employed at all work sites throughout the construction phase. <p>Waste Management</p> <ul style="list-style-type: none"> - Waste Management Plan submitted and implemented |
| Unit L11 Electrical, Instrumentation & Control Erection | | |
| 7. | Cable installation | <p>Air</p> <ul style="list-style-type: none"> - Dust suppression measures implemented according to the EMP. <p>Noise</p> <ul style="list-style-type: none"> - General noise mitigation measures employed at all work sites throughout the construction phase. <p>Waste Management</p> <ul style="list-style-type: none"> - Waste Management Plan submitted and implemented. |
| Foundation Works for Lamma Power Station Extension Unit L12 & Cable Bridge | | |
| 8. | Bored Pile Work | <p>Air</p> <ul style="list-style-type: none"> - Dust suppression in the main haul road. - Using ULSD for PMEs. - Cover dusty stockpile with tarpaulin and water |

| Item | Construction Activities | Environmental Mitigation Measures |
|------|----------------------------|--|
| | | spraying. Noise <ul style="list-style-type: none"> – General noise mitigation measure employed at all work sites throughout the construction phase. – Routine checking should be carried out to ensure the requirements as stipulated in the CNP have been fulfilled. Wastewater <ul style="list-style-type: none"> – Wastewater should be pumped to the sedimentation ponds for desilting process. After that, waste water will be re-used for construction activities or pumped for storage. Waste Management <ul style="list-style-type: none"> – Waste Management Plan submitted and implemented |
| 9. | Rock-Socketed H-piles Work | Noise <ul style="list-style-type: none"> – General noise mitigation measure employed at all work sites throughout the construction phase. – Routine checking should be carried out to ensure the requirements as stipulated in the CNP have been fulfilled. Wastewater <ul style="list-style-type: none"> – All wastewater will be pumped to the sedimentation ponds for desilting process. After that, wastewater will be re-used for construction activities or pumped for storage. Waste Management <ul style="list-style-type: none"> – Waste Management Plan submitted and implemented. |

1.4 Summary of EM&A Requirements

The detailed EM&A monitoring work for air quality and noise are described in Sections 2 and 3 respectively. Regular environmental site audits for air quality, noise, water quality and waste management were carried out.

The following environmental audits are summarized in Section 4 of this report:

- Environmental monitoring results;
- Waste Management Records;
- Weekly site audit results;
- The status of environmental licensing and permits for the Project;
- The implementation status of environmental protection and pollution control/ mitigation measures.

Future key issues will be reported in Section 5 of this report.

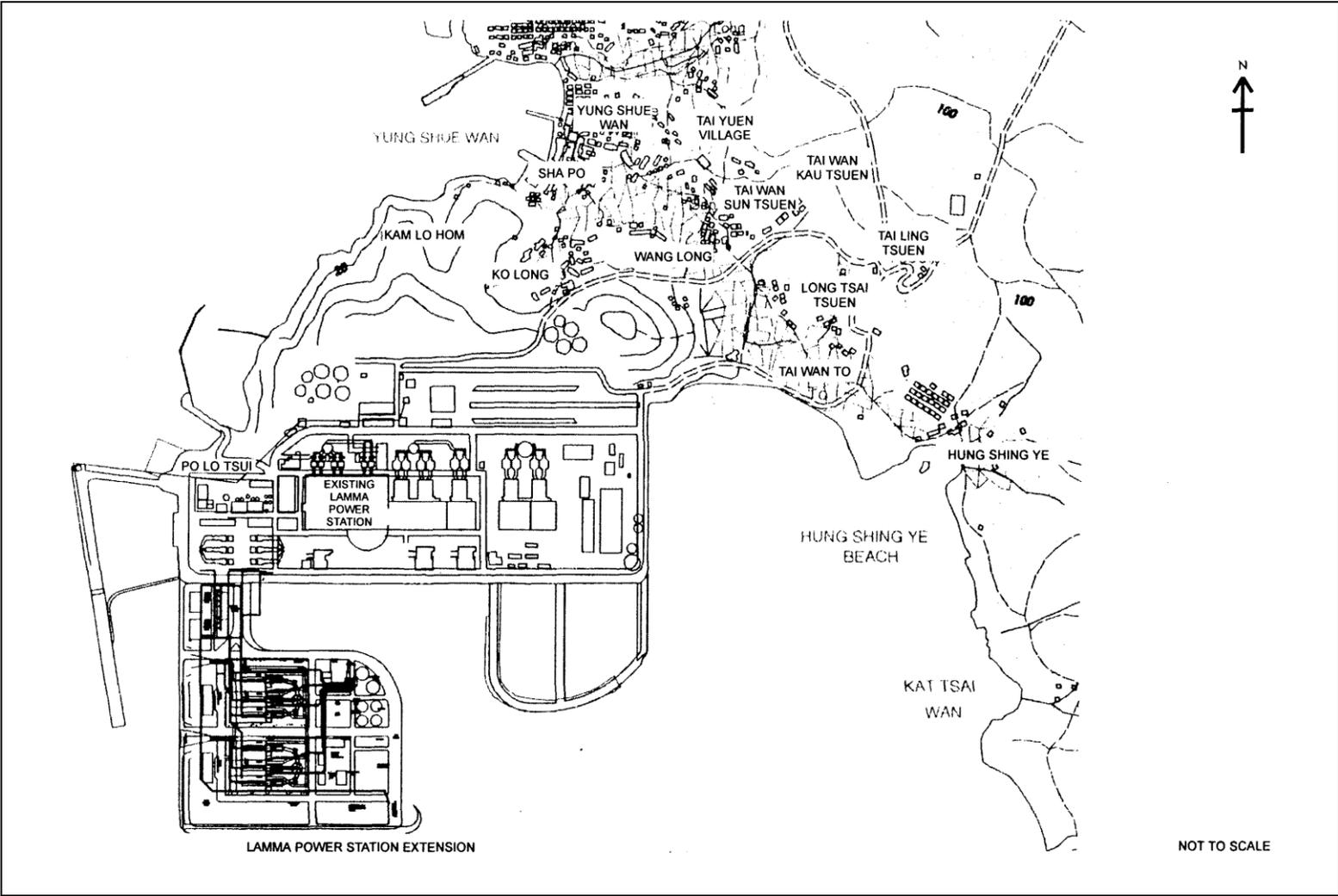


Figure 1.1 Layout of Work Site

2. AIR QUALITY

2.1 Monitoring Requirements

1-hour and 24-hour TSP monitoring at agreed frequencies were conducted to monitor air quality. The impact monitoring data were checked against the Action/Limit Levels as determined in the Baseline Monitoring Report (Construction Phase). [Appendix B](#) shows the established Action/Limit Levels for Air Quality.

2.2 Monitoring Locations

Three dust monitoring locations were selected for 1-hour TSP sampling (AM1, AM2 & AM3) while four monitoring locations were selected for 24-hour TSP sampling (AM1, AM2, AM3 and AM4). [Table 2.1](#) tabulates the monitoring stations. The locations of the monitoring stations are shown in [Figure 2.1](#).

Table 2.1 Air Quality Monitoring Locations

| Location I.D. | Description |
|---------------|------------------|
| AM1 | Reservoir |
| AM2 | East Gate |
| AM3 | Ash Lagoon |
| AM4 | Tai Yuen Village |

2.3 Monitoring Equipment

It is agreed with EPD that continuous 24-hour TSP air quality monitoring would be performed using TEOM continuous dust monitor and the MINIVOL Portable Sampler at AM1,2&3 and AM4 respectively. TEOM continuous dust monitors were used to carry out 1-hour TSP monitoring at AM1, AM2 and AM3. [Table 2.2](#) summarises the equipment used in dust monitoring.

Table 2.2 Air Quality Monitoring Equipment

| Equipment | Model and Make |
|---------------------------|---|
| <i>24-hour sampling:</i> | |
| Continuous TSP Dust Meter | TEOM continuous dust monitor Thermo Scientific |
| MINIVOL Portable Sampler | AIRMETRICS |
| <i>1-hour sampling:</i> | |
| Continuous TSP Dust Meter | TEOM continuous dust monitor Thermo Scientific |

2.4 Monitoring Parameters, Frequency and Duration

[Table 2.3](#) summarises the monitoring parameters, duration and frequency of air quality monitoring. The monitoring schedule for the reporting month is shown in [Appendix C](#).

Table 2.3 Air Quality Monitoring Parameter, Duration and Frequency

| Monitoring Stations | Parameter | Duration | Frequency |
|---------------------|-------------|----------|-------------------------------|
| AM1 | 1-hour TSP | 1 | 3 hourly samples every 6 days |
| | 24-hour TSP | 24 | Once every 6 days |
| AM2 | 1-hour TSP | 1 | 3 hourly samples every 6 days |
| | 24-hour TSP | 24 | Once every 6 days |
| AM3 | 1-hour TSP | 1 | 3 hourly samples every 6 days |
| | 24-hour TSP | 24 | Once every 6 days |
| AM4 | 24-hour TSP | 24 | Once every 6 days |

2.5 Monitoring Procedures and Calibration Details

MINIVOL (24- hour TSP Monitoring):

Preparation of Filter Papers

- Visual inspection of filter papers was carried out to ensure that there were no pinholes, tears and creases;
- The filter papers were then labeled before sampling.
- The filter papers were equilibrated at room temperature and relative humidity < 50% for at least 24 hours before weighing.

Field Monitoring

- During collection of the sampled filter paper, the information on the elapse timer was logged. Site observations around the monitoring stations, which might have affected the monitoring results, were also recorded. Major pollution sources, if any, would be identified and reported.
- The post-sampling filter papers were removed carefully from the filter holder and folded to avoid loss of fibres or dust particles from the filter papers;
- The filter holder and its surrounding were cleaned;
- A pre-weighed blank filter paper for the next sampling was put in place and aligned carefully. The filter holder was then tightened firmly to avoid leakage;
- The programmable timer was set for the next 24 hrs sampling period;
- The post-sampling filter papers were equilibrated at room temperature and relative humidity < 50% for at least 24 hours before weighing.

TEOM continuous dust monitor (24- hour TSP and 1- hour TSP Monitoring):

- The following parameters of the TEOM model dust meters are regularly checked to ensure proper functionality:
 - Operation Mode;
 - Frequency of the tapered element;
 - Main flow;
 - Bypass flow.

Maintenance & Calibration

- The monitoring equipment and their accessories are maintained in good working conditions.

- Monitoring equipment is calibrated at monthly intervals. Calibration details are shown in [Appendix F](#).

2.6 Results and Observations

All dust monitoring works were conducted on schedule. All monitoring data and graphical presentation of the monitoring results are provided in [Appendix D](#). Key findings and observations are provided below:

1-hour TSP

No exceedance of 1-hour TSP Action/Limit Level was recorded in the month.

24-hour TSP

No exceedance of 24-hour TSP Action/Limit Level was recorded in the month.

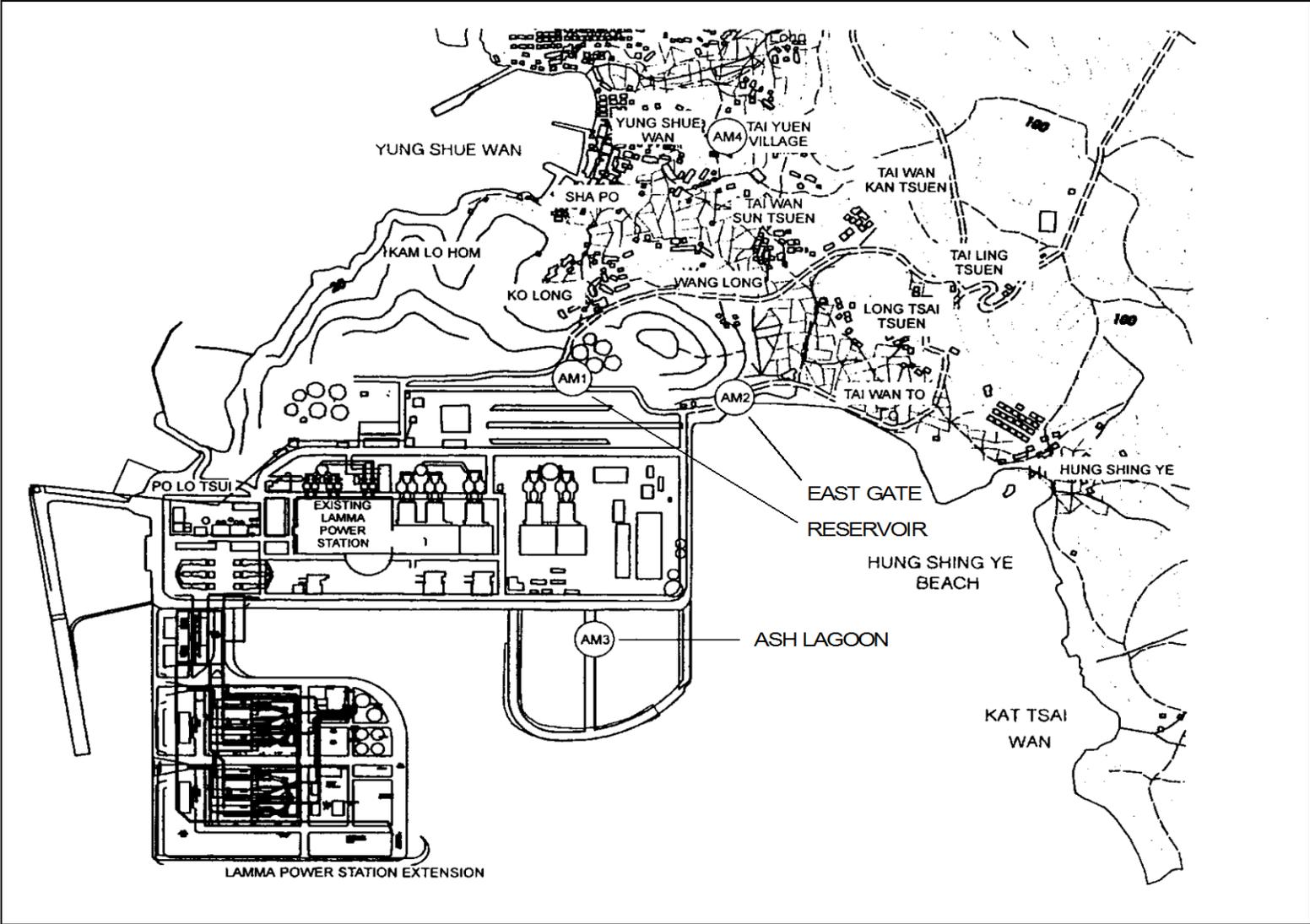


Figure 2.1 Location of Air Quality Monitoring Stations

3. NOISE

3.1 Monitoring Requirements

Continuous noise alarm monitoring at Ash Lagoon/Ching Lam were carried out to calculate the noise contributed by the construction activities at the two critical NSR's, viz. Long Tsai Tsuen/Hung Shing Ye and the school within the village of Tai Wan San Tsuen. The impact monitoring data for construction noise were checked against the limit levels specified in the EM&A Manual. With the availability of the construction noise permits, impact monitoring for the construction work during the restricted hours was also carried out. Section 3 presents the details of the construction noise permits.

The impact noise monitoring data were checked against the limit levels specified in the EM&A Manual. [Appendix B](#) shows the established Action/Limit Levels for noise.

3.2 Monitoring Locations

In accordance with the EM&A manual, the identified noise monitoring locations of Ash Lagoon and Ching Lam are shown in [Figure 3.1](#).

3.3 Monitoring Equipment

The sound level meters used for noise monitoring complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1). The noise monitoring equipment used is shown in [Table 3.1](#).

Table 3.1 Noise Monitoring Equipment

| Equipment | Model |
|------------------------|----------|
| Sound level meters | B&K 2250 |
| Sound level calibrator | B&K 4231 |

3.4 Monitoring Parameters, Frequency and Duration

Continuous alarm monitoring was carried out at Ash Lagoon and Ching Lam. The measurement duration and parameter of noise monitoring were presented in [Table 3.2](#) as follows:

Table 3.2 Noise Monitoring Duration and Parameter

| Location | Time Period | Frequency | Parameter |
|----------|-------------|-----------|-----------|
|----------|-------------|-----------|-----------|

| | | | |
|-----------------------------|--|--|------------------|
| Ash Lagoon Ching Lam | Day-time: 0700-1900 hrs on normal weekdays | Day-time: 30 minutes | 30-min L_{Aeq} |
| | Evening-time & holidays: 0700-2300 hrs on holidays; and 1900-2300 hrs on all other days | Evening-time & holidays: 5 minutes | 5-min L_{Aeq} |
| | Night-time: 2300-0700 hrs of next day | Night-time: 5 minutes | 5-min L_{Aeq} |

3.5 Monitoring Procedures and Calibration Details

Monitoring Procedures

Continuous Noise Monitoring for Lamma Extension Construction

The measured noise levels (MNL's) were collected at the noise alarm monitoring stations at Ash Lagoon and Ching Lam. The notional background noise levels (viz. baseline noise data at Ash Lagoon and Ching Lam) were applied to correct the corresponding MNL's in 30-min/5-min L_{Aeq} .

A wind speed sensor was installed at Station Building Rooftop. The wind speed signal was used to determine whether the data from Ash Lagoon and Ching Lam noise alarm monitoring stations were affected. The instantaneous data was discarded in case the instantaneous wind speed exceeded 10 m/s. The 30-min/5-min L_{Aeq} was considered valid only if the amount of valid data was equal to or above 70%.

Equipment Calibration

The sound level meters and calibrators were verified by the manufacturer or accredited laboratory. With the endorsement of the Independent Environmental Checker, the enhancement of calibration of sound level meter at the noise monitoring stations was implemented. The monthly manual on-site calibration using sound level calibrator was replaced by the daily auto charge injection calibration function of the sound level meter. For additional quality assurance, manual on-site calibration would still be conducted for the noise monitoring stations once every 6 months. The manual on-site calibrations for Ash Lagoon and Ching Lam noise monitoring stations were carried out in March 2020. The next calibrations for the two noise monitoring stations were scheduled in September 2020.

3.6 Results and Observations

Continuous noise monitoring was conducted at the two monitoring stations at Ash Lagoon and Ching Lam.

All monitoring results and their graphical presentations are provided in [Appendix E](#). No exceedance of noise Action/Limit Level was recorded in the month.

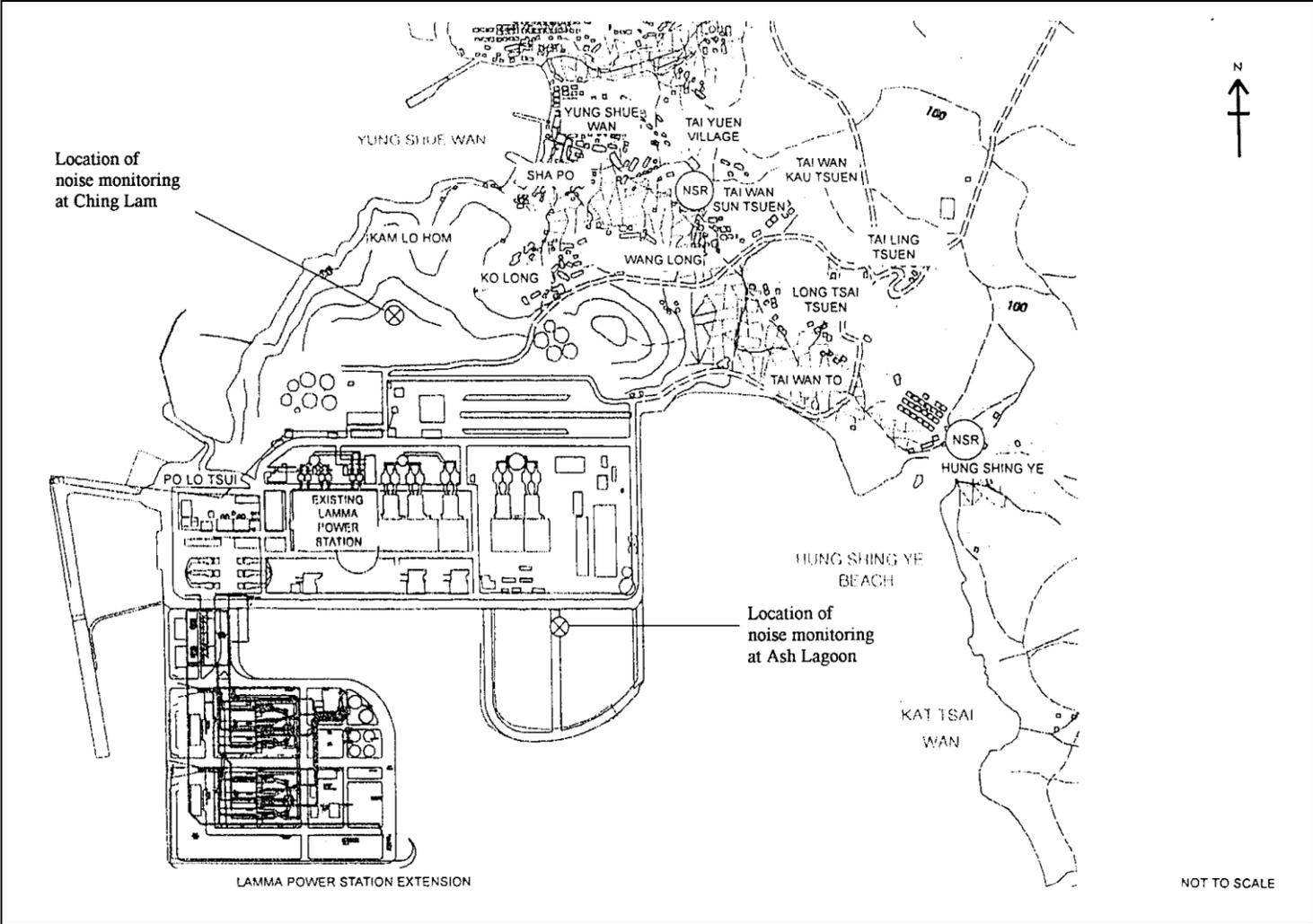


Figure 3.1 Location of Noise Monitoring Stations

4. ENVIRONMENTAL AUDIT

4.1 Review of Environmental Monitoring Procedures

The environmental monitoring procedures were regularly reviewed by the Environmental Team. No modification to the existing monitoring procedures was recommended.

4.2 Assessment of Environmental Monitoring Results

Monitoring results for Air Quality and Noise

The environmental monitoring results for Air Quality and Noise in the reporting month presented in Sections 2 and 3 respectively are summarized in [Table 4.1](#).

Table 4.1 Summary of AL Level Exceedances on Monitoring Parameters

| Item | Parameter Monitored | Monitoring Period | No. of Exceedances In | | Event/Action Plan Implementation Status and Results |
|-------|--|-----------------------|-----------------------|-------------|---|
| | | | Action Level | Limit Level | |
| Air | | | | | |
| 1 | Ambient TSP (24-hour) | 01/03/2020-31/03/2020 | 0 | 0 | |
| 2 | Ambient TSP (1-hour) | 01/03/2020-31/03/2020 | 0 | 0 | |
| Noise | | | | | |
| 1 | Noise level at the critical NSR's predicted by the noise alarm monitoring system | 01/03/2020-31/03/2020 | 0 | 0 | |

4.3 Waste Management

Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. Inert C&D materials comprise excavated materials and broken concrete. Non-inert C&D materials comprise general refuse, metals and paper/ cardboard packaging, plastics, chemical waste, etc.

Inert C&D material and non-inert C&D material disposed of in March 2020 are shown in [Table 4.2](#).

Table 4.2 Estimated Amounts of Waste in March 2020

| Total Inert C&D Waste Materials | Non-inert C&D Materials | | |
|---------------------------------|-------------------------|-----------------------------------|----------------|
| | C&D Materials Recycled | C&D Waste Disposed of at Landfill | Chemical Waste |
| | | | |

| | | | |
|-----------------|-----------|---------------|----------|
| 4,371.37 Tonnes | 11 Tonnes | 108.69 Tonnes | 0 Litres |
|-----------------|-----------|---------------|----------|

The monthly waste flow tables prepared by the contractors are attached in [Appendix K](#)

4.4 Site Environmental Audit

EPD officials from Regional Office (South) visited Lamma Power Station on 19/03/2020. EPD inspected the Lamma Extension Construction Site. There was no adverse comment from EPD regarding the construction site.

Site audits were carried out by ET on a weekly basis to monitor environmental issues at the construction sites to ensure that all mitigation measures were implemented timely and properly. The site audit findings for the reporting month are summarized in [Appendix H](#). The site conditions were generally satisfactory. All required mitigation measures were implemented.

4.5 Status of Environmental Licensing and Permitting

All permits/licenses obtained for the project are summarised in [Table 4.3](#).

Table 4.3 Summary of Environmental Licensing and Permit Status

| Description | Permit No. | Valid Period | | Highlights | Status |
|-----------------------------|---------------|--------------|----------|---|-----------------------|
| | | From | To | | |
| Varied Environmental Permit | EP-071/2000/C | 18/05/05 | - | The whole construction work site | Valid |
| Construction Noise Permit | GW-RS0809-19 | 15/09/19 | 14/03/20 | Civil and Building Works for Unit L11. Operation of PME during restricted hours | Valid up to 14/3/2020 |
| Construction Noise Permit | GW-RS0132-20 | 15/03/20 | 13/09/20 | Civil and Building Works for Unit L11. Operation of PME during restricted hours | Valid from 15/3/2020 |
| Construction Noise Permit | GW-RS1134-19 | 01/01/20 | 30/06/20 | Power Block Facilities works for Unit L11. Operation of PME during restricted hours | Valid |
| Construction Noise Permit | GW-RS0930-19 | 02/11/19 | 01/05/20 | Foundation work for Unit L12. Operation of PME during restricted hours. | Valid |
| Construction Noise Permit | GW-RS1064-19 | 04/12/19 | 03/06/20 | Foundation work for Unit L12 at Station Road. Operation of PME during restricted hours. | Valid |

| Description | Permit No. | Valid Period | | Highlights | Status |
|---|----------------------|--------------|----------|--|--------|
| | | From | To | | |
| WPCO Discharge Licence# | WT00027316-2017 | 01/03/17 | 31/03/22 | Civil and Building Works for Unit L10 | Valid |
| WPCO Discharge Licence## | WT00034006-2019 | 08/08/19 | 31/08/24 | Civil and Building Works for Unit L11 | Valid |
| WPCO Discharge Licence### | WT00034368-2019 | 11/09/19 | 30/09/24 | Foundation Works for L12 | Valid |
| Registration of Chemical Waste Producer | WPN5213-912-P2781-22 | 22/02/16 | - | Civil and Building Works for Unit L10 | Valid |
| Registration of Chemical Waste Producer | WPN5517-912-T2007-02 | 17/03/05 | | E&M Equipment Installation and Maintenance | Valid |
| Waste Disposal Billing Account | Account No.: 7026035 | 06/10/16 | - | Civil and Building Works for Unit L10 | Valid |
| Waste Disposal Billing Account | Account No.: 7027632 | 20/04/17 | - | E&M Erection of Power Block Facilities – L10 | Valid |
| Waste Disposal Billing Account | Account No.: 7031135 | 21/06/18 | - | Civil and Building Works for Unit L11 | Valid |
| Waste Disposal Billing Account | Account No.: 7027672 | 24/04/17 | - | E&M Erection of Power Block Facilities – L11 | Valid |
| Waste Disposal Billing Account | Account No.: 7033637 | 01/04/19 | - | Foundation works for Unit L12 | Valid |

Notes: # - No discharge of effluent was carried out in the reporting period.
 ## - Water quality monitoring was carried out in February 2020 and the result of which had been reported under a separate cover by the contractor.
 ### - Water quality monitoring was carried out in February 2020 and the result of which had been reported under a separate cover by the contractor.

4.6 Implementation Status of Environmental Mitigation Measures

Mitigation measures detailed in the permits and the EM&A Manual (Construction Phase) are required to be implemented. An updated summary of the Environmental Mitigation Implementation Schedule (EMIS) is presented in [Appendix I](#).

4.7 Implementation Status of Event/Action Plans

The Event/Action Plans extracted from the EM&A Manual (Construction Phase) are presented in [Appendix G](#).

4.8 Implementation Status of Environmental Complaint Handling Procedures

In March 2020, no complaint against the construction activities was received.

Table 4.4 Environmental Complaints Received in March 2020

| Case Reference / Date, Time Received / Date, Time Concerned | Descriptions / Actions Taken | Conclusion / Status |
|---|---------------------------------|------------------------|
| Nil | N/A | N/A |

Table 4.5 Outstanding Environmental Complaints Carried Over

| Case Reference / Date, Time Received / Date, Time Concerned | Descriptions / Actions Taken | Conclusion / Status |
|---|---------------------------------|------------------------|
| Nil | N/A | N/A |

5. FUTURE KEY ISSUES

5.1 Key Issues for the Coming Month

Key issues to be considered in the coming month include:

Unit L10 Civil and Building Works

Noise Impact

- To continue monitoring the noise level during construction.
- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the noise performance.

Air Impact

- To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Water Impact

- To treat wastewater in sedimentation pit and tanks before discharge and to ensure compliance in accordance with the WPCO discharge licence already obtained.

Unit L10 Mechanical Erection

Noise Impact

- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the noise performance.

Air Impact

- To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Unit L10 Electrical, Instrumentation & Control Erection

Noise Impact

- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the noise performance.

Air Impact

- To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Unit L11 Civil and Building Works

Noise Impact

- To continue monitoring the noise level during construction and to ensure compliance with the CNP's already obtained.

- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the noise performance.

Air Impact

- To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Water Impact

- To treat wastewater in sedimentation pit and tanks before discharge and to ensure compliance in accordance with the WPCO discharge licence already obtained.

Unit L11 Mechanical Erection

Noise Impact

- To continue monitoring the noise level during construction and to ensure compliance with the CNP's already obtained.
- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the noise performance.

Air Impact

- To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Unit L11 Electrical, Instrumentation & Control Erection

Noise Impact

- To continue monitoring the noise level during construction and to ensure compliance with the CNP's already obtained.
- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the noise performance.

Air Impact

- To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Unit L12 Foundation Works

Noise Impact

- To continue monitoring the noise level during construction and to ensure compliance with the CNP's already obtained.
- To continue executing the preventive measures for avoiding noise exceedance and keep monitoring/ reviewing the noise performance.

Air Impact

- To monitor and review the sufficiency of the dust suppression measures provided and increase the resources accordingly if necessary.

Water Impact

- To treat wastewater in sedimentation pit and tanks for reuse on water spraying and to ensure compliance in accordance with the WPCO discharge licence already obtained.

5.2 Monitoring Schedules for the Next 3 Months

The tentative environmental monitoring schedules for the next 3 months are shown in [Appendix C](#).

5.3 Construction Program for the Next 3 Months

The tentative construction programs for the next 3 months are shown in [Appendix J](#).

6. CONCLUSION

All monitoring work at designated stations was performed as scheduled satisfactorily. The environmental monitoring works and site inspection were performed as scheduled in the reporting month. All monitoring results were checked and reviewed.

No Action/Limit level exceedance on 1-hour and 24-hour TSP level was recorded in the reporting month.

No Action/Limit level exceedance on noise was recorded in the reporting month.

Environmental mitigation measures recommended in the EM&A manual for the construction activities were implemented in the reporting month. No complaint against the construction activities was received in the reporting month. No prosecution was received for this Project in the reporting period.

The environmental performance of the Project was generally satisfactory.

Appendix A Organization Chart

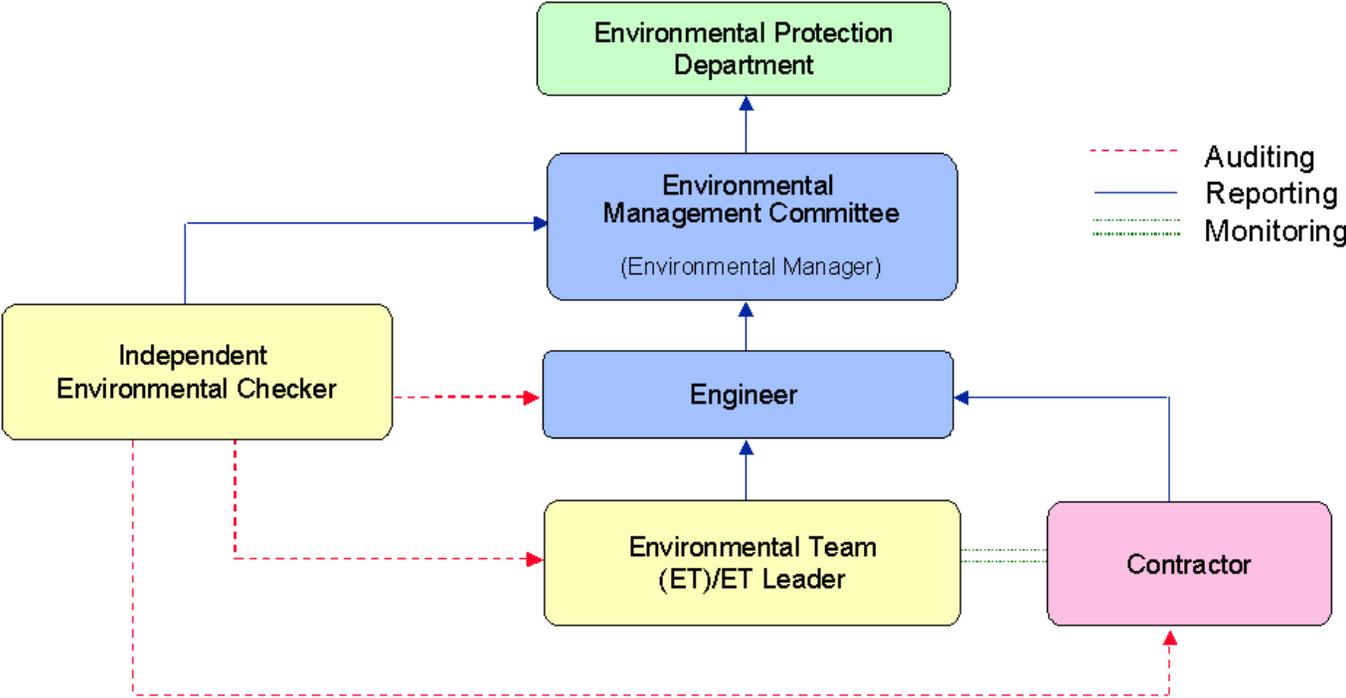


Figure A.1 Organisation of EM&A Programme at Construction Phase

Appendix B Action and Limit Levels for Air Quality and Noise Monitoring

B.1. Air

Table B.1 Action and Limit Levels for 1-hour and 24-hour TSP

| | Action Level, $\mu\text{g}/\text{m}^3$ | Limit Level, $\mu\text{g}/\text{m}^3$ |
|-------------|--|---------------------------------------|
| 1-hour TSP* | 340 | 500 |
| 24-hour TSP | 190 | 260 |

* No Action/Limit Level for 1-hour TSP is applied to AM4 where no real time dust monitor is installed.

B.2. Noise

Table B.2 AL Levels for Construction Noise (Other than Percussive Piling)

| Parameters | Action | Limit |
|--|---|--|
| Noise Levels at the NSR's at Long Tsai Tsuen/Hung Shing Ye and school within the village of Tai Wan San Tsuen predicted by the noise alarm monitoring system | When one or more documented complaints are received | a. 75 dB(A) in $L_{Aeq,30 \text{ min}}$ (07:00-19:00 hrs on normal weekdays) (Note 1) |
| Manual noise monitoring at the nearest Pak Kok Tsui residences to cable landing points N4 and N5 | | b. subject to statutory control under the Noise Control Ordinance (07:00-23:00 hrs on holidays and 19:00-23:00 hrs on all other days). Set to 60 dB(A) in $L_{Aeq,5 \text{ min}}$ c. subject to statutory control under the Noise Control Ordinance (23:00-07:00 hrs of next day). Set to 45 dB(A) in $L_{Aeq,5 \text{ min}}$ |
| Note: 1. For educational institution, the limit level shall be 70 dB(A), reduced to 65 dB(A) during examination periods. | | |

Appendix C Environmental Monitoring Schedule

Table C.1 Monitoring schedule for 24hr and 1hr TSP monitoring for Lamma Extension Construction (March 2020 to June 2020)

| 24hr TSP Monitoring | 1hr TSP Monitoring |
|---------------------|--------------------------------|
| 1/March/2020 | 1/March/2020 1500hr to 1800hr |
| 7/March/2020 | 7/March/2020 1500hr to 1800hr |
| 13/March/2020 | 13/March/2020 1500hr to 1800hr |
| 19/ March/2020 | 19/March/2020 1500hr to 1800hr |
| 25/March/2020 | 25/March/2020 1500hr to 1800hr |
| 31/March/2020 | 31/March/2020 1500hr to 1800hr |
| 6/April/2020 | 6/April/2020 1500hr to 1800hr |
| 12/April/2020 | 12/April/2020 1500hr to 1800hr |
| 18/April/2020 | 18/April/2020 1500hr to 1800hr |
| 24/April/2020 | 24/April/2020 1500hr to 1800hr |
| 30/April/2020 | 30/April/2020 1500hr to 1800hr |
| 6/May/2020 | 6/May/2020 1500hr to 1800hr |
| 12/May/2020 | 12/May/2020 1500hr to 1800hr |
| 18/May/2020 | 18/May/2020 1500hr to 1800hr |
| 24/May/2020 | 24/May/2020 1500hr to 1800hr |
| 30/May/2020 | 30/May/2020 1500hr to 1800hr |
| 5/June/2020 | 5/June/2020 1500hr to 1800hr |
| 11/June/2020 | 11/June/2020 1500hr to 1800hr |
| 17/June/2020 | 17/June/2020 1500hr to 1800hr |
| 23/June/2020 | 23/June/2020 1500hr to 1800hr |
| 29/June/2020 | 29/June/2020 1500hr to 1800hr |

APPENDIX D AIR QUALITY MONITORING RESULTS

Site: Lamma Power Station Extension

Month: March 2020

24 hour TSP Measurement:-

| Date | TSP concentration ($\mu\text{g}/\text{m}^3$) | | | | Weather Information (From Hong Kong Observatory) | | |
|-----------|--|--------------------|---------------------|------------------------------|---|---|------------------|
| | Reservoir (AM1) | East Gate (AM2) | Ash Lagoon (AM3) | Tai Yuen Village (AM4) | Mean Wind Speed (km/hr) | Prevailing Wind Dir. ($^{\circ}$) | Mean R.H. (%) |
| 1/3/2020 | 34 | 30 | 27 | 25 | 7.1 | 220 | 82 |
| 7/3/2020 | 35 | 33 | 30 | 17 | 13.4 | 30 | 88 |
| 13/3/2020 | 40 | 40 | 34 | 24 | 13.6 | 20 | 91 |
| 19/3/2020 | 34 | 32 | 29 | 8 | 13.5 | 20 | 88 |
| 25/3/2020 | 35 | 36 | 32 | 31 | 22.6 | 70 | 83 |
| 31/3/2020 | 19 | 21 | 19 | 17 | 22.0 | 30 | 95 |

1 hour TSP Measurement:-

| Date | Time | TSP concentration ($\mu\text{g}/\text{m}^3$) | | |
|-----------|---------------|--|--------------------|---------------------|
| | | Reservoir (AM1) | East Gate (AM2) | Ash Lagoon (AM3) |
| 1/3/2020 | 15:00 - 15:59 | 27 | 36 | 30 |
| | 16:00 - 16:59 | 48 | 29 | 25 |
| | 17:00 - 17:59 | 29 | 23 | 25 |
| 7/3/2020 | 15:00 - 15:59 | 35 | 31 | 34 |
| | 16:00 - 16:59 | 38 | 34 | 32 |
| | 17:00 - 17:59 | 35 | 33 | 30 |
| 13/3/2020 | 15:00 - 15:59 | 61 | 61 | 43 |
| | 16:00 - 16:59 | 46 | 42 | 43 |
| | 17:00 - 17:59 | 47 | 37 | 38 |
| 19/3/2020 | 15:00 - 15:59 | 63 | 50 | 38 |
| | 16:00 - 16:59 | 44 | 26 | 24 |
| | 17:00 - 17:59 | 21 | 21 | 19 |
| 25/3/2020 | 15:00 - 15:59 | 30 | 29 | 29 |
| | 16:00 - 16:59 | 29 | 32 | 28 |
| | 17:00 - 17:59 | 39 | 33 | 29 |
| 31/3/2020 | 15:00 - 15:59 | 30 | 26 | 23 |
| | 16:00 - 16:59 | 31 | 19 | 20 |
| | 17:00 - 17:59 | 7 | 16 | 20 |

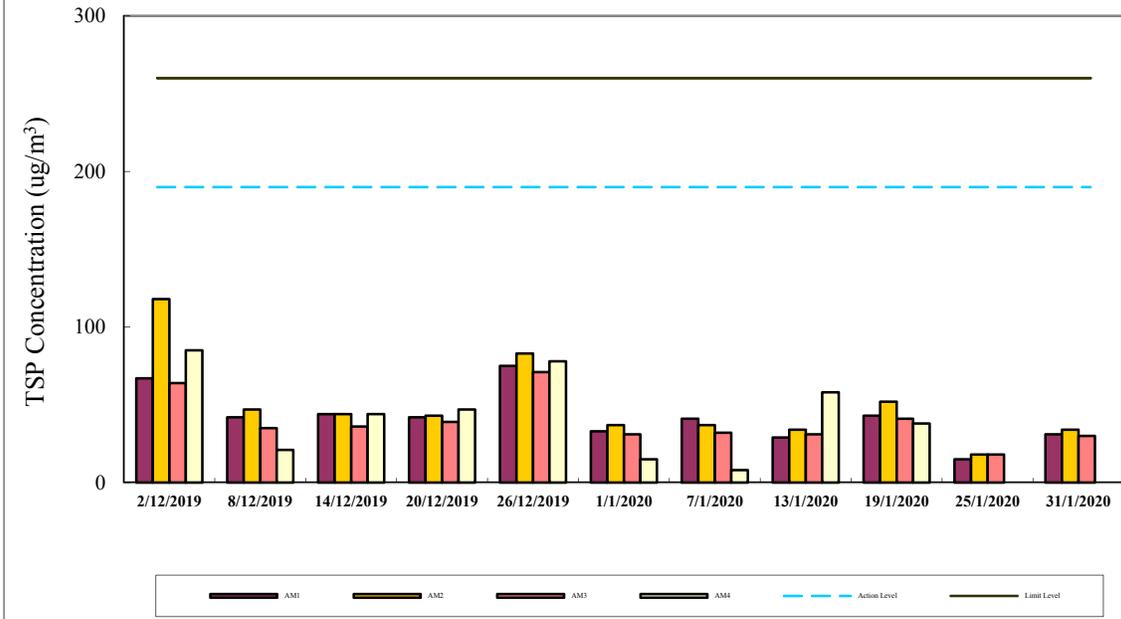
| | 1-hr TSP ($\mu\text{g}/\text{m}^3$) | 24-hr TSP ($\mu\text{g}/\text{m}^3$) |
|--------------|--|---|
| Action Level | 340 | 190 |
| Limit Level | 500 | 260 |

Calibration: Calibration details are shown in appendix F.

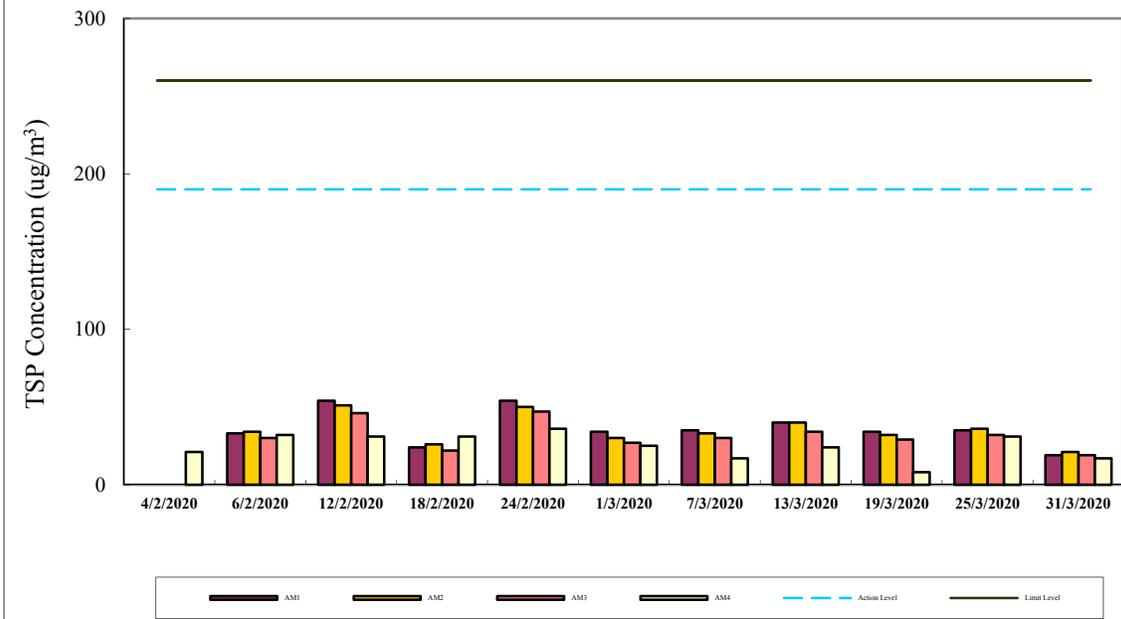
Equipment used:

| Location | 1-hr TSP | 24-hr TSP |
|-------------------------------------|----------|--------------------------|
| Reservoir, East Gate and Ash Lagoon | TEOM | TEOM |
| Tai Yuen Village | - | MINIVOL Portable Sampler |

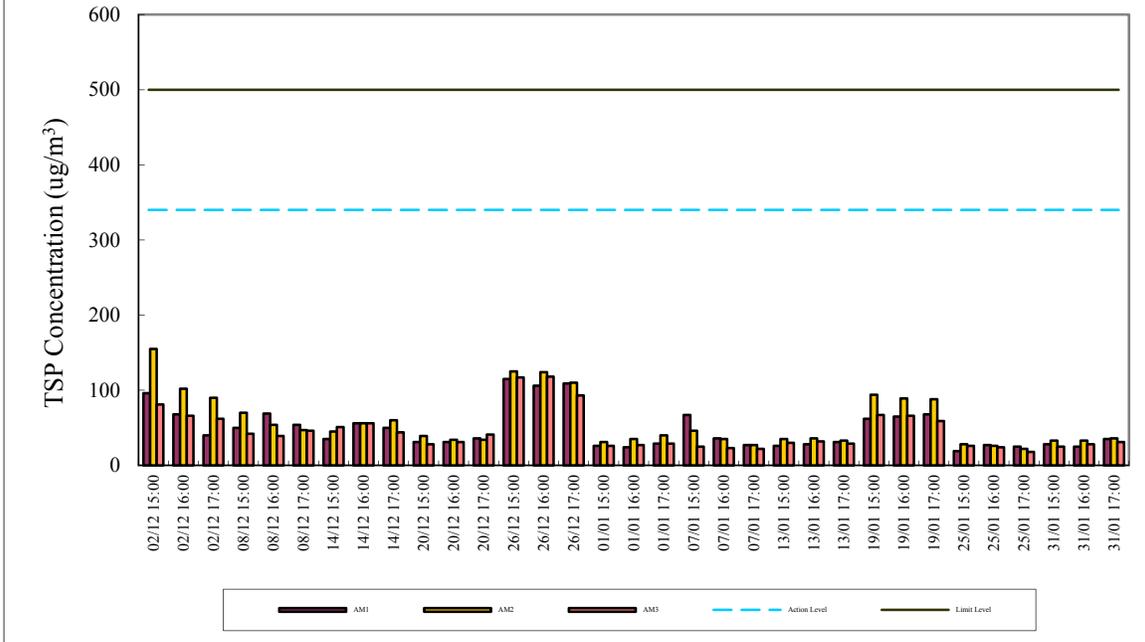
24-hr TSP Air Monitoring Data (December 2019 - January 2020)



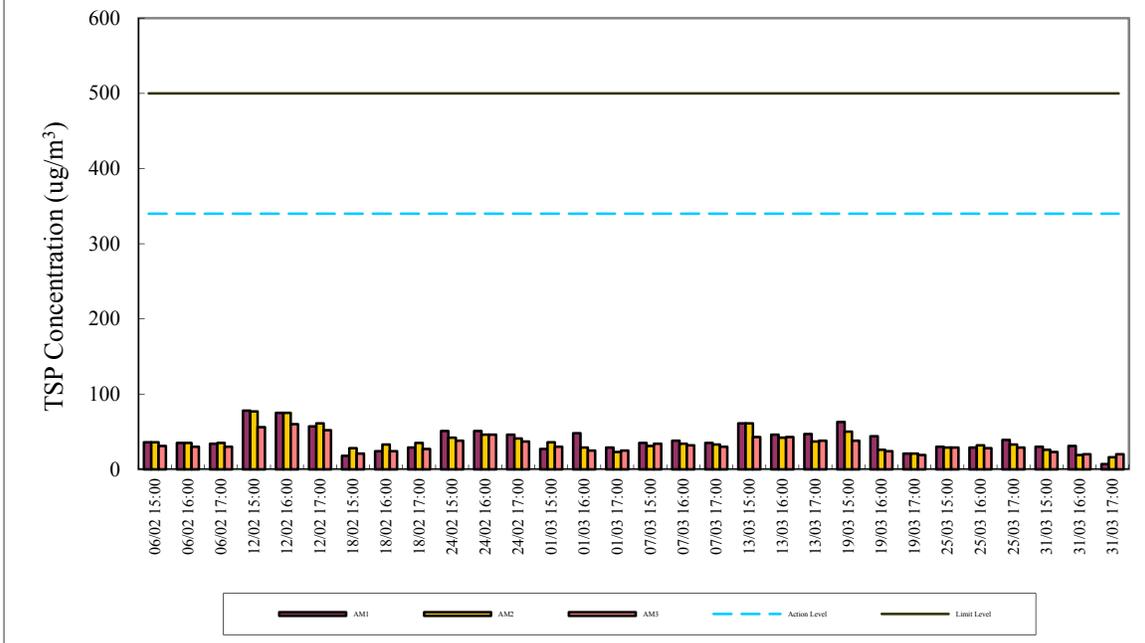
24-hr TSP Air Monitoring Data (February 2020 - March 2020)



1-hr TSP Air Monitoring Data (December 2019 - January 2020)



1-hr TSP Air Monitoring Data (February 2020 - March 2020)



Appendix E

Continuous Noise Monitoring Results for March 2020

Site: Lamma Power Station Extension Construction
 Measurement Location: Ash Lagoon and Ching Lam
 Measurement Parameter: 30-min Leq (07:00-19:00 hrs on normal weekdays)
 5-min Leq (07:00-23:00 hrs on holidays and
 19:00-23:00 hrs on all other days, and 23:00-
 07:00 hrs of next day)
 Noise Equipment: B&K 2250 sound level meters and B&K 4231 sound
 Level calibrator
 Lab. Calibration Date: B&K 2250 sound level meters - 21/06/2018 (Ash Lagoon)
 19/08/2019 (Ching Lam)
 B&K 4231 calibrator - 02/10/2019

| Date | Time | Calculated Noise Level at NSR at Long Tsai Tsuen/Hung Shing Ye (dB(A)) | | Limit Noise Level (dB(A)) | Calculated Noise Level at NSR at the school within Tai Wan San Tsuen (dB(A)) | | Limit Noise Level (dB(A)) |
|------------|-------------|--|-----|---------------------------|--|-----|---------------------------|
| | | Max | Avg | | Max | Avg | |
| 01/03/2020 | 07:00-23:00 | 59 | 39 | 60 | 59 | 34 | 60 |
| 01/03/2020 | 23:00-07:00 | 45 | 42 | 45 | 45 | 37 | 45 |
| 02/03/2020 | 07:00-19:00 | --- | --- | 75 | 42 | 38 | 70 |
| 02/03/2020 | 19:00-23:00 | 41 | 37 | 60 | 42 | 36 | 60 |
| 02/03/2020 | 23:00-07:00 | 45 | 42 | 45 | 41 | 37 | 45 |
| 03/03/2020 | 07:00-19:00 | --- | --- | 75 | 36 | 36 | 70 |
| 03/03/2020 | 19:00-23:00 | --- | --- | 60 | 39 | 37 | 60 |
| 03/03/2020 | 23:00-07:00 | 45 | 41 | 45 | 40 | 36 | 45 |
| 04/03/2020 | 07:00-19:00 | 54 | 53 | 75 | 38 | 32 | 70 |
| 04/03/2020 | 19:00-23:00 | --- | --- | 60 | 37 | 35 | 60 |
| 04/03/2020 | 23:00-07:00 | 44 | 41 | 45 | 43 | 39 | 45 |
| 05/03/2020 | 07:00-19:00 | 51 | 45 | 75 | 41 | 36 | 70 |
| 05/03/2020 | 19:00-23:00 | --- | --- | 60 | 40 | 36 | 60 |
| 05/03/2020 | 23:00-07:00 | 45 | 40 | 45 | 44 | 38 | 45 |
| 06/03/2020 | 07:00-19:00 | --- | --- | 75 | 56 | 40 | 70 |
| 06/03/2020 | 19:00-23:00 | --- | --- | 60 | 38 | 34 | 60 |
| 06/03/2020 | 23:00-07:00 | 45 | 40 | 45 | 40 | 34 | 45 |
| 07/03/2020 | 07:00-19:00 | 48 | 47 | 75 | 49 | 39 | 70 |
| 07/03/2020 | 19:00-23:00 | --- | --- | 60 | 43 | 38 | 60 |
| 07/03/2020 | 23:00-07:00 | --- | --- | 45 | 43 | 39 | 45 |
| 08/03/2020 | 07:00-23:00 | 57 | 44 | 60 | 56 | 37 | 60 |
| 08/03/2020 | 23:00-07:00 | 44 | 41 | 45 | 38 | 33 | 45 |
| 09/03/2020 | 07:00-19:00 | 48 | 48 | 75 | 51 | 51 | 70 |
| 09/03/2020 | 19:00-23:00 | --- | --- | 60 | 45 | 36 | 60 |
| 09/03/2020 | 23:00-07:00 | 45 | 44 | 45 | 43 | 40 | 45 |
| 10/03/2020 | 07:00-19:00 | 55 | 55 | 75 | 44 | 44 | 70 |
| 10/03/2020 | 19:00-23:00 | --- | --- | 60 | --- | --- | 60 |
| 10/03/2020 | 23:00-07:00 | 45 | 40 | 45 | 42 | 34 | 45 |
| 11/03/2020 | 07:00-19:00 | --- | --- | 75 | 40 | 33 | 70 |
| 11/03/2020 | 19:00-23:00 | 39 | 36 | 60 | 43 | 34 | 60 |
| 11/03/2020 | 23:00-07:00 | 45 | 37 | 45 | 45 | 36 | 45 |
| 12/03/2020 | 07:00-19:00 | 52 | 52 | 75 | 50 | 36 | 70 |
| 12/03/2020 | 19:00-23:00 | --- | --- | 60 | 40 | 34 | 60 |
| 12/03/2020 | 23:00-07:00 | 45 | 42 | 45 | 43 | 38 | 45 |
| 13/03/2020 | 07:00-19:00 | 49 | 44 | 75 | 41 | 34 | 70 |
| 13/03/2020 | 19:00-23:00 | --- | --- | 60 | 43 | 38 | 60 |

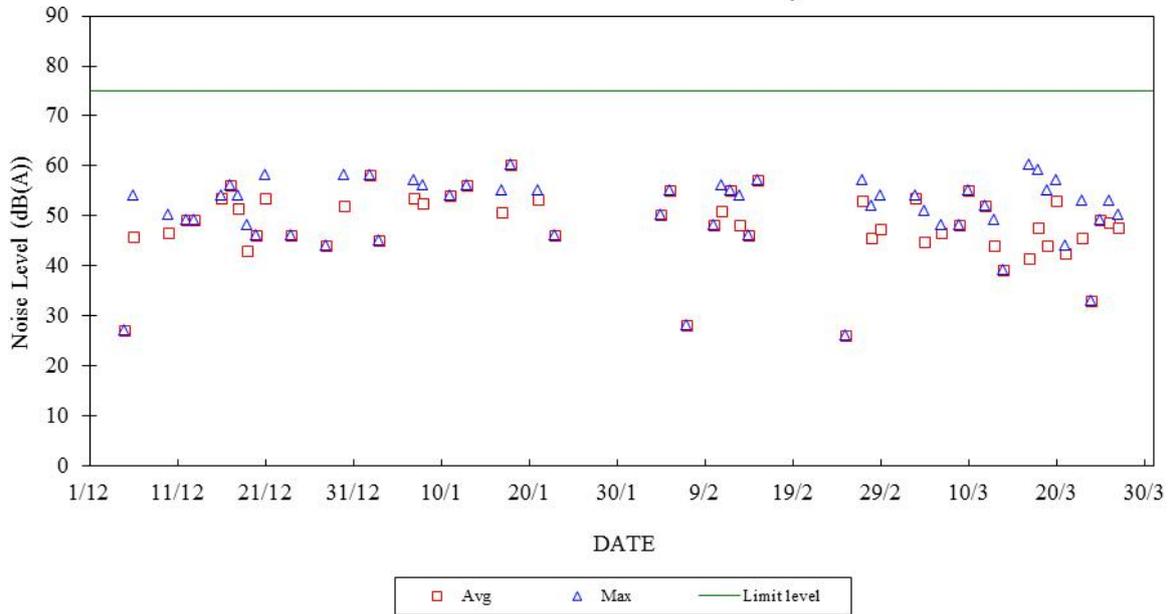
| | | | | | | | |
|------------|-------------|-----|-----|----|-----|-----|----|
| 13/03/2020 | 23:00-07:00 | 45 | 41 | 45 | 43 | 37 | 45 |
| 14/03/2020 | 07:00-19:00 | 39 | 39 | 75 | 44 | 33 | 70 |
| 14/03/2020 | 19:00-23:00 | --- | --- | 60 | 39 | 28 | 60 |
| 14/03/2020 | 23:00-07:00 | 43 | 43 | 45 | 45 | 39 | 45 |
| 15/03/2020 | 07:00-23:00 | 59 | 46 | 60 | 59 | 37 | 60 |
| 15/03/2020 | 23:00-07:00 | 44 | 44 | 45 | 43 | 38 | 45 |
| 16/03/2020 | 07:00-19:00 | --- | --- | 75 | 41 | 36 | 70 |
| 16/03/2020 | 19:00-23:00 | --- | --- | 60 | 40 | 35 | 60 |
| 16/03/2020 | 23:00-07:00 | 45 | 41 | 45 | 43 | 37 | 45 |
| 17/03/2020 | 07:00-19:00 | 60 | 42 | 75 | 37 | 29 | 70 |
| 17/03/2020 | 19:00-23:00 | --- | --- | 60 | 48 | 38 | 60 |
| 17/03/2020 | 23:00-07:00 | 45 | 38 | 45 | 44 | 35 | 45 |
| 18/03/2020 | 07:00-19:00 | 59 | 48 | 75 | 40 | 36 | 70 |
| 18/03/2020 | 19:00-23:00 | 27 | 27 | 60 | 43 | 38 | 60 |
| 18/03/2020 | 23:00-07:00 | 45 | 42 | 45 | 43 | 36 | 45 |
| 19/03/2020 | 07:00-19:00 | 55 | 44 | 75 | 50 | 40 | 70 |
| 19/03/2020 | 19:00-23:00 | --- | --- | 60 | 41 | 39 | 60 |
| 19/03/2020 | 23:00-07:00 | 45 | 42 | 45 | 43 | 35 | 45 |
| 20/03/2020 | 07:00-19:00 | 57 | 53 | 75 | 42 | 34 | 70 |
| 20/03/2020 | 19:00-23:00 | 43 | 37 | 60 | 42 | 37 | 60 |
| 20/03/2020 | 23:00-07:00 | 40 | 40 | 45 | 42 | 38 | 45 |
| 21/03/2020 | 07:00-19:00 | 44 | 43 | 75 | 44 | 37 | 70 |
| 21/03/2020 | 19:00-23:00 | --- | --- | 60 | 42 | 39 | 60 |
| 21/03/2020 | 23:00-07:00 | 40 | 38 | 45 | 43 | 35 | 45 |
| 22/03/2020 | 07:00-23:00 | 55 | 45 | 60 | 52 | 37 | 60 |
| 22/03/2020 | 23:00-07:00 | 45 | 40 | 45 | 43 | 32 | 45 |
| 23/03/2020 | 07:00-19:00 | 53 | 46 | 75 | 46 | 40 | 70 |
| 23/03/2020 | 19:00-23:00 | --- | --- | 60 | 43 | 39 | 60 |
| 23/03/2020 | 23:00-07:00 | 45 | 42 | 45 | 44 | 37 | 45 |
| 24/03/2020 | 07:00-19:00 | 33 | 33 | 75 | 42 | 36 | 70 |
| 24/03/2020 | 19:00-23:00 | --- | --- | 60 | 44 | 40 | 60 |
| 24/03/2020 | 23:00-07:00 | --- | --- | 45 | 43 | 36 | 45 |
| 25/03/2020 | 07:00-19:00 | 49 | 49 | 75 | 47 | 39 | 70 |
| 25/03/2020 | 19:00-23:00 | --- | --- | 60 | 33 | 30 | 60 |
| 25/03/2020 | 23:00-07:00 | 44 | 41 | 45 | 40 | 31 | 45 |
| 26/03/2020 | 07:00-19:00 | 53 | 49 | 75 | --- | --- | 70 |
| 26/03/2020 | 19:00-23:00 | --- | --- | 60 | 37 | 35 | 60 |
| 26/03/2020 | 23:00-07:00 | 44 | 43 | 45 | 43 | 38 | 45 |
| 27/03/2020 | 07:00-19:00 | 50 | 48 | 75 | 48 | 39 | 70 |
| 27/03/2020 | 19:00-23:00 | --- | --- | 60 | 40 | 35 | 60 |
| 27/03/2020 | 23:00-07:00 | 44 | 37 | 45 | 43 | 38 | 45 |
| 28/03/2020 | 07:00-19:00 | --- | --- | 75 | 53 | 40 | 70 |
| 28/03/2020 | 19:00-23:00 | 56 | 43 | 60 | 44 | 35 | 60 |
| 28/03/2020 | 23:00-07:00 | 45 | 37 | 45 | 44 | 39 | 45 |
| 29/03/2020 | 07:00-23:00 | 52 | 38 | 60 | 44 | 38 | 60 |
| 29/03/2020 | 23:00-07:00 | 42 | 38 | 45 | 45 | 40 | 45 |
| 30/03/2020 | 07:00-19:00 | --- | --- | 75 | 41 | 36 | 70 |
| 30/03/2020 | 19:00-23:00 | --- | --- | 60 | 44 | 37 | 60 |
| 30/03/2020 | 23:00-07:00 | 44 | 37 | 45 | 44 | 39 | 45 |
| 31/03/2020 | 07:00-19:00 | --- | --- | 75 | 43 | 36 | 70 |
| 31/03/2020 | 19:00-23:00 | --- | --- | 60 | 42 | 38 | 60 |
| 31/03/2020 | 23:00-07:00 | 42 | 37 | 45 | 43 | 40 | 45 |

Note:

- a. "----" represents the measured noise monitoring data lower than the established notional background level/discarded under strong wind.
- b. Continuous noise monitoring was also carried out at holidays & evening-time (07:00-23:00 hrs on holidays and 19:00-23:00 hrs on all other days) and night-time (23:00-07:00 hrs of next day) with construction noise permit.

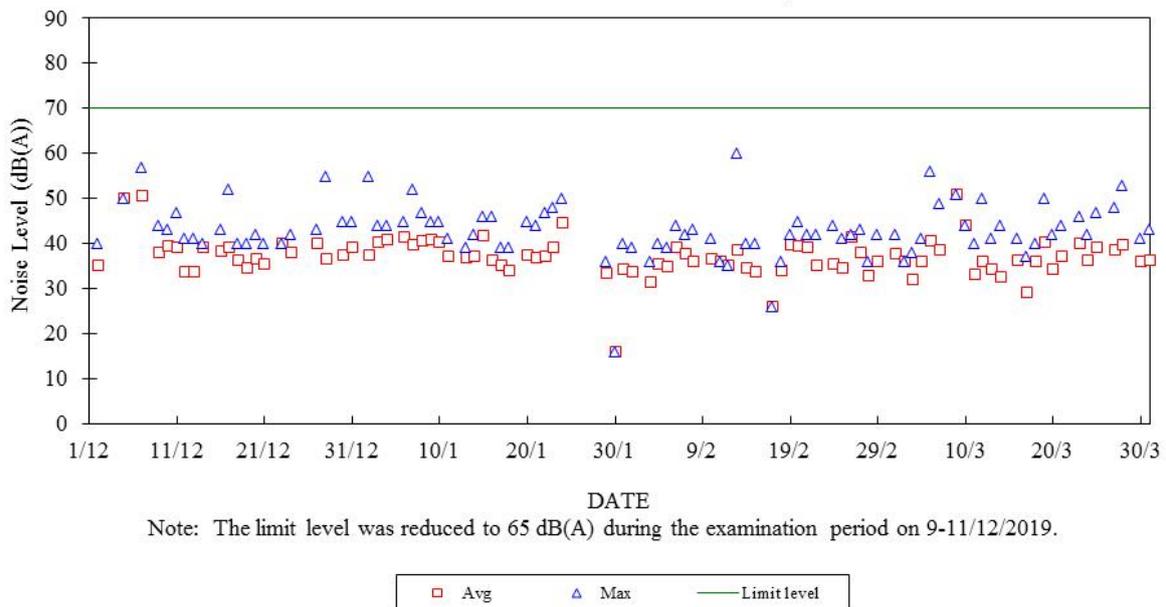
Construction Noise Monitoring in December 2019 - March 2020

NSR at Long Tsai Tsuen/Hung Shing Ye
07:00-19:00 hrs on Normal Weekdays

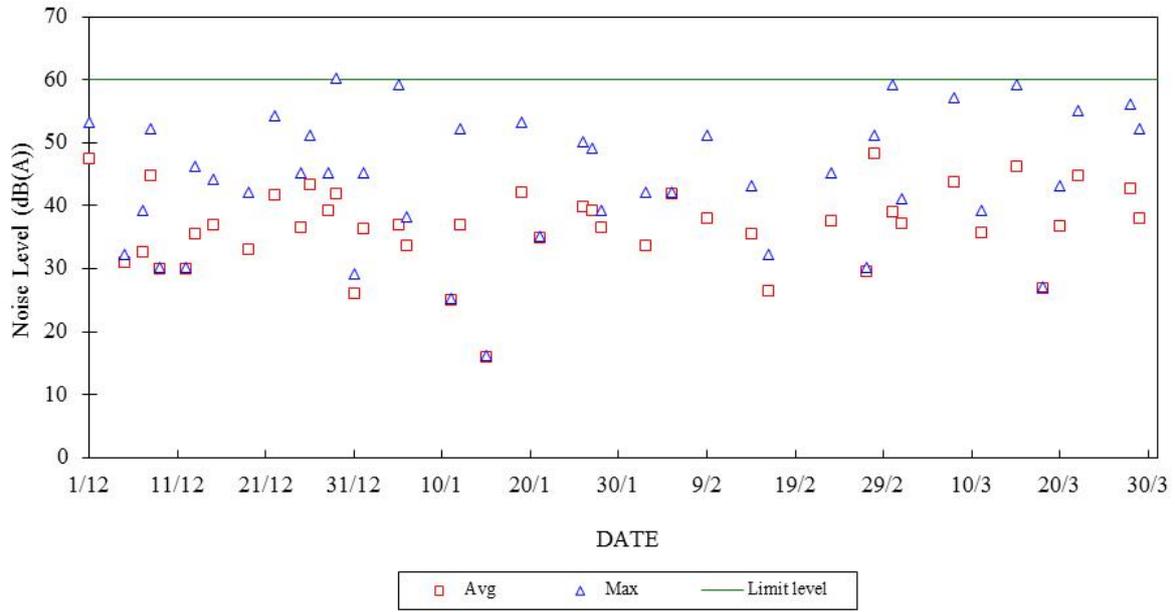


Construction Noise Monitoring in December 2019 - March 2020

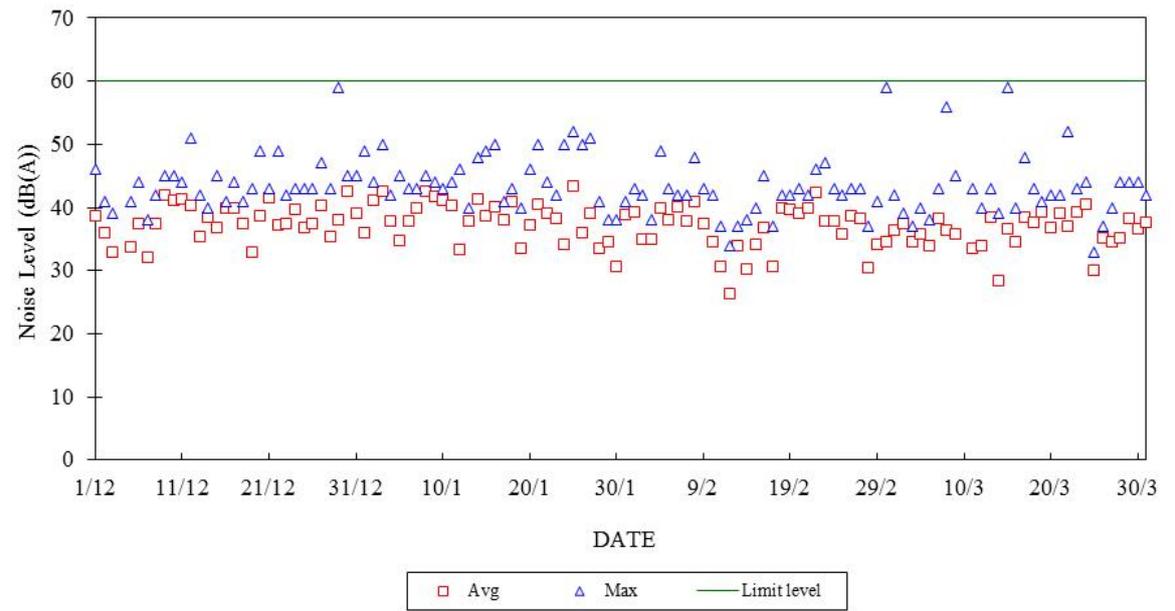
NSR at School within Tai Wan San Tsuen
07:00-19:00 hrs on Normal Weekdays

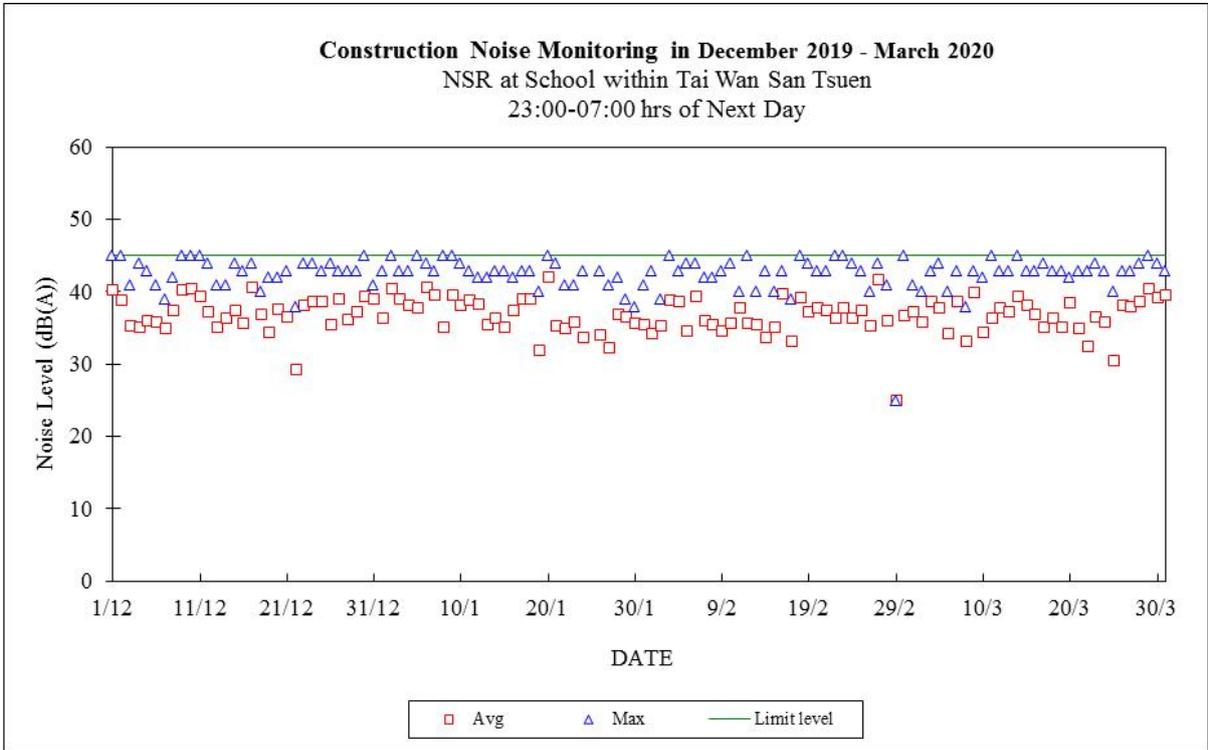
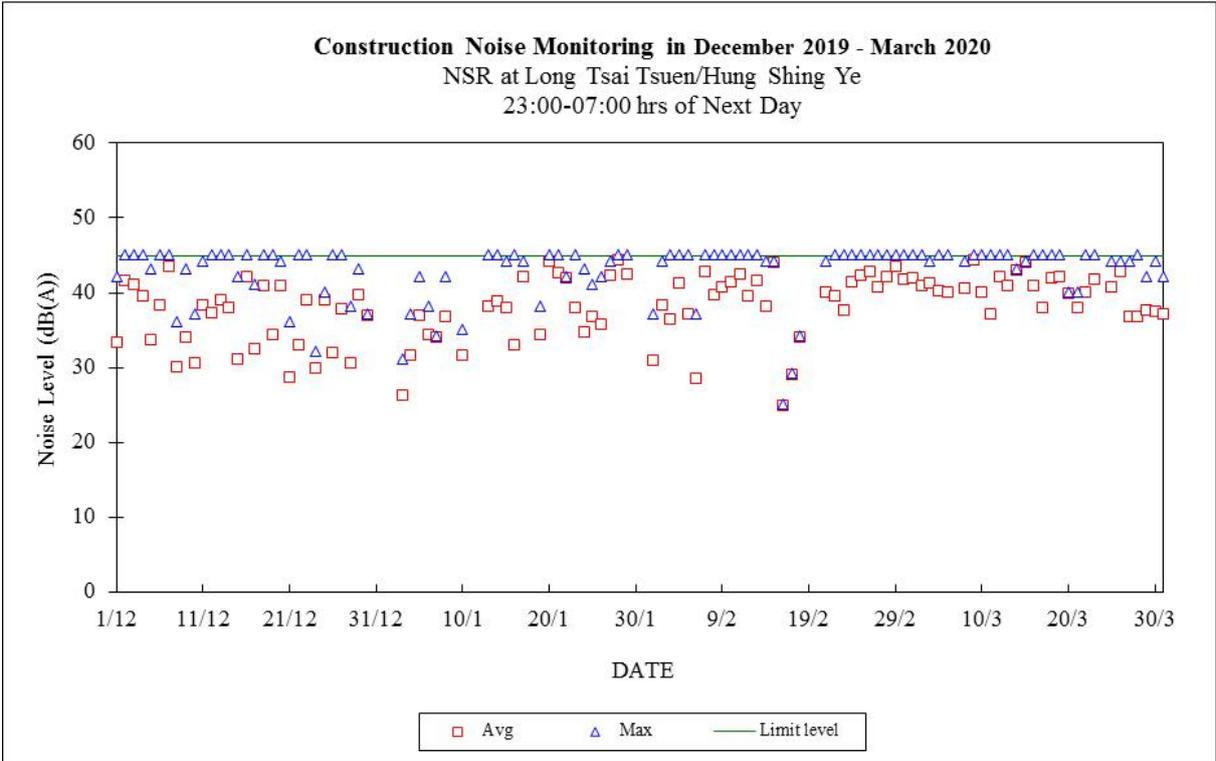


Construction Noise Monitoring in December 2019 - March 2020
 NSR at Long Tsai Tsuen/Hung Shing Ye
 07:00-23:00 hrs on Holidays and 19:00-23:00 hrs on All Other Days



Construction Noise Monitoring in December 2019 - March 2020
 NSR at School within Tai Wan San Tsuen
 07:00-23:00 hrs on Holidays and 19:00-23:00 hrs on All Other Days





Appendix F

The QA/QC Procedures and Results

The Hongkong Electric Co., Ltd.
Lamma Power Station Extension
TEOM Continuous Dust Monitor
Data Quality Assurance Log Sheet

Month: March

Year: 2020

| Reservoir (AM1) | | | | |
|-----------------|-------------------------------|----------------------------|------------------------------------|--|
| Date | Frequency (Hz) (240 - 275) | Operation Mode (Mode 4) | Main Flow (l/min) (2.70 - 3.30) | Bypass Flow (l/min) (12.30 - 15.04) |
| 01/03/2020 | 267.776 | 4 | 2.91 | 13.28 |
| 07/03/2020 | 271.718 | 4 | 3.07 | 13.98 |
| 13/03/2020 | 271.233 | 4 | 3.07 | 13.98 |
| 19/03/2020 | 270.554 | 4 | 3.07 | 14.00 |
| 25/03/2020 | 270.034 | 4 | 3.05 | 13.90 |
| 31/03/2020 | 269.670 | 4 | 3.07 | 13.99 |

| East Gate (AM2) | | | | |
|-----------------|-------------------------------|----------------------------|------------------------------------|--|
| Date | Frequency (Hz) (240 - 275) | Operation Mode (Mode 4) | Main Flow (l/min) (2.70 - 3.30) | Bypass Flow (l/min) (12.30 - 15.04) |
| 01/03/2020 | 256.190 | 4 | 3.01 | 13.70 |
| 07/03/2020 | 255.887 | 4 | 3.02 | 13.77 |
| 13/03/2020 | 255.343 | 4 | 3.05 | 13.88 |
| 19/03/2020 | 254.768 | 4 | 3.05 | 13.89 |
| 25/03/2020 | 256.893 | 4 | 3.07 | 14.00 |
| 31/03/2020 | 256.551 | 4 | 3.08 | 14.02 |

| Ash Lagoon (AM3) | | | | |
|------------------|-------------------------------|----------------------------|------------------------------------|--|
| Date | Frequency (Hz) (240 - 275) | Operation Mode (Mode 4) | Main Flow (l/min) (2.70 - 3.30) | Bypass Flow (l/min) (12.30 - 15.04) |
| 01/03/2020 | 255.773 | 4 | 3.00 | 13.67 |
| 07/03/2020 | 255.487 | 4 | 3.00 | 13.67 |
| 13/03/2020 | 255.113 | 4 | 3.00 | 13.67 |
| 19/03/2020 | 254.598 | 4 | 3.00 | 13.67 |
| 25/03/2020 | 256.149 | 4 | 3.00 | 13.67 |
| 31/03/2020 | 255.848 | 4 | 3.00 | 13.67 |

| Maintenance Record | | | |
|-----------------------------|-----------|-----------|------------|
| | Reservoir | East Gate | Ash Lagoon |
| TEOM Filter Exchange | ✓ | ✓ | ✓ |
| Clean TSP Inlet | ✓ | ✓ | ✓ |
| Replace flow in-line filter | ✓ | ✓ | ✓ |
| Pump Repair | | | |
| Leak Check | ✓ | ✓ | ✓ |
| Flow audit | ✓ | ✓ | ✓ |
| Flow Controller Calibration | | | |
| A/C filter cleaning | | | |

Remarks:

Prepared by: Chris Chan

Checked by: HY Chan

The Hongkong Electric Co., Ltd.
Mini Volume Air Sampler Site Visit Log Sheet

Attendance Log

Site Name: Tai Yuen Village (AM4)

| Date/Time | Staff Name |
|--------------------|----------------------|
| 20/03/2020 / 15:00 | WM Tam / David Tsang |

Equipment / Item

| Equipment / Item | Serial No. / No. |
|-----------------------|------------------|
| MINIVOL | 5580 |
| Used filter paper no. | MQ67 |
| New filter paper no. | MQ68 |

Type of filter: Glass-fibre

- I. Calibration is performed by using Drycal DC-2 Flow Calibrator
5 std. L/min set point is recommended

Before: 5.000
After: 5.025

- II. General Services

1. Clean Rotameter: Yes
2. Clean / Replace Pump Valves: No
3. Clean / Replace Pump Diaphragms: No
4. Clean Impaction Inlet: Yes
5. Replace Timer Battery Every 6 months: No
6. Replace Inlet Filter: Yes

Remarks

N/A

Conducted by: WM Tam / David Tsang

Checked by: SM Hon

The Hongkong Electric Co., Ltd.
Lamma Power Station Extension
Noise Monitoring Station
Site Visit Log Sheet

Location: Ash Lagoon

| Date/Time | Staff Attended |
|--------------------|-----------------|
| 02/03/2020 / 10:50 | WM Tam / TL Chu |

| Equipment | Serial No. |
|-----------|------------|
| B&K 2250 | 3024699 |

1. Calibration

Acoustic calibrator: B&K 4231 (S/N: 3014754)

Noise level measured in calibration: 93.8 (94 ±1.0 dBA)

2. Weather Conditions

a. Cloudy

b. Calm

3. Beacon

Function normally: Yes

4. Remark/Observation

N/A

Prepared by: WM Tam

Checked by: TL Chu

The Hongkong Electric Co., Ltd.
Lamma Power Station Extension
Noise Monitoring Station
Site Visit Log Sheet

Location: Ching Lam

| Date/Time | Staff Attended |
|--------------------|-----------------|
| 09/03/2020 / 14:20 | WM Tam / TL Chu |

| Equipment | Serial No. |
|-----------|------------|
| B&K 2250 | 3008903 |

1. Calibration

Acoustic calibrator: B&K 4231 (S/N: 3014754)

Noise level measured in calibration: 93.9 (94 ±1.0 dBA)

2. Weather Conditions

a. Fine

b. Calm

3. Beacon

Function normally: Yes

4. Remark/Observation

N/A

Prepared by: WM Tam

Checked by: TL Chu

Appendix G Event/Action Plans

Table G.1 Event and Action Plans for Air Quality

| Event | Monitoring | | Action | |
|---|---|--|--|--|
| | ET Leader | IEC | Engineer | Contractor |
| Action Level | | | | |
| Exceedance of one sample | Identify source Inform Engineer and IEC verbally Repeat measurement to confirm finding | Check monitoring data submitted by ET and advise Engineer. | Notify Contractor Checking monitoring data and contractor's working methods | Rectify any unacceptable practice amend any working methods if appropriate |
| Exceedance of two or more consecutive samples | Identify source Inform Engineer and IEC verbally Repeat measurement to confirm finding Increase monitoring frequency Discuss with Engineer and Contractor on remedial actions required If exceedance continues, arrange meeting with Engineer If exceedance stops, discontinue additional monitoring | Check monitoring data submitted by ET and advise Engineer. Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures | Confirm receipt of notification of failure in writing Notify contractor Checking monitoring data and contractor's working methods Discuss proposed remedial actions with the ET and Contractor Ensure remedial actions properly implemented | Submit proposals for remedial actions to Engineer within 3 working days of notifications Implement the agreed proposals Amend proposal if appropriate |
| Limit level | | | | |
| Exceedance of one sample | Repeat measurement to confirm finding. Identify the source(s) of the impact. If the exceedance is found to be valid and due to the Construction works, verbally advise the Contractor, Engineer and IEC, and inform the EPD of the exceedance, as soon as practicable. Increase monitoring frequency to daily Assess the effectiveness of the contractor's remedial actions and keep Engineer, IEC and EPD informed of the results | Check monitoring data submitted by ET and advise Engineer Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures | Confirm receipt of notification of failure in writing Notify Contractor Checking monitoring data and Contractor's working method Discuss with ET and Contractor on remedial actions to be provided Ensure remedial measures properly implemented | Take immediate action to avoid further exceedance Submit proposals for remedial actions to Engineer within 3 working days of notifications Implement the agreed proposals Amend proposal if appropriate |
| Exceedance of two or more | Identify source | Provide feedback to the Engineer on the remedial actions proposed by the | Confirm receipt of notification of | Take immediate action to |

| Event | Monitoring | | | Action | | |
|---------------------|--|--|--|---|--|--|
| | ET Leader | IEC | Engineer | Contractor | | |
| consecutive samples | <p>If the exceedance is found to be valid and due to the construction works, verbally advise the Contractor, Engineer and IEC, and inform the EPD of the exceedance as soon as practicable.</p> <p>Repeat measurement to confirm finding</p> <p>Increase monitoring frequency to daily</p> <p>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented</p> <p>Arrange meeting with Engineer and Contractor to discuss the remedial actions to be taken</p> <p>If exceedance stops, discontinue additional monitoring</p> | <p>ET / Contractor</p> <p>Advise Engineer on the effectiveness of the proposed remedial measures</p> <p>Verify the implementation of the remedial measures</p> | <p>failure in writing</p> <p>Checking monitoring data and Contractor's working methods</p> <p>Notify Contractor</p> <p>Discuss proposed remedial actions with ET and Contractor</p> <p>Ensure remedial measures properly implemented</p> <p>If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop the portion of work until the exceedance is abated</p> | <p>avoid further exceedance</p> <p>Submit proposals for remedial actions to Engineer within 3 working days of notifications</p> <p>Implement the agreed proposals</p> <p>Resubmit proposals if problem still not under control</p> <p>Stop the relevant portion of works as determined by the Engineer until the exceedance is abated</p> | | |

Table G.2 Event and Action Plans for Construction Noise

| Exceedance | ET Leader | IEC | Engineer | Contractor |
|---------------------|---|---|---|---|
| Action Level | Undertake noise measurement/check monitoring data to establish validity of complaint. | Review the analysed results submitted by the ET. | Notify Contractor of the complaint if proven. | Submit proposals for remedial actions to Engineer. |
| | If the complaint is valid, inform Engineer and IEC verbally. | Review the remedial measures proposed by the Contractor and advise the Engineer and ET accordingly. | Check Contractor's working methods and advise IEC and ET accordingly. | Amend proposals if required by the Engineer. |
| | Identify the source(s) of the noise. | Verify the implementation of the remedial measures. | Remind the Contractor of his contractual obligations and discuss remedial actions. | Implement the remedial actions immediately upon instruction from the Engineer. |
| | Discuss remedial actions required with Contractor and Engineer. | | Keep the Contractor informed of the efficacy of remedial actions. | Liaise with the Engineer to optimise the effectiveness of the agreed mitigation. |
| | Increase manual monitoring frequency to assess efficacy of remedial measures. | | | |
| | If exceedance continues, review implementation of appropriate mitigation measures. | | | |
| Limit Level | Repeat manual measurement/check monitoring data to confirm findings. | Agree potential remedial actions with Engineer, ET and Contractor. | Notify Contractor of exceedance. | Take immediate action to avoid further exceedance. |
| | Identify the source(s) of the impact. If the exceedance is found to be valid and due to the Construction works, verbally advise the Contractor, Engineer and IEC, and inform the EPD of the exceedance, as soon as practicable. | Review Contractor's remedial actions / measures to ensure their effectiveness and advise the Engineer and ET accordingly. | Check Contractor's working methods and advise IEC and ET accordingly. Discuss with Contractor the remedial actions to be implemented. | Submit proposals for remedial actions to Engineer. Amend proposals if required by the Engineer. |
| | Discuss remedial actions required with Engineer. | Verify the implementation of the remedial measures | Keep the Contractor informed of the efficacy of remedial actions. If the exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop the portion of work until the exceedance is abated | Implement remedial actions immediately upon instruction from the Engineer. If the exceedance continues, consider what portion of the work is responsible and, as instructed by the Engineer, stop the portion of work until the exceedance is abated |
| | Increase manual monitoring frequency to assess efficacy of remedial measures. | | | |

Table G.3 Event and Action Plans for Water Quality

| Exceedance | ET Leader | IEC | Engineer | Contractor |
|---|--|--|---|---|
| Action level exceeded on one sampling day | Verbally inform the Contractor, and IEC. Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with Engineer and Contractor; Repeat measurement on next day of exceedance. | Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures | Discuss with Contractor the proposed mitigation measures; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures. | Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Propose and discuss mitigation measures with Engineer; Implement the agreed mitigation measures. |
| Action level exceeded on more than one consecutive sampling day | Repeat in-situ measurements to confirm findings; Identify source(s) of impact; Inform Contractor and IEC; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measure with Engineer and Contractor; Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; Repeat measurement on next day of exceedance. | Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures | Discuss with ET and Contractor on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the implemented mitigation measures. | Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Propose mitigation measures to Engineer within 3 working days and discuss with ET and Engineer; Implement the agreed mitigation measures. |
| Limit level exceeded on one sampling day | Verbally inform the Contractor, IEC and the EPD of the exceedance; Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Check monitoring data, all plant, | Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor Advise Engineer on the effectiveness of the proposed remedial measures Verify the implementation of the remedial measures | Discuss with Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Assess the effectiveness of the | Inform the Engineer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Propose mitigation measures to Engineer |

| Exceedance | ET Leader | IEC | Engineer | Contractor |
|---|---|---|--|---|
| | <p>equipment and Contractor's working methods;</p> <p>Discuss mitigation measure with Engineer and Contractor;</p> <p>Ensure mitigation measures are implemented;</p> <p>Increase the monitoring frequency to daily until no exceedance of Limit level.</p> | | <p>implemented mitigation measures.</p> | <p>within 3 working days and discuss with Engineer;</p> <p>Implement the agreed mitigation measures.</p> |
| <p>Limit level exceeded by more than one consecutive sampling day</p> | <p>Repeat in-situ measurement to confirm findings;</p> <p>Identify source(s) of impact;</p> <p>Inform Contractor, IEC and EPD;</p> <p>Check monitoring data, all plant, equipment and Contractor's working methods;</p> <p>Discuss mitigation measure with Engineer and Contractor;</p> <p>Ensure mitigation measures are implemented;</p> <p>Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.</p> | <p>Provide feedback to the Engineer on the remedial actions proposed by the ET / Contractor</p> <p>Advise Engineer on the effectiveness of the proposed remedial measures</p> <p>Verify the implementation of the remedial measures</p> | <p>Discuss with Contractor on the proposed mitigation measures;</p> <p>Request Contractor to critically review the working methods;</p> <p>Make agreement on the mitigation measures to be implemented;</p> <p>Assess the effectiveness of the implemented mitigation measures;</p> <p>Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine works until no exceedance of the Limit Level.</p> | <p>Inform the Engineer and confirm notification of the non-compliance in writing;</p> <p>Rectify unacceptable practice;</p> <p>Check all plant and equipment; Consider changes of working methods;</p> <p>Propose mitigation measures to Engineer within 3 working days and discuss with Engineer;</p> <p>Implement the agreed mitigation measures..</p> <p>As directed by the Engineer, to slow down or to stop all or part of the marine work</p> |

Appendix H Summary of Site Audit Findings

L10 Civil & Building Superstructure Work

Dates of Inspection: 3/3/2020, 10/3/2020, 17/3/2020, 27/3/2020 and 31/3/2020

Summary of Findings

General

- No environmental deficiency identified.

Air Quality

- No environmental deficiency identified.

Noise

- No environmental deficiency identified.

Water Quality

- No environmental deficiency identified.

Waste Management

- No environmental deficiency identified.

L10 Mechanical, Electrical, Instrumentation & Control Erection Work

Dates of Inspection: 5/3/2020, 12/3/2020, 19/3/2020 and 26/3/2020.

Summary of Findings

General

- No environmental deficiency identified.

Air Quality

- No environmental deficiency identified.

Noise

- No environmental deficiency identified.

Water Quality

- No environmental deficiency identified.

Waste Management

- No environmental deficiency identified.

L11 Civil & Building Superstructure Work

Dates of Inspection: 3/3/2020, 10/3/2020, 17/3/2020, 27/3/2020 and 31/3/2020.

Summary of Findings

General

- No environmental deficiency identified.

Air Quality

- No environmental deficiency identified.

Noise

- No environmental deficiency identified.

Water Quality

- No environmental deficiency identified.

Waste Management

- No environmental deficiency identified.

L11 Mechanical, Electrical, Instrumentation & Control Erection Work

Dates of Inspection: 5/3/2020, 12/3/2020, 19/3/2020 and 26/3/2020.

Summary of Findings

General

- No environmental deficiency identified.

Air Quality

- No environmental deficiency identified.

Noise

- No environmental deficiency identified.

Water Quality

- No environmental deficiency identified.

Waste Management

- No environmental deficiency identified.

L12 Piling Foundation Work

Dates of Inspection: 3/3/2020, 10/3/2020, 17/3/2020, 24/3/2020 and 31/3/2020.

Summary of Findings

General

- No environmental deficiency identified.

Air Quality

- No environmental deficiency identified.

Noise

- No environmental deficiency identified.

Water Quality

- No environmental deficiency identified.

Waste Management

- No environmental deficiency identified.

Summary of EMIS

Power Station – (Part B of EIA Report)

Construction Phase Mitigation Measures and their Implementation

| EM&A Log Ref. | Mitigation Measures | Implementation Status |
|---------------|---|-----------------------|
| | AIR QUALITY | |
| A1 | For general construction works, the dust control measures stipulated under the Air Pollution Control (Construction Dust) Regulation shall be complied with, such as: <ul style="list-style-type: none"> the haul roads shall be sprayed with water to keep the entire road surface wet. the load carried by vehicle shall be covered by impervious sheeting to ensure no leakage of dusty materials from the vehicle. the heights from which fill materials are dropped shall be controlled to a practical level to minimise the fugitive dust arising from unloading. | C C C |
| A2 | For the concrete batching plant, the following control measures are recommended: <ul style="list-style-type: none"> loading, unloading, handling, transfer or storage of any dusty materials shall be carried out in a totally enclosed system. The materials which may generate airborne dust emissions shall be wetted by water spray system. All receiving hoppers shall be enclosed on three sides up to 3m above unloading point. All conveyor transfer points shall be totally enclosed. | C C C C |
| | WATER QUALITY | |
| B1 | Silt curtains shall be installed on the eastern, southern and north western sides of the reclamation site during dredging for the reclamation construction. This is a required mitigation measure for the construction works and shall be implemented prior to the commencement of bulk dredging. ** | N/A |
| B3 | As a necessary operational constraint combined bulk dredging and sand filling for site formation shall not be permitted at any time. In addition, sand filling for site platform shall take place behind constructed sea walls which pierce the water surface. ** | N/A |
| B4 | HEC shall ensure design to divert all storm drains away from Hung Shing Ye Bay. ** | N/A |
| B5 | Sand fill for the rubble mound seawalls shall be placed by controlled pumping down the trailer arm. ** | N/A |
| B6 | EM&A shall confirm the acceptability of any impacts during construction and should any unacceptable impacts be found then one or more of the following mitigation measures shall be implemented: ** <ul style="list-style-type: none"> reducing the number of dredgers working at any one time; reducing the rate of working of the dredgers; temporary suspension of operations; phasing of the works so that dredging / filling is only undertaken at certain stages of the tidal cycle. | N/A |

| EM&A Log Ref. | Mitigation Measures | Implementation Status |
|---------------------------------------|---|--|
| B7 | <p>In addition to the above specific measures the following general working procedures shall be adopted. **</p> <ul style="list-style-type: none"> • fully-enclosed or watertight grabs shall be used to minimise loss of sediment during the raising of loaded grabs through the water column; • the descent speed of grabs shall be controlled to minimise the seabed impact speed and to reduce the volume of over dredging; • barges shall be loaded carefully to avoid splashing of material; • all barges used for the transport of dredged materials shall be fitted with tight bottom seals in order to prevent leakage of material during loading and transport; • all barges shall be filled to a level which ensures that material does not spill over during loading and transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action; • the speed of trailer dredgers shall be controlled to prevent propeller wash from stirring up the sea bed sediments; • "rainbowing" sand fill from trailer dredgers shall not be permitted; and • the works shall cause no visible foam, oil, grease or litter or other objectionable matter to be present in the water within and adjacent to the dredging site and along the route to the disposal site. | |
| B8 | <p>Cumulative impacts shall be assessed through EM&A. Co-ordination with the EM&A consultants for other projects to determine if any exceedances are caused by the other projects or by HEC's activities. Should monitoring results indicate exceedances at sensitive receivers due to HEC's activities, then the above described mitigation measures shall be implemented until impacts reduce to acceptable levels. **</p> | N/A |
| | | |
| NOISE | | |
| C1 | General noise mitigation measures shall be employed at all work sites throughout the construction phase. | C |
| C2 | Mitigate against general construction noise during Sunday's and public holidays, either at source with portable noise barriers, or by rescheduling of some PME's to less sensitive time periods. | C |
| C3 | Mitigate against night time noise from dredging equipment, with silencers or mufflers. ** | N/A |
| | | |
| LANDSCAPE & VISUAL IMPACTS | | |
| D1 | <p>The following mitigation measures shall be allowed for landscape and visual improvement:</p> <ul style="list-style-type: none"> • Use rubble mound seawall along south and west edges of the reclamation to provide a more natural look. • Break the mass of main buildings by varying the height/division into smaller units. • Plant trees and vegetation for screening. • Adopt colour scheme to blend the buildings into the scenery. | |

| EM&A Log Ref. | Mitigation Measures | Implementation Status |
|--|--|-----------------------|
| | | |
| WASTE MANAGEMENT | | |
| E1 | HEC to submit a Waste Management Plan for the construction phase to EPD. The Plan shall be verified by the IEC and shall describe the arrangements for avoidance, reuse, recovery and recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities and shall take into account the recommendations of the EIA report. | C |
| <i>Dredging Waste</i> | | |
| E2 | All vessels for marine transportation of dredged sediment shall be fitted with tight fitting seals to their bottom openings to prevent leakage of materials. In addition, loading of barges and hoppers shall be controlled to prevent splashing of dredged material into the surrounding water, and barges or hoppers should under no circumstances be filled to a level which shall cause the overflowing of materials or polluted water during loading or transportation** | N/A |
| <i>Storage, Collection and Transport of Waste</i> | | |
| E3 | <ul style="list-style-type: none"> • Minimise windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed containers. | C |
| | <ul style="list-style-type: none"> • Obtain the necessary waste disposal permits from the appropriate authorities, if they are required, in accordance with the Waste Disposal Ordinance (Cap.354), Waste Disposal (Chemical Waste) (General) Regulation (Cap.354), the Crown Land Ordinance (Cap 28), Dumping at Sea Ordinance (Cap 466) and Work Branch Technical Circular No. 22/92, Marine Disposal of Dredged Mud. | C |
| | <ul style="list-style-type: none"> • Disposal of waste at Licensed sites; | C |
| | <ul style="list-style-type: none"> • Develop procedures such as a ticketing system to facilitate tracking of marine mud and chemical waste, and to ensure that illegal disposal does not occur; | C |
| | <ul style="list-style-type: none"> • Segregate and sort the waste materials into 3 categories: <ul style="list-style-type: none"> • public fill (e.g. concrete and rubble) for re-use on-site or disposal at a public filling area; • re-use and/or recycling waste (e.g. steel and other metals); • waste which cannot be re-used and/or recycled (e.g. wood, glass and plastic) for landfill disposal. • The sorting process shall be carefully monitored to avoid missing of the 3 categories. Different types of wastes shall be stockpiled and stored in different containers or skips to enhance re-use or recycling of materials and their proper disposal. | C |
| <ul style="list-style-type: none"> • Maintain records of the quantities of wastes generated and disposed off-site for each category of waste. | C | |
| E4 | Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes | C |
| | | |
| LAND CONTAMINATION | | |
| F1 | No land Contamination mitigation measures are required during the construction phase. | N/A |
| | | |
| MARINE ECOLOGY | | |

| EM&A Log Ref. | Mitigation Measures | Implementation Status |
|--------------------------|---|------------------------------|
| G1 | All percussive piling works shall be conducted on reclaimed land to avoid noise impact to marine mammals** | N/A |
| G2 | All construction related vessels shall approach the extension site from the north and via the East Lamma Channel to avoid disturbance to the finless porpoise** | N/A |
| G3 | Rubble mound seawall to the south and west edges of the reclamation to enhance recolonisation of marine organisms** | N/A |
| G4 | Artificial Reefs of a volume not less than 400 m ³ shall be deployed in a location to be decided upon consultation with the Director of Agriculture and Fisheries to serve the purpose of an Additional Habitat Enhancement Measure.** | N/A |
| FISHERIES | | |
| H1 | No Fisheries-specific mitigation measures are required during the construction phase. | N/A |
| RISK ASSESSMENT | | |
| I1 | No risk mitigation measures are required during the construction phase. | N/A |

Remarks:

- ** - No dredging and reclamation work would be involved for L10 & L11 construction
- C - Compliance with mitigation measure
- NC - Non-compliance with mitigation measure
- N/A - Not Applicable

16/8002 Outstanding Work Programme

16-8002 OS Work Prog (04 Nov 19)_BC

Wed 4/3/20

| ID | Task Name | Duration | Start | Finish | 20 | | |
|----|---|-----------------|--------------------|---------------------|--------------|----------|-----------|
| | | | | | April 2020 | May 2020 | June 2020 |
| 1 | 16/8002 Unit 10 Outstanding Work Programme | 521 days | Sat 1/12/18 | Thu 14/5/20 | ▼ 14 May '20 | | |
| 2 | Unit 10 MSB & HRSG | 368 days | Sat 1/12/18 | Fri 13/12/19 | | | |
| 3 | Superstructure | 340 days | Sat 1/12/18 | Fri 15/11/19 | | | |
| 53 | External Works | 15 days | Fri 1/11/19 | Fri 15/11/19 | | | |
| 54 | EVA North MSB & HRSG | 15 days | Fri 1/11/19 | Fri 15/11/19 | | | |
| 55 | Curb surrounding Feed Water Pump | 6 days | Mon 4/11/19 | Sat 9/11/19 | | | |
| 56 | Road base near West & along cable trench | 7 days | Fri 1/11/19 | Thu 7/11/19 | | | |
| 57 | Road paving near West & along cable trench | 12 days | Mon 4/11/19 | Fri 15/11/19 | | | |
| 58 | Conduits for streetlight and fs signal | 5 days | Mon 4/11/19 | Fri 8/11/19 | | | |
| 59 | Road base near East | 2 days | Sat 9/11/19 | Sun 10/11/19 | | | |
| 60 | Road paving near East | 5 days | Mon 11/11/19 | Fri 15/11/19 | | | |
| 61 | EVA West MSB | 7 days | Fri 8/11/19 | Thu 14/11/19 | | | |
| 62 | Road base near South | 2 days | Fri 8/11/19 | Sat 9/11/19 | | | |
| 63 | Road paving | 2 days | Sun 10/11/19 | Mon 11/11/19 | | | |
| 64 | Relocate hoarding and Gate 39 | 3 days | Tue 12/11/19 | Thu 14/11/19 | | | |
| 65 | EVA South MSB & HRSG | 12 days | Mon 4/11/19 | Fri 15/11/19 | | | |
| 66 | Road base near West | 2 days | Fri 8/11/19 | Sat 9/11/19 | | | |
| 67 | Road paving near West | 2 days | Sun 10/11/19 | Mon 11/11/19 | | | |
| 68 | Conduits for streetlight and fs signal near East | 4 days | Mon 4/11/19 | Thu 7/11/19 | | | |
| 69 | Road base near East | 3 days | Fri 8/11/19 | Sun 10/11/19 | | | |
| 70 | Road paving near East | 3 days | Mon 11/11/19 | Wed 13/11/19 | | | |
| 71 | Extend hoarding to the East | 2 days | Thu 14/11/19 | Fri 15/11/19 | | | |
| 72 | EVA East HRSG | 14 days | Sat 2/11/19 | Fri 15/11/19 | | | |
| 73 | Surface channel outside HRSG Equipment Room | 4 days | Mon 4/11/19 | Thu 7/11/19 | | | |
| 74 | Remaining on-grade slab at HRSG | 6 days | Fri 8/11/19 | Wed 13/11/19 | | | |
| 75 | 300mm dia. drain to new surface channel | 5 days | Sat 2/11/19 | Wed 6/11/19 | | | |
| 76 | New surface drain u channel | 5 days | Mon 4/11/19 | Fri 8/11/19 | | | |
| 77 | Conduits for streetlight and fs signal | 3 days | Wed 6/11/19 | Fri 8/11/19 | | | |
| 78 | Road base | 2 days | Sat 9/11/19 | Sun 10/11/19 | | | |
| 79 | Road paving | 5 days | Mon 11/11/19 | Fri 15/11/19 | | | |
| 80 | Erect hoarding and gate | 2 days | Thu 14/11/19 | Fri 15/11/19 | | | |
| 81 | Installation of pole for traffic sign@EVA | 8 days | Wed 6/11/19 | Wed 13/11/19 | | | |

16-8002 OS Work Prog (04 Nov 19) Critical Split Split Summary ▼

Task  Milestone ◆

16/8002 Outstanding Work Programme

16-8002 OS Work Prog (04 Nov 19)_BC

| ID | Task Name | Duration | Start | Finish | 20 | | |
|-----|---|-----------------|---------------------|---------------------|---|----------|-----------|
| | | | | | April 2020 | May 2020 | June 2020 |
| 82 | Cleaning and complete remaining works inside manholes@EVA | 14 days | Wed 30/10/19 | Tue 12/11/19 | | | |
| 83 | Street lighting | 12 days | Mon 4/11/19 | Fri 15/11/19 | | | |
| 84 | Lift @ HRSG Installation (Temporary) | 30 days | Fri 1/11/19 | Sat 30/11/19 | | | |
| 85 | Statutory Submissions & Inspection (Incl. HRSG) | 368 days | Sat 1/12/18 | Fri 13/12/19 | | | |
| 96 | C.W. Pump, Intake and Urea Plant and Outstanding External Works | 34 days | Mon 28/10/19 | Sat 30/11/19 | | | |
| 97 | C.W. Pump Area incl. Chlorination Area | 18 days | Mon 4/11/19 | Thu 21/11/19 | | | |
| 98 | Conduits for streetlight and fs signal@ footpath | 5 days | Mon 4/11/19 | Fri 8/11/19 | | | |
| 99 | Road Reinstatement at Demin. Plant Road | 8 days | Sat 9/11/19 | Sat 16/11/19 | | | |
| 100 | Relocation Hoarding to middle road and return area to GEN | 5 days | Sun 17/11/19 | Thu 21/11/19 | | | |
| 101 | Urea Plant + Middle Road | 29 days | Sat 2/11/19 | Sat 30/11/19 | | | |
| 102 | Storm drain to Gully@ MH837 | 6 days | Mon 4/11/19 | Sat 9/11/19 | | | |
| 103 | Storm drain MH831 to MH832 | 6 days | Wed 6/11/19 | Mon 11/11/19 | | | |
| 104 | FS pipes at Junction of Intake Road and Middle Road | 4 days | Tue 5/11/19 | Fri 8/11/19 | | | |
| 105 | New Oily Drain installation and diversion of FS & foam pipe | 3 days | Sat 9/11/19 | Mon 11/11/19 | | | |
| 106 | Road Base@ Intake Road | 3 days | Tue 12/11/19 | Thu 14/11/19 | | | |
| 107 | Paving@ Intake Road | 3 days | Fri 15/11/19 | Sun 17/11/19 | | | |
| 108 | Reinstatement of irrigation pipes | 3 days | Wed 6/11/19 | Fri 8/11/19 | | | |
| 109 | Ramp of Urea Shelter at North | 3 days | Thu 7/11/19 | Sat 9/11/19 | | | |
| 110 | Conduits for streetlight and fs signal@ Middle Road & junction of Demin. Plant Road | 14 days | Mon 4/11/19 | Sun 17/11/19 | | | |
| 111 | Road Kerb | 12 days | Sat 2/11/19 | Wed 13/11/19 | | | |
| 112 | Road Base | 5 days | Thu 14/11/19 | Mon 18/11/19 | | | |
| 113 | Road Paving | 8 days | Tue 19/11/19 | Tue 26/11/19 | | | |
| 114 | Installation of pole for traffic sign@EVA | 3 days | Sun 24/11/19 | Tue 26/11/19 | | | |
| 115 | Erect hoarding and gate | 4 days | Wed 27/11/19 | Sat 30/11/19 | | | |
| 116 | Other & External works | 14 days | Mon 28/10/19 | Sun 10/11/19 | | | |
| 118 | Rectification of Defects after OP Inspection and before handover to GEN | 74 days | Mon 2/3/20 | Thu 14/5/20 | 14 May '20 | | |
| 119 | MSB Rectification and cleaning works | 45 days | Mon 2/3/20 | Wed 15/4/20 | MSB Rectification and cleaning works | | |
| 120 | Urea Plant Rectification and cleaning works | 60 days | Mon 16/3/20 | Thu 14/5/20 | Urea Plant Rectification and cleaning works | | |

16-8002 OS Work Prog (04 Nov 19) Critical Split Split Summary ▼

Task [Pattern] Milestone ◆

SCHEDULE C. Contract No. 16/2209
Lamma Power Station Extension - Unit 10
Complete Erection, Inspection, Testing &
Commissioning of Power Block Facilities

Appendix J

| No. | Description | 2020 | 2020 | 2020 |
|----------|--|------|------|------|
| | | Apr | May | June |
| | Erection Key Date | | | |
| A | HRSG PORTION | | | |
| A-01 | Install Casing (Bottom/Side/Top) with Structure | | | |
| A-02 | Upper/Lower Connection Pipe | | | |
| A-03 | Module Install (Bundle Tube Block) | | | |
| A-04 | Down Commer Pipe | | | |
| A-05 | Drum Lifting / HDR Level Adjustment | | | |
| A-06 | Critical Piping/connecting piping (Main Steam, Aux, R/H, HP/LP Feed Water) | | | |
| A-07 | Other piping | | | |
| A-08 | Access Platform / Hand Rail | | | |
| A-09 | Inside Baffle Plate & Seismic Tie Adjust / Setting | | | |
| A-10 | SCR System | | | |

SCHEDULE C. Contract No. 16/2209
 Lamma Power Station Extension - Unit 10
 Complete Erection, Inspection, Testing &
 Commissioning of Power Block Facilities

| No. | Description | 2020 | 2020 | 2020 |
|------|---|------|------|------|
| | | Apr | May | June |
| | Erection Key Date | | | |
| | | | | |
| A-11 | Inlet Duct Structure / Include Pipe Rack (U9-U10 Connection) | | | |
| A-12 | Inlet Duct | | | |
| A-13 | Exhaust Duct Structure | | | |
| A-14 | Exhaust Duct | | | |
| A-15 | Aux Equip(B/D Tank, HP/IP Feed Water Pump, LP Eco Recirculation Pump, etc.) HP/IP Feed Water Pump Reserve feed water Tank | | | |
| A-16 | Insulation | | | |
| A-17 | Painting | | | |
| A-18 | Install Catalyst | | | |
| A-19 | Steam Blowing out(other scope) & alkaline boiling out | | | |

SCHEDULE C. Contract No. 16/2209
Lamma Power Station Extension - Unit 10
Complete Erection, Inspection, Testing &
Commissioning of Power Block Facilities

Appendix J

| No. | Description | 2020 | 2020 | 2020 |
|----------|--|------|------|------|
| | | Apr | May | June |
| | Erection Key Date | | | |
| | Installation of Temporary piping, Support & Silencer Exection of Steam blowing out Dismantle of Temporary iping, Support & Silencer Exection of Steam boiling out | | | |
| B | GT/ST/GEN PORTION | | | |
| B-1 | Turbine O/H Crane | | | |
| B-2 | Condenser | | | |
| B-3 | Install ST | | | |

SCHEDULE C. Contract No. 16/2209
Lamma Power Station Extension - Unit 10
Complete Erection, Inspection, Testing &
Commissioning of Power Block Facilities

| No. | Description | 2020 | 2020 | 2020 |
|-----|--------------------------|------|------|------|
| | | Apr | May | June |
| | Erection Key Date | | | |
| | | | | |
| B-4 | Install GEN | | | |
| B-5 | Install GT | | | |

SCHEDULE C. Contract No. 16/2209
Lamma Power Station Extension - Unit 10
Complete Erection, Inspection, Testing &
Commissioning of Power Block Facilities

| No. | Description | 2020 | 2020 | 2020 |
|-----|--------------------------------------|------|------|------|
| | | Apr | May | June |
| | Erection Key Date | | | |
| | | | | |
| B-6 | Aux Equipment | | | |
| B-7 | Insulation | | | |
| B-8 | Painting | | | |
| B-9 | Switchgear/Hoist/Hoist for condenser | | | |
| | | | | |

SCHEDULE C. Contract No. 16/2209
Lamma Power Station Extension - Unit 10
Complete Erection, Inspection, Testing &
Commissioning of Power Block Facilities

Appendix J

| No. | Description | 2020 | 2020 | 2020 |
|----------|--|------|------|------|
| | | Apr | May | June |
| | Erection Key Date | | | |
| C | ERECTION & INSTRUMENTATION PORTION | | | |
| C-1 | Transformer & Ancillaries (G Tx, U Tx, Ex Tx, SFC Tx) | | | |
| C-2 | EQUIPMENT INSTALLATION | | | |
| | Generator & Ancillaries | | | |
| | Isolated Phase Busducts | | | |
| | Switchgear and Accessories | | | |
| | UPS, Batterys, Battery Charger System & DBs | | | |
| | Electrical Panels & Local Control Panels | | | |
| | Control Systems, Control Panels, Local Instrument Cubicle & Rack | | | |
| | Channel Base Installation | | | |
| | | | | |
| C-3 | CABLING SYSTEM INSTALLATION | | | |
| | Cable Ladder / Tray Installation | | | |
| | Conduit Pipe Installation | | | |
| | Earthing Installation | | | |
| | Cable Laying & Termination | | | |
| | Fire Resistant Sealing | | | |
| | Cable Trench Opening & Transportation | | | |
| | | | | |
| | | | | |

SCHEDULE C. Contract No. 16/2209
 Lamma Power Station Extension - Unit 10
 Complete Erection, Inspection, Testing &
 Commissioning of Power Block Facilities

| No. | Description | 2020 | 2020 | 2020 |
|-----|---|------|------|------|
| | | Apr | May | June |
| | Erection Key Date | | | |
| C-4 | INSTRUMENTS, INSTR. PIPINGS & AIR TUBE | | | |
| | Local Instruments, Piping & Tubing | | | |
| | Instrument Calibration | | | |
| | | | | |
| C-5 | OTHER WORK | | | |
| | 275kV Shunt Reactor Relocation | | | |
| | Turbine Overhead Crane, Hoist, Battery Power Supply | | | |
| | Existing CWP etc. | | | |
| | BOP & Other Works | | | |
| | Site Cleaning | | | |
| | | | | |
| C-6 | TESTING & COMMISSIONING | | | |
| | Testing & Commissioning | | | |
| | Commissioning Assistant | | | |
| C-7 | Lift Shaft installation | ●—● | | |

| ID | Task Name | Duration | Start | Finish | Timeline | | |
|----|---|------------------|---------------------|--------------------|--|---|-----------|
| | | | | | April 2020 | May 2020 | June 2020 |
| 1 | Civil and Building Works for Unit 11 and Associated Works | 1197 days | Fri 1/6/18 | Thu 30/9/21 | | | |
| 2 | Contract Key Dates | 1197 days | Fri 1/6/18 | Thu 30/9/21 | | | |
| 3 | Contract Commencement Date | 0 days | Fri 1/6/18 | Fri 1/6/18 | | | |
| 4 | Completion Dates | 1044 days | Wed 31/10/18 | Thu 30/9/21 | | | |
| 5 | Section A1 - Ground treatment installation works at Zone 1A | 0 days | Wed 31/10/18 | Wed 31/10/18 | | | |
| 6 | Section A2 - Ground treatment installation works at Zone 1B | 0 days | Wed 31/10/18 | Wed 31/10/18 | | | |
| 7 | Section A3 - Ground treatment installation works at Zone 2 | 0 days | Sun 17/3/19 | Sun 17/3/19 | | | |
| 8 | Section A4 - Ground treatment installation works at Zone 3 | 0 days | Thu 21/3/19 | Thu 21/3/19 | | | |
| 9 | Section A5 (i) - Ground treatment installation works at Zone 4 - Band drain installation | 0 days | Thu 28/3/19 | Thu 28/3/19 | | | |
| 10 | Section A5 (ii) - Ground treatment installation works at Zone 4 - Surcharge filling | 0 days | Wed 30/9/20 | Wed 30/9/20 | | | |
| 11 | Section A6 (i) - A&A Works for No. 4 C.W. Outfall at Area E18 | 0 days | Sat 28/3/20 | Sat 28/3/20 | Section A6 (i) - A&A Works for No. 4 C.W. Outfall at Area E18 | | |
| 12 | Section A6 (ii) - External works at Area E15 | 0 days | Sat 15/2/20 | Sat 15/2/20 | | | |
| 13 | Section B1 (i) - Area south of L11 MSB and HRSG from GL11-F eastwards leading to Chimney Road at Area E1 & E2 | 0 days | Sun 1/3/20 | Sun 1/3/20 | Area south of L11 MSB from GL11-F eastwards leading to Chimney Road at Area E1 & E2 | | |
| 14 | Section B1 (ii) - Supporting structures for overhead cranes of L11 MSB including the associated roof structure except the roof deferred works | 0 days | Tue 17/3/20 | Tue 17/3/20 | Supporting structures for overhead cranes of L11 MSB including the associated roof structure except the roof deferred works | | |
| 15 | Section B1 (iii) - FSRU Civil works at Area E13 | 0 days | Mon 31/5/21 | Mon 31/5/21 | | | |
| 16 | Section B2 - Retractable Cover D at Area E22 | 0 days | Tue 31/3/20 | Tue 31/3/20 | Section B2 - Retractable Cover D at Area E22 | | |
| 17 | Section B3 - External works at Area B1, D2 and D4 | 0 days | Thu 30/4/20 | Thu 30/4/20 | | Section B3 - External works at Area B1, D2 and D4 | |
| 18 | Section C1 - Area south of L11 MSB from GL11-F westwards leading to Station Road at Area E3(A) & E3(B) | 0 days | Sun 1/3/20 | Sun 1/3/20 | Area south of L11 MSB from GL11-F westwards leading to Station Road at Area E3(A) & E3(B) | | |
| 19 | Section C2 - (i) Southern part of L11 HRSG area and its surrounding at Area E7 except the deferred works for Lube Oil Storage Tank | 0 days | Sun 1/12/19 | Sun 1/12/19 | | | |
| 20 | Section C2 - (ii) L11 Turbo Block foundation including the L11 MSB ground floor together with the equipment foundations between GL 11-F to 11-H and 11-1 to 11-6 for the installation of power generator, air inlet duct and lube oil reservoir | 0 days | Thu 30/4/20 | Thu 30/4/20 | | Section C2 - (ii) L11 Turbo Block foundation including the L11 MSB ground floor together with the equipment foundations between GL 11-F to 11-H and 11-1 to 11-6 for the installation of power generator, air inlet duct and lube oil reservoir | |
| 21 | Section C2 - (iii) G/F of L11 MSB including the Condenser Pit, Circulating Water Pipe Pit and equipment foundations between GL 11-B to 11-C and 11-1 to 11-6 for the installation of condenser | 0 days | Sun 1/3/20 | Sun 1/3/20 | Condenser Pit, Circulating Water Pipe Pit and equipment foundations between GL 11-B to 11-C and 11-1 to 11-6 for the installation of condenser | | |
| 22 | Section D - (i) Roads and external grounds surrounding L11 MSB and L11 HRSG in addition to the southern & eastern areas mentioned above in Area E5 and E6 | 0 days | Tue 31/12/19 | Tue 31/12/19 | Roads and external grounds surrounding L11 MSB and L11 HRSG in addition to the southern & eastern areas mentioned above in Area E5 and E6 | | |
| 23 | Section D - (ii) Remaining northern part of L11 HRSG area and its surrounding in Area E6 | 0 days | Sun 1/3/20 | Sun 1/3/20 | Remaining northern part of L11 HRSG area and its surrounding in Area E6 | | |
| 24 | Section D - (iii) Whole of L11 MSB including the pipe and cable rack along south façade of L11 MSB with all underground utilities at Area E4 including C.W. Inlet and Outlet Culvert except the deferred works | 0 days | Thu 30/4/20 | Thu 30/4/20 | | Section D - (iii) Whole of L11 MSB including the pipe and cable rack along south façade of L11 MSB with all underground utilities at Area E4 including C.W. Inlet and Outlet Culvert except the deferred works | |
| 25 | Section D - (iv) Link Bridge between L10 and L11 MSB and at the south of L11 MSB including their associated alternations & additions (A&A) Works at L10 MSB | 0 days | Thu 30/4/20 | Thu 30/4/20 | | Section D - (iv) Link Bridge between L10 and L11 MSB and at the south of L11 MSB including their associated alternations & additions (A&A) Works at L10 MSB | |
| 26 | Section D - (v) Gas Duct Foundation, Pipe and Cable Rack and associated trench in Area E20 | 0 days | Sat 1/2/20 | Sat 1/2/20 | | | |
| 27 | Section E1 - (i) Link Bridge and Pipe and Cable Rack connecting L11 MSB to the western area of L11 MSB at Area E3 | 0 days | Mon 28/9/20 | Mon 28/9/20 | | | |
| 28 | Section E1 - (ii) Gas Receiving Station and L11 Gas Receiving Station Equipment Room (GRS) Area Extension at Area E16 | 0 days | Tue 30/6/20 | Tue 30/6/20 | | | |
| 29 | Section E1 - (iii) External Works at Area E15 (C) | 0 days | Sun 28/2/21 | Sun 28/2/21 | | | |
| 30 | Section E2 - Pipe and Cable Rack and trench at west of Chimney Road and Pipe and Cable Rack at south of Middle Road at Area E8 and E19 | 0 days | Thu 17/9/20 | Thu 17/9/20 | | | |
| 31 | Section E3 - Gas Pipe Support Foundation and Pipe Trench and associated external works at Area E14, E15 (A) and E15 (B) | 0 days | Tue 30/6/20 | Tue 30/6/20 | | | |
| 32 | Section E4 - 275kV cable trenching works connecting the 275kV Switching Station Extension and L11 MSB at Area E9 (A) | 0 days | Sun 15/9/19 | Sun 15/9/19 | | | |
| 33 | Section F - 275kV Station Building Extension and associated works at Area E17 | 0 days | Sat 30/5/20 | Sat 30/5/20 | | Section F - 275kV Station Building Extension and associated works at Area E17 | |
| 34 | Section G - A&A Works at No. 4 C.W. Intake at Area E12 | 0 days | Sun 31/5/20 | Sun 31/5/20 | | Section G - A&A Works at No. 4 C.W. Intake at Area E12 | |
| 35 | Section H - L11 Steel flue liner at No. 4 Chimney | 0 days | Mon 15/7/19 | Mon 15/7/19 | | | |

| ID | Task Name | Duration | Start | Finish | Timeline | | |
|----|---|-----------------|--------------------|---------------------|------------|---|--|
| | | | | | April 2020 | May 2020 | June 2020 |
| 36 | Section I - (i) 275kV cable trenching works connecting the 275kV Switching Station Extension and L11 MSB at Area E9 (B) | 0 days | Fri 15/5/20 | Fri 15/5/20 | | | ◆ Section I - (i) 275kV cable trenching works connecting the 275kV Switching Sta |
| 37 | Section I - (ii) Interconnector 2 Trench Modification Works at Area E10 | 0 days | Fri 15/5/20 | Fri 15/5/20 | | | ◆ Section I - (ii) Interconnector 2 Trench Modification Works at Area E10 |
| 38 | Section J - (i) Demolition of Retractable Cover A&B & (ii) Foundation of LMX Light Oil Storage Tank Nos. 3 & 4 and A&A for Existing Bund Wall at | 0 days | Fri 30/4/21 | Fri 30/4/21 | | | |
| 39 | Section K1 - External works at Area 15 (E) and 15(F) | 0 days | Mon 31/5/21 | Mon 31/5/21 | | | |
| 40 | Section K2 - Removal of Southern Bund and External Works at Area D5, D6 and D7 | 0 days | Mon 31/5/21 | Mon 31/5/21 | | | |
| 41 | Section K3 - All remaining works shall be completed for reporting completion to BD and ready for OP inspection | 0 days | Thu 30/9/21 | Thu 30/9/21 | | | |
| 42 | General & Preliminary | 318 days | Fri 1/6/18 | Wed 24/4/19 | | | |
| 43 | Set up Temporary Site Office and Utilities | 90 days | Fri 1/6/18 | Wed 29/8/18 | | | |
| 44 | Permit Applications & Statuary Submissions | 120 days | Thu 30/8/18 | Thu 27/12/18 | | | |
| 45 | Existing Utilities scanning & Excavation Permit | 45 days | Tue 13/11/18 | Thu 27/12/18 | | | |
| 46 | Tower Crane erection 2@MSB, 1@ 275 | 50 days | Wed 6/3/19 | Wed 24/4/19 | | | |
| 47 | Submission and Approval | 554 days | Fri 1/6/18 | Mon 16/12/19 | | | |
| 48 | Method Statement / Temp Work Submission & Approval from HEC for General Works | 240 days | Fri 1/6/18 | Sat 26/1/19 | | | |
| 49 | BD Approval & Consent (If required) | 120 days | Fri 1/6/18 | Fri 28/9/18 | | | |
| 50 | BIM Model, CSD & CBWD Submission & Approval from HEC | 200 days | Sat 29/9/18 | Fri 26/4/19 | | | |
| 51 | Structure Steelwork Connection Design Submission & BD Approval | 60 days | Sat 29/9/18 | Tue 27/11/18 | | | |
| 52 | Structure Steelwork Shop Drawing & Approval | 60 days | Sat 13/10/18 | Tue 11/12/18 | | | |
| 53 | Metal Cladding, louvre & windows submission & BD Approval | 60 days | Wed 28/11/18 | Sat 26/1/19 | | | |
| 54 | Metal Cladding, louvre & windows shop drawing submission | 60 days | Wed 12/12/18 | Tue 19/2/19 | | | |
| 55 | Order, Off Site Fabrication and Delivery (S. Steel & Cladding & louvres) | 180 days | Sat 27/10/18 | Sat 4/5/19 | | | |
| 56 | Retractable Cover D BD Submission & Approval | 90 days | Wed 20/2/19 | Mon 20/5/19 | | | |
| 57 | No. 4 C.W. Outfall A&A BD 1st Submission | 90 days | Thu 30/8/18 | Tue 27/11/18 | | | |
| 58 | Submission & Approval of Steel Flue Assessment Report and Design Drawings | 60 days | Sun 30/9/18 | Wed 28/11/18 | | | |
| 59 | Submission and Approval of Steel Flue Design from BD | 60 days | Sun 30/9/18 | Wed 28/11/18 | | | |
| 60 | Material Fabrication & Delivery for L11 Flue | 100 days | Mon 15/10/18 | Tue 22/1/19 | | | |
| 61 | Folding Shutters Shop Drawing Submission & Approval | 120 days | Wed 20/2/19 | Wed 19/6/19 | | | |
| 62 | Fabrication & Delivery of Folding Shutters | 150 days | Thu 20/6/19 | Sat 16/11/19 | | | |
| 63 | Sewage Pump System Design submission & approval | 90 days | Fri 22/3/19 | Wed 19/6/19 | | | |
| 64 | Fabrication & Delivery of Sewage Pump | 180 days | Thu 20/6/19 | Mon 16/12/19 | | | |
| 65 | Other material submission & approval & delivery | 300 days | Thu 30/8/18 | Fri 5/7/19 | | | |
| 66 | Coordination with the Employer's Specialist Contractors | 478 days | Mon 20/5/19 | Sat 19/9/20 | | | |
| 67 | Installation of Puddle Pipes at C.W. outlet Culvert | 7 days | Mon 20/5/19 | Sun 26/5/19 | | | |
| 68 | Installation of Puddle Pipes at C.W. Inlet Culvert | 7 days | Sun 7/7/19 | Sat 13/7/19 | | | |
| 69 | Template setting at L11 Turbo Block Foundation | 60 days | Wed 1/1/20 | Mon 9/3/20 | Foundation | | |
| 70 | Template setting of holding down bolts at HRSG column base | 46 days | Tue 23/7/19 | Fri 6/9/19 | | | |
| 71 | I-beam / channel base installation on top of transformer foundations at Transformer Area | 30 days | Fri 17/4/20 | Sat 16/5/20 | | I-beam / channel base installation on top of transformer foundations at Transfo | |
| 72 | Overhead crane erection at turbine hall using access through a temporary opening at L11 MSB roof between GL11-G to 11-H and 11-2 to 11-6 | 36 days | Sun 1/12/19 | Tue 7/1/20 | | | |
| 73 | Condenser assembly and erection using access through a temporary façade opening at L11 MSB below 1/F along GL 11-6 from GL11-B to 11-C including a clear space below 1/F between GL 11-B to 11-C | 127 days | Sun 1/3/20 | Sun 5/7/20 | | | |
| 74 | Installation of power train equipment including air inlet duct using access through a temporary façade opening at L11 MSB below 1/F along GL 11-6 from GL11-F to 11-H including a clear space below 1/F of the above area | 142 days | Fri 1/5/20 | Sat 19/9/20 | | | |
| 75 | Installation of embedded materials such as holding down bolts for equipment foundations - Commencement | 30 days | Sun 23/6/19 | Mon 22/7/19 | | | |
| 76 | Section A1 & A2 - Ground treatment at Zone 1A & 1B | 92 days | Wed 1/8/18 | Wed 31/10/18 | | | |
| 77 | Plant establishment for earthworks | 7 days | Wed 1/8/18 | Tue 7/8/18 | | | |
| 78 | Backfilling and compaction from existing ground +4.5mPD to +5.5mPD | 45 days | Wed 8/8/18 | Fri 21/9/18 | | | |
| 79 | Delivery of band drain | 5 days | Wed 29/8/18 | Sun 2/9/18 | | | |
| 80 | Plant establishment for band drain (1st rig) | 10 days | Mon 3/9/18 | Wed 12/9/18 | | | |
| 81 | Plant establishment for band drain (2nd rig) | 7 days | Thu 20/9/18 | Wed 26/9/18 | | | |
| 82 | Plant establishment for band drain (3rd rig) | 7 days | Thu 11/10/18 | Wed 17/10/18 | | | |

| ID | Task Name | Duration | Start | Finish | 2020 | | |
|-----|--|-----------------|---------------------|--------------------|--|-----|------|
| | | | | | April | May | June |
| 83 | Vert. Band drain installation (1023 nos. x 44m) | 45 days | Thu 13/9/18 | Sat 27/10/18 | | | |
| 84 | Deposition of surcharge up to +8.3mPD | 45 days | Mon 17/9/18 | Wed 31/10/18 | | | |
| 85 | Section A3 - Ground treatment installation works at Zone 2 | 158 days | Mon 1/10/18 | Sun 17/3/19 | | | |
| 86 | Backfilling and compaction from existing ground +4.5mPD to +5.5mPD | 30 days | Mon 1/10/18 | Tue 30/10/18 | | | |
| 87 | Delivery of band drain | 6 days | Thu 18/10/18 | Tue 23/10/18 | | | |
| 88 | Vert. Band drain installation (1787 nos. x 44m) | 50 days | Wed 24/10/18 | Wed 12/12/18 | | | |
| 89 | Deposition of surcharge up to +8.3mPD | 60 days | Mon 3/12/18 | Thu 31/1/19 | | | |
| 90 | Additional Concrete Blocks + Extra Surcharge | 60 days | Mon 7/1/19 | Sun 17/3/19 | | | |
| 91 | Section A4 - Ground treatment installation works at Zone 3 | 131 days | Thu 1/11/18 | Thu 21/3/19 | | | |
| 92 | Backfilling and compaction from existing ground +4.5mPD to +5.5mPD | 12 days | Thu 1/11/18 | Mon 12/11/18 | | | |
| 93 | Vert. Band drain installation | 60 days | Fri 9/11/18 | Mon 7/1/19 | | | |
| 94 | Deposition of surcharge up to +8.3mPD | 45 days | Tue 18/12/18 | Thu 31/1/19 | | | |
| 95 | Possession of Part 1 Defer portion at Zone 3 | 0 days | Wed 20/2/19 | Wed 20/2/19 | | | |
| 96 | Vert. Band drain installation | 10 days | Wed 20/2/19 | Fri 1/3/19 | | | |
| 97 | Possession of Part 2 Defer portion at Zone 3 | 0 days | Fri 1/3/19 | Fri 1/3/19 | | | |
| 98 | Vert. Band drain installation | 7 days | Fri 1/3/19 | Thu 7/3/19 | | | |
| 99 | Surcharge at deferred portion | 14 days | Fri 8/3/19 | Thu 21/3/19 | | | |
| 100 | Section A5 (i) - Ground treatment installation works at Zone 4 | 83 days | Wed 26/12/18 | Thu 28/3/19 | | | |
| 101 | Site Preparation for Vertical Band Drain | 3 days | Tue 1/1/19 | Thu 3/1/19 | | | |
| 102 | Band drain installation | 21 days | Wed 26/12/18 | Tue 15/1/19 | | | |
| 103 | Possession of Defer portion at Zone 4 | 0 days | Fri 1/3/19 | Fri 1/3/19 | | | |
| 104 | Vert. Band drain installation | 28 days | Fri 1/3/19 | Thu 28/3/19 | | | |
| 105 | Section A5 (ii) - Surcharge works at Zone 4 | 30 days | Tue 1/9/20 | Wed 30/9/20 | | | |
| 106 | Deposition of surcharge up to +8.3mPD | 30 days | Tue 1/9/20 | Wed 30/9/20 | | | |
| 107 | Section A6 (i) - A&A Works for No. 4 C.W. Outfall at Area E18 | 493 days | Thu 1/11/18 | Sat 28/3/20 | Mar '20 | | |
| 108 | BD Amendment, resubmission & approval for Jacking Pit | 170 days | Thu 1/11/18 | Mon 29/4/19 | | | |
| 109 | Consent for Jacking Pit ELS | 28 days | Sat 20/4/19 | Fri 17/5/19 | | | |
| 110 | Mobilization | 0 days | Sat 15/12/18 | Sat 15/12/18 | | | |
| 111 | Jacking Pit Sheetpile Installation (incl. Stop work notice + CNY) | 60 days | Sun 16/12/18 | Sat 23/2/19 | | | |
| 112 | Protective screen and preventive measure for U9 gas pipeline (VO) | 28 days | Sun 24/2/19 | Sat 23/3/19 | | | |
| 113 | Provision of temp support for U10 gas pipeline (VO) upon RMA allow access | 28 days | Sun 14/4/19 | Sat 11/5/19 | | | |
| 114 | ELS of jacking pit | 30 days | Sat 18/5/19 | Sun 16/6/19 | | | |
| 115 | Pipe Jacking set up & ground strengthening | 18 days | Mon 17/6/19 | Thu 4/7/19 | | | |
| 116 | Pipe Jacking | 90 days | Tue 10/9/19 | Sun 8/12/19 | | | |
| 117 | Receiving Pit BD Approval | 170 days | Sun 25/11/18 | Thu 23/5/19 | | | |
| 118 | Consent for Pipe & Sheet pile | 28 days | Tue 14/5/19 | Mon 10/6/19 | | | |
| 119 | Receiving Pit Pipe & Sheet pile installation | 30 days | Tue 11/6/19 | Wed 10/7/19 | | | |
| 120 | Consent for Receiving Pit ELS | 28 days | Thu 4/7/19 | Wed 31/7/19 | | | |
| 121 | ELS of Receiving pit | 40 days | Thu 1/8/19 | Mon 9/9/19 | | | |
| 122 | Allow modify existing outfall manhole for pipe jacking receiving | 18 days | Tue 10/9/19 | Fri 27/9/19 | | | |
| 123 | Culvert Pipe Intallation & water test | 55 days | Mon 9/12/19 | Wed 12/2/20 | | | |
| 124 | Inspection Manhole at Jacking Pit + backfill (Area E3(A)) | 18 days | Thu 13/2/20 | Sun 1/3/20 | (A) | | |
| 125 | Manhole extension at Outfall no. 4 + backfill + Reinstate of Outfall Rd | 45 days | Thu 13/2/20 | Sat 28/3/20 | hole extension at Outfall no. 4 + backfill + Reinstate of Outfall Rd | | |
| 126 | Sheetpile for L12 Outlet culvert (Connection to Jacking Pit) | 45 days | Mon 15/7/19 | Wed 28/8/19 | | | |
| 127 | Consent + ELS for remaining jacking pit | 75 days | Thu 29/8/19 | Mon 11/11/19 | | | |
| 128 | Outlet Culvert pipe installation + Thrust Box (remaining portion at A1 Area) | 45 days | Tue 12/11/19 | Sat 28/12/19 | | | |
| 129 | Sheet pile for future extension along GRS | 60 days | Thu 29/8/19 | Sun 27/10/19 | | | |
| 130 | Section A6 (ii) - External works at Area E15(D) | 37 days | Wed 1/1/20 | Sat 15/2/20 | | | |
| 131 | Area possession & Clearance | 6 days | Wed 1/1/20 | Mon 6/1/20 | | | |
| 132 | Road & Surface Works | 31 days | Tue 7/1/20 | Sat 15/2/20 | | | |
| 133 | Section B1 (i) - Area south of L11 MSB and HRSG from GL11-F eastwards leading to Chimney Road at Area E1 & E2 | 375 days | Thu 31/1/19 | Sun 1/3/20 | | | |
| 134 | Area Possession & Clearance | 0 days | Thu 31/1/19 | Thu 31/1/19 | | | |
| 135 | Excavation for CW Inlet Culvert (South of L11 HRSG) | 21 days | Tue 16/4/19 | Mon 6/5/19 | | | |
| 136 | Installation CW Inlet Culvert pipe | 30 days | Tue 7/5/19 | Wed 5/6/19 | | | |
| 137 | Construction of Thrust Box & Manholes,etc | 14 days | Thu 6/6/19 | Wed 19/6/19 | | | |
| 138 | Backfill | 21 days | Thu 20/6/19 | Wed 10/7/19 | | | |
| 139 | Install underground utilities | 45 days | Mon 30/9/19 | Wed 13/11/19 | | | |
| 140 | Backfill and Temporary paving for Condensor Move in (E1) | 14 days | Mon 17/2/20 | Sun 1/3/20 | in (E1) | | |
| 141 | Backfill and Temporary paving for Condensor Move in (others) | 30 days | Sat 1/2/20 | Sun 1/3/20 | in (others) | | |
| 142 | Section B1 (ii) - Supporting structures for overhead cranes of L11 MSB including the associated roof structure except the roof deferred works | 482 days | Thu 1/11/18 | Tue 17/3/20 | | | |
| 143 | Area possession & Clearance | 0 days | Thu 1/11/18 | Thu 1/11/18 | | | |
| 144 | Erection of turbine hall roof except defer work | 0 days | Wed 13/11/19 | Wed 13/11/19 | | | |

| ID | Task Name | Duration | Start | Finish | Timeline | | |
|-----|--|-----------------|--------------------|--------------------|------------|----------|-----------|
| | | | | | April 2020 | May 2020 | June 2020 |
| 145 | Installation of crane griders | 21 days | Mon 11/11/19 | Sun 1/12/19 | | | |
| 146 | Turbine hall wall claddings | 60 days | Thu 9/1/20 | Tue 17/3/20 | | | |
| 147 | Section B1 (iii) - FSRU Civil works at Area E13 (GRS) | 151 days | Fri 1/1/21 | Mon 31/5/21 | | | |
| 148 | Submission and approval for consent to work | 0 days | Fri 1/1/21 | Fri 1/1/21 | | | |
| 149 | Civil & Building Works | 130 days | Fri 1/1/21 | Mon 10/5/21 | | | |
| 150 | Ground reinstatement | 21 days | Tue 11/5/21 | Mon 31/5/21 | | | |
| 151 | Section B2 - Retractable Cover D at Area E22 | 435 days | Tue 1/1/19 | Tue 31/3/20 | | | |
| 152 | Area Possession, Demolition and clearance work | 60 days | Tue 1/1/19 | Mon 11/3/19 | | | |
| 153 | Revise Structural Form and BD resubmission & approval | 150 days | Tue 12/3/19 | Thu 8/8/19 | | | |
| 154 | Foundation construction | 60 days | Fri 9/8/19 | Mon 7/10/19 | | | |
| 155 | Backfill & Ground reinstatement | 30 days | Tue 8/10/19 | Wed 6/11/19 | | | |
| 156 | Superstructure fabrication & delivery | 90 days | Fri 9/8/19 | Wed 6/11/19 | | | |
| 157 | Superstructure erection | 90 days | Thu 7/11/19 | Sat 15/2/20 | | | |
| 158 | E&M Installation and T&C | 45 days | Sun 16/2/20 | Tue 31/3/20 | | | |
| 159 | Section B3 - External works at Area B1, D2 and D4 | 416 days | Fri 1/3/19 | Thu 30/4/20 | | | |
| 160 | Receive Area from HKE, Area Possession & Clearance | 0 days | Fri 1/3/19 | Fri 1/3/19 | | | |
| 161 | Removal of existing paving for band drain under Section A5(i) | 30 days | Fri 1/3/19 | Sat 30/3/19 | | | |
| 162 | Complete Vert. Band drain under Section A5(i) | 0 days | Thu 28/3/19 | Thu 28/3/19 | | | |
| 163 | Ground preparation for B1, D2 & D4 for handover to Plant contractor | 90 days | Sat 1/2/20 | Thu 30/4/20 | | | |
| 164 | Section C1 - Area south of L11 MSB from GL11-F westwards leading to Station Road at Area E3(A) & E3(B) | 466 days | Thu 1/11/18 | Sun 1/3/20 | | | |
| 165 | Area Possession & Clearance | 0 days | Thu 1/11/18 | Thu 1/11/18 | | | |
| 166 | Excavation for Type C (Area E3A) | 21 days | Tue 26/3/19 | Mon 15/4/19 | | | |
| 167 | Installation CW Outlet Culvert Pipe connect to Type C1 | 21 days | Tue 16/4/19 | Mon 6/5/19 | | | |
| 168 | Installation CW Inlet Culvert pipe (South of L11 Condensor) | 21 days | Mon 20/5/19 | Sun 9/6/19 | | | |
| 169 | Construction of Thrust Box | 10 days | Mon 10/6/19 | Wed 19/6/19 | | | |
| 170 | Construction of Access Manhole | 21 days | Mon 10/6/19 | Sun 30/6/19 | | | |
| 171 | Backfill | 14 days | Mon 1/7/19 | Sun 14/7/19 | | | |
| 172 | Construction of Underground drainage and utilities | 60 days | Thu 7/11/19 | Tue 7/1/20 | | | |
| 173 | Construct Temp Paving for Condenser move in | 45 days | Wed 8/1/20 | Sun 1/3/20 | | | |
| 174 | Section C2 - (i) Southern part of L11 HRSG area and its surrounding at Area E7 (No Defer Foundations) | 295 days | Thu 31/1/19 | Sun 1/12/19 | | | |
| 175 | Area Possession & Clearance | 0 days | Thu 31/1/19 | Thu 31/1/19 | | | |
| 176 | Excavation & Pile Caps & Tie Beams (HRSG South Area E7) | 45 days | Sun 19/5/19 | Tue 2/7/19 | | | |
| 177 | Construction RC foundations | 45 days | Tue 9/7/19 | Thu 22/8/19 | | | |
| 178 | Construction RC plinths | 30 days | Fri 23/8/19 | Sat 21/9/19 | | | |
| 179 | Construction underground utilities | 45 days | Fri 23/8/19 | Sun 6/10/19 | | | |
| 180 | Backfill & Construction on-grade slabs | 35 days | Mon 7/10/19 | Sun 10/11/19 | | | |
| 181 | Backfill and Temporary paving | 21 days | Mon 11/11/19 | Sun 1/12/19 | | | |
| 182 | Section C2 - (ii) L11 Turbo Block foundation including the L11 MSB ground floor together with the equipment foundations between GL 11-F to 11-H and 11-1 to 11-6 for the installation of power generator, air inlet duct and lube oil reservoir | 496 days | Sat 1/12/18 | Thu 30/4/20 | | | |
| 183 | Area Possession & Clearance | 0 days | Sat 1/12/18 | Sat 1/12/18 | | | |
| 184 | Excavation & Pile Caps & Tie Beams (MSBL11 - Turbo Block North) | 70 days | Mon 14/1/19 | Wed 3/4/19 | | | |
| 185 | Excavation & Pile Caps & Tie Beams (MSBL11 - Turbo Block South) | 30 days | Wed 10/7/19 | Thu 8/8/19 | | | |
| 186 | Backfill and construction turbine block foundations | 21 days | Fri 9/8/19 | Thu 29/8/19 | | | |
| 187 | Construction of internal drainage | 60 days | Fri 9/8/19 | Mon 7/10/19 | | | |
| 188 | Construction RC walls incl. G/F rooms | 90 days | Tue 8/10/19 | Tue 7/1/20 | | | |
| 189 | Construction turbine block columns and upper portion for plant embed installation | 21 days | Mon 9/9/19 | Sun 29/9/19 | | | |
| 190 | Concrete Turbine upper part foundation & clear falsework | 52 days | Tue 10/3/20 | Thu 30/4/20 | | | |
| 191 | Section C2 - (iii) G/F of L11 MSB including the Condenser Pit, Circulating Water Pipe Pit and equipment foundations between GL 11-B to 11-C and 11-1 to 11-6 for the installation of condenser | 466 days | Thu 1/11/18 | Sun 1/3/20 | | | |
| 192 | Area Possession & Clearance | 0 days | Thu 1/11/18 | Thu 1/11/18 | | | |
| 193 | Excavation to foundation level at ELS Type A | 18 days | Sat 13/4/19 | Tue 30/4/19 | | | |
| 194 | Construction of CW Outlet Box + lowest tie beam & caps | 40 days | Wed 1/5/19 | Sun 9/6/19 | | | |
| 195 | Construction of pile caps & tie beams & hot well sump pit up to +2.5mPD | 30 days | Mon 10/6/19 | Tue 9/7/19 | | | |
| 196 | Backfill & Construction of CW Inlet Box + tie beams | 18 days | Wed 10/7/19 | Sat 27/7/19 | | | |
| 197 | Backfill and Construction ground beams & trenches | 18 days | Sun 28/7/19 | Wed 14/8/19 | | | |

| ID | Task Name | Duration | Start | Finish | 2020 | | |
|-----|---|-----------------|--------------------|---------------------|-------|-----|------|
| | | | | | April | May | June |
| 198 | Construction of indoor underground drainage | 12 days | Thu 15/8/19 | Mon 26/8/19 | | | |
| 199 | Backfill & construction on-grade slabs | 10 days | Tue 27/8/19 | Thu 5/9/19 | | | |
| 200 | Construction Column casting and RC walls | 30 days | Mon 30/9/19 | Tue 29/10/19 | | | |
| 201 | Metal Cladding & Louvres for GLB-C/1-6 | 60 days | Thu 28/11/19 | Thu 6/2/20 | | | |
| 202 | Mis. Works for plant erection | 24 days | Fri 7/2/20 | Sun 1/3/20 | | | |
| 203 | Section D - (i) Roads and external grounds surrounding L11 MSB and L11 HRSG in addition to the southern & eastern areas mentioned above in Area E5 and E6 | 414 days | Thu 1/11/18 | Tue 31/12/19 | | | |
| 204 | Area Possession & Clearance | 14 days | Thu 1/11/18 | Wed 14/11/18 | | | |
| 205 | Excavation for Type C1 and open sheet pile | 75 days | Mon 14/1/19 | Mon 8/4/19 | | | |
| 206 | Install CW Outlet pipe & connect to previous | 21 days | Tue 16/4/19 | Mon 6/5/19 | | | |
| 207 | Backfill | 10 days | Tue 7/5/19 | Thu 16/5/19 | | | |
| 208 | Undeground utilities and trenches | 60 days | Wed 3/7/19 | Sat 31/8/19 | | | |
| 209 | Construction of plant drainage, trenches & RC plinths | 45 days | Sun 1/9/19 | Tue 15/10/19 | | | |
| 210 | Remaining Undeground utilities & backfill (West of Tx Bay) | 75 days | Wed 16/10/19 | Tue 31/12/19 | | | |
| 211 | Section D - (ii) Remaining northern part of L11 HRSG area and its surrounding in Area E6 | 375 days | Thu 31/1/19 | Sun 1/3/20 | | | |
| 212 | Area Possession & Clearance | 0 days | Thu 31/1/19 | Thu 31/1/19 | | | |
| 213 | Excavation & Pits & Pile Caps & Tie Beams (HRSG north Area E6) | 45 days | Thu 4/4/19 | Sat 18/5/19 | | | |
| 214 | Construction RC foundations | 45 days | Sun 19/5/19 | Tue 2/7/19 | | | |
| 215 | Construction RC plinths & HRSG Lift Pit & internal drainage | 60 days | Sun 9/6/19 | Wed 7/8/19 | | | |
| 216 | Backfill Construction on-grade slabs | 28 days | Thu 8/8/19 | Wed 4/9/19 | | | |
| 217 | Construction underground utilities | 45 days | Thu 5/9/19 | Sat 19/10/19 | | | |
| 218 | Backfill, Remaining utilities and temporary paving | 85 days | Thu 14/11/19 | Mon 17/2/20 | | | |
| 219 | Touch up and site clearance | 13 days | Tue 18/2/20 | Sun 1/3/20 | | | |
| 220 | Section D - (iii) Whole of L11 MSB including the pipe and cable rack along south facade of L11 MSB with all underground utilities at Area E4 including C.W. Inlet and Outlet Culvert except the deferred works | 526 days | Thu 1/11/18 | Thu 30/4/20 | | | |
| 221 | Area Possession & Clearance | 0 days | Thu 1/11/18 | Thu 1/11/18 | | | |
| 222 | Construction of pile caps & tie beams at Transformer Area | 60 days | Thu 15/11/18 | Sun 13/1/19 | | | |
| 223 | Excavation & Construction Blow Down Sum pit (Type B) | 45 days | Thu 4/4/19 | Sat 18/5/19 | | | |
| 224 | Construction of pile caps & tie beams at SunShadeCover Area | 45 days | Wed 10/7/19 | Fri 23/8/19 | | | |
| 225 | Preparation for S.Steelwork Erection | 14 days | Wed 3/7/19 | Tue 16/7/19 | | | |
| 226 | Structural Delivery & Erection (Turbine Hall North fr G.L. 1-3/H->B) | 30 days | Wed 17/7/19 | Thu 15/8/19 | | | |
| 227 | Structural Delivery & Erection (Equipment Floors) | 45 days | Fri 16/8/19 | Sun 29/9/19 | | | |
| 228 | Structural Delivery & Erection (Turbine Hall South) | 45 days | Mon 30/9/19 | Wed 13/11/19 | | | |
| 229 | Fire Coating Application at Joint | 120 days | Fri 16/8/19 | Fri 13/12/19 | | | |
| 230 | External Scaffolding Erection | 150 days | Wed 31/7/19 | Sun 29/12/19 | | | |
| 231 | Construction 1/F RC Slab | 14 days | Mon 30/9/19 | Sun 13/10/19 | | | |
| 232 | Construction M/F RC Slab | 7 days | Mon 14/10/19 | Sun 20/10/19 | | | |
| 233 | Construction 2/F RC Slab | 14 days | Mon 14/10/19 | Sun 27/10/19 | | | |
| 234 | Construction 3/F RC Slab | 14 days | Mon 28/10/19 | Sun 10/11/19 | | | |
| 235 | Construction 4/F RC Slab | 14 days | Mon 11/11/19 | Sun 24/11/19 | | | |
| 236 | Construction 5/F RC Slab (Roof of turbine hall, except defer portion) | 30 days | Mon 25/11/19 | Tue 24/12/19 | | | |
| 237 | Construction Roof RC Slab | 14 days | Mon 9/12/19 | Sun 22/12/19 | | | |
| 238 | Construction Upper Roof RC Slab | 12 days | Fri 27/12/19 | Tue 7/1/20 | | | |
| 239 | Construction Defer Roof RC Slab (G.L. G-H) | 30 days | Wed 8/1/20 | Sat 15/2/20 | | | |
| 240 | Construction of Staircase ST-01 & lift shaft & machine room | 120 days | Fri 30/8/19 | Sun 29/12/19 | | | |
| 241 | Construction of Staircase ST-02 except defer work | 76 days | Mon 28/10/19 | Mon 13/1/20 | | | |
| 242 | Construction of RC plinth, kerbs & parapet Walls | 30 days | Fri 7/2/20 | Sat 7/3/20 | | | |
| 243 | Erection of Skylight & Roof Features | 45 days | Fri 21/2/20 | Sun 5/4/20 | | | |
| 244 | Waterproofing & Flooring at Roof | 60 days | Wed 8/1/20 | Mon 16/3/20 | | | |
| 245 | ABFW Works from 1/F to 5/F equipment rooms | 150 days | Mon 21/10/19 | Sun 29/3/20 | | | |
| 246 | Metal Cladding, Windows and Louvres incl. roof feature | 100 days | Thu 28/11/19 | Tue 17/3/20 | | | |
| 247 | Removal of external scaffolding | 60 days | Mon 17/2/20 | Thu 16/4/20 | | | |
| 248 | Building Services E&M Access & Installation | 150 days | Mon 4/11/19 | Sun 12/4/20 | | | |
| 249 | Remaining and Mis. works for Plant erection Full Access | 18 days | Mon 13/4/20 | Thu 30/4/20 | | | |
| 250 | Section D - (iv) Link Bridge between L10 and L11 MSB and at the south of L11 MSB including their associated alternations & additions (A&A) Works at L10 MSB | 526 days | Thu 1/11/18 | Thu 30/4/20 | | | |
| 251 | Area Possession & Clearance | 0 days | Thu 1/11/18 | Thu 1/11/18 | | | |

| ID | Task Name | Duration | Start | Finish | Timeline | | |
|-----|---|-----------------|--------------------|--------------------|------------|----------|-----------|
| | | | | | April 2020 | May 2020 | June 2020 |
| 252 | A&A works at South of L10 MSB | 60 days | Thu 28/11/19 | Fri 7/2/20 | | | |
| 253 | Erection of link bridge structural steel | 21 days | Fri 7/2/20 | Thu 27/2/20 | | | |
| 254 | Casting of bridge deck | 7 days | Fri 28/2/20 | Thu 5/3/20 | | | |
| 255 | Metal roofing installation | 14 days | Fri 6/3/20 | Thu 19/3/20 | | | |
| 256 | ABWF work | 21 days | Fri 20/3/20 | Thu 9/4/20 | | | |
| 257 | Form new opening at MSB for final connection | 14 days | Fri 27/3/20 | Thu 9/4/20 | | | |
| 258 | E&M Work for completion | 21 days | Fri 10/4/20 | Thu 30/4/20 | | | |
| 259 | Section D - (v) Gas Duct Foundation, Pipe and Cable Rack and associated trench in Area E20 | 345 days | Mon 11/2/19 | Sat 1/2/20 | | | |
| 260 | Area Possession & Clearance + CNY | 0 days | Mon 11/2/19 | Mon 11/2/19 | | | |
| 261 | Sheet pile installation & submit as-built | 75 days | Mon 11/2/19 | Fri 26/4/19 | | | |
| 262 | Consent for excavation | 28 days | Sat 27/4/19 | Fri 24/5/19 | | | |
| 263 | Excavation & plate load test | 45 days | Sat 1/6/19 | Mon 15/7/19 | | | |
| 264 | Construction of foundation | 45 days | Tue 16/7/19 | Thu 29/8/19 | | | |
| 265 | Backfill & Underground utitiies | 30 days | Fri 30/8/19 | Sat 28/9/19 | | | |
| 266 | Remaining Pipe & cable rack and associated trenches in Area E20 | 115 days | Sun 29/9/19 | Sat 1/2/20 | | | |
| 267 | Section E1 - (i) Link Bridge and Pipe and Cable Rack connecting L11 MSB to the western area of L11 MSB at Area E3 | 263 days | Wed 1/1/20 | Mon 28/9/20 | | | |
| 268 | Area Possession | 0 days | Wed 1/1/20 | Wed 1/1/20 | | | |
| 269 | Excavation & construction of new foundation | 40 days | Wed 1/1/20 | Tue 18/2/20 | | | |
| 270 | Backfill | 10 days | Wed 19/2/20 | Fri 28/2/20 | | | |
| 271 | Erection of Structural steel | 30 days | Mon 6/7/20 | Tue 4/8/20 | | | |
| 272 | Backfill & Ground works | 55 days | Wed 5/8/20 | Mon 28/9/20 | | | |
| 273 | Section E1 - (ii) Gas Receiving Station and L11 Gas Receiving Station Equipment Room (GRS) Area Extension at Area E16 | 173 days | Wed 1/1/20 | Tue 30/6/20 | | | |
| 274 | Area Possession | 0 days | Wed 1/1/20 | Wed 1/1/20 | | | |
| 275 | Removal of Surcharge and excavation | 14 days | Wed 1/1/20 | Tue 14/1/20 | | | |
| 276 | Modification of Site Drainage | 45 days | Wed 15/1/20 | Sun 8/3/20 | | | |
| 277 | Construction of new RC for GRS Equipment Room | 75 days | Tue 14/1/20 | Mon 6/4/20 | | | |
| 278 | ABWF for GRS Equipment room | 45 days | Tue 7/4/20 | Thu 21/5/20 | | | |
| 279 | E&M Installation | 45 days | Sun 17/5/20 | Tue 30/6/20 | | | |
| 280 | Construction of new Gas pipe plinths & racks | 45 days | Sat 22/2/20 | Mon 6/4/20 | | | |
| 281 | Backfill and construction site drainage | 21 days | Tue 7/4/20 | Mon 27/4/20 | | | |
| 282 | External Paving and install new fencing | 60 days | Sat 2/5/20 | Tue 30/6/20 | | | |
| 283 | Section E1 - (iii) External Works at Area E15 (C) | 273 days | Mon 1/6/20 | Sun 28/2/21 | | | |
| 284 | Removal of Surcharge and excavation | 45 days | Mon 1/6/20 | Wed 15/7/20 | | | |
| 285 | Underground drianage, Utilities and RC plinths | 123 days | Thu 16/7/20 | Sun 15/11/20 | | | |
| 286 | Backfill and install surface utilities | 45 days | Mon 16/11/20 | Wed 30/12/20 | | | |
| 287 | Roadwork | 60 days | Thu 31/12/20 | Sun 28/2/21 | | | |
| 288 | Section E2 - Pipe and Cable Rack and trench at west of Chimney Road and Pipe and Cable Rack at south of Middle Road at Area E8 and E19 | 495 days | Wed 1/5/19 | Thu 17/9/20 | | | |
| 289 | BD consent + Site Possession @ Area E8 | 0 days | Wed 1/5/19 | Wed 1/5/19 | | | |
| 290 | Excavation & Plate load test | 60 days | Wed 1/5/19 | Sat 29/6/19 | | | |
| 291 | Foundation and Trench constructions | 90 days | Sun 30/6/19 | Fri 27/9/19 | | | |
| 292 | Backfill & underground utitiles + temp paving | 60 days | Sat 28/9/19 | Tue 26/11/19 | | | |
| 293 | Excavation & plate load test @ E19 | 60 days | Wed 27/11/19 | Wed 5/2/20 | | | |
| 294 | Construction of foundations & trenches | 45 days | Thu 6/2/20 | Sat 21/3/20 | | | |
| 295 | Backfill & underground utitiles | 60 days | Sun 22/3/20 | Wed 20/5/20 | | | |
| 296 | Pipe & cable rack Erection | 60 days | Thu 21/5/20 | Sun 19/7/20 | | | |
| 297 | Ground reinstatement | 60 days | Mon 20/7/20 | Thu 17/9/20 | | | |
| 298 | Section E3 - Gas Pipe Support Foundation and Pipe Trench and associated external works at Area E14, E15 (A) and E15 (B) | 173 days | Wed 1/1/20 | Tue 30/6/20 | | | |
| 299 | Removal of surcharge / site clearance | 21 days | Wed 1/1/20 | Tue 21/1/20 | | | |
| 300 | Excavation & construction of pipe trench | 30 days | Wed 22/1/20 | Sat 29/2/20 | | | |
| 301 | Construction of gas pipe support foundation | 30 days | Sun 1/3/20 | Mon 30/3/20 | | | |
| 302 | Construction of underground drainage and utilities | 60 days | Tue 31/3/20 | Fri 29/5/20 | | | |
| 303 | Backfill & road work | 32 days | Sat 30/5/20 | Tue 30/6/20 | | | |
| 304 | Section E4 - 275kV cable trenching works connecting the 275kV Switching Station Extension and L11 MSB at Area E9 (A) | 185 days | Fri 15/3/19 | Sun 15/9/19 | | | |
| 305 | Site possession | 0 days | Fri 15/3/19 | Fri 15/3/19 | | | |
| 306 | Obtain Permit to work & Road close permit | 10 days | Fri 15/3/19 | Sun 24/3/19 | | | |

| ID | Task Name | Duration | Start | Finish | Timeline | | |
|-----|--|-----------------|--------------------|---------------------|------------|----------|-----------|
| | | | | | April 2020 | May 2020 | June 2020 |
| 307 | Excavation & construction new cable trench to 275kV | 45 days | Mon 25/3/19 | Wed 8/5/19 | | | |
| 308 | Excavation & construction new cable trench to L11MSB | 130 days | Thu 9/5/19 | Sun 15/9/19 | | | |
| 309 | Section F - 275kV Station Building Extension and associated works at Area E17 | 709 days | Fri 1/6/18 | Sat 30/5/20 | c.F | | |
| 310 | Installation of ELS for 275kV Switching Station near Staircase ST-3 and ST-6 | 14 days | Fri 1/6/18 | Thu 14/6/18 | | | |
| 311 | Construction of Staircase ST-3 | 110 days | Fri 15/6/18 | Tue 2/10/18 | | | |
| 312 | BD Amendment Approval on A&A | 0 days | Mon 17/12/18 | Mon 17/12/18 | | | |
| 313 | BD Amendment Approval on A&A ST3 & Drainage | 0 days | Mon 4/2/19 | Mon 4/2/19 | | | |
| 314 | OP inspection of Staircase ST-3 | 14 days | Mon 11/2/19 | Sun 24/2/19 | | | |
| 315 | Consent of New Foundation Works (Stage 1) | 0 days | Fri 19/10/18 | Fri 19/10/18 | | | |
| 316 | Consent & BA10 for Demolition of Existing Staircase | 0 days | Fri 8/3/19 | Fri 8/3/19 | | | |
| 317 | Demolition of Existing Staircase and Submit BA14A | 14 days | Sat 9/3/19 | Fri 22/3/19 | | | |
| 318 | BD inspection for BA14A & Issue OP | 28 days | Sat 23/3/19 | Fri 19/4/19 | | | |
| 319 | Consent & BA10 for New Foundation Work (Stage 2) | 28 days | Sat 13/4/19 | Fri 10/5/19 | | | |
| 320 | Hoarding Modification | 7 days | Fri 19/10/18 | Thu 25/10/18 | | | |
| 321 | Pile Cap & Tie Beam Construction (Stage 1) | 98 days | Fri 26/10/18 | Thu 31/1/19 | | | |
| 322 | Erection of Tower Crane | 40 days | Mon 11/2/19 | Fri 22/3/19 | | | |
| 323 | Pile Cap and Tie Beam (Stage 2) | 21 days | Sat 11/5/19 | Fri 31/5/19 | | | |
| 324 | RC Construction up to 1/F (Stage 1) | 30 days | Sat 11/5/19 | Sun 9/6/19 | | | |
| 325 | RC Construction up to 1/F (Stage 2) | 75 days | Sat 1/6/19 | Wed 14/8/19 | | | |
| 326 | Construction of Staircase ST6 | 90 days | Sun 15/9/19 | Fri 13/12/19 | | | |
| 327 | Shop Drawing Submission & Approval of Structural Steel | 45 days | Wed 27/2/19 | Fri 12/4/19 | | | |
| 328 | Structural Steel fabrication & Delivery | 60 days | Sat 13/4/19 | Tue 11/6/19 | | | |
| 329 | Erection of Structural Steel GL 17~18 | 30 days | Fri 16/8/19 | Sat 14/9/19 | | | |
| 330 | Erection of Structural Steel GL 8~17 | 60 days | Sun 15/9/19 | Wed 13/11/19 | | | |
| 331 | Metal Cladding Delivery | 60 days | Wed 7/8/19 | Sat 5/10/19 | | | |
| 332 | Metal Door, Window & Louvre Delivery | 45 days | Sun 6/10/19 | Tue 19/11/19 | | | |
| 333 | Erection of Working Platform and Scaffold | 150 days | Mon 1/7/19 | Wed 27/11/19 | | | |
| 334 | Install Decking | 60 days | Wed 9/10/19 | Sat 7/12/19 | | | |
| 335 | RC Walls from 1/F @ GIS Hall | 40 days | Thu 31/10/19 | Mon 9/12/19 | | | |
| 336 | Construction of 2/F RC slab | 14 days | Tue 10/12/19 | Mon 23/12/19 | | | |
| 337 | Construction of R/F RC slab | 21 days | Tue 24/12/19 | Wed 15/1/20 | | | |
| 338 | Construction of UR/F RC slab | 14 days | Thu 16/1/20 | Fri 7/2/20 | | | |
| 339 | Construction of GIS Hall Floor | 60 days | Tue 24/12/19 | Tue 3/3/20 | | | |
| 340 | Installation of Overhead Crane (By JEC) | 60 days | Wed 4/3/20 | Sat 2/5/20 | | | |
| 341 | Construction of staircase ST4, ST5, Lift Shaft & Equip Floors | 150 days | Sun 15/9/19 | Sat 22/2/20 | | | |
| 342 | Lift Installation | 90 days | Sun 23/2/20 | Fri 22/5/20 | | | |
| 343 | Concrete of RC walls, plinths, kerb & parapet walls & New trench for LV Power | 30 days | Tue 24/12/19 | Sun 2/2/20 | | | |
| 344 | ABWF Works @ G/F | 50 days | Mon 14/10/19 | Mon 2/12/19 | | | |
| 345 | ABWF Works @ 1/F | 50 days | Wed 13/11/19 | Fri 3/1/20 | | | |
| 346 | ABWF Works @ 2/F | 75 days | Fri 13/12/19 | Sat 7/3/20 | | | |
| 347 | ABWF Works @ R/F | 30 days | Tue 14/1/20 | Fri 21/2/20 | | | |
| 348 | ABWF Works @ UR/F | 21 days | Mon 3/2/20 | Sun 23/2/20 | | | |
| 349 | Waterproofing Works at R/F & UR/F | 45 days | Thu 16/1/20 | Mon 9/3/20 | | | |
| 350 | Building Services E&M Access & Installation & T&C | 150 days | Wed 13/11/19 | Tue 21/4/20 | | | |
| 351 | Metal Cladding, Windows and Louvres incl. Roof Feature | 90 days | Tue 24/12/19 | Thu 2/4/20 | | | |
| 352 | Shutter Erection | 30 days | Fri 3/4/20 | Sat 2/5/20 | | | |
| 353 | Removal of External Scaffolding + Tower Crane | 35 days | Fri 3/4/20 | Thu 7/5/20 | | | |
| 354 | External Underground Drainage and Utilities | 30 days | Fri 17/4/20 | Sat 16/5/20 | | | |
| 355 | Road & Paving Reinstatement | 30 days | Fri 1/5/20 | Sat 30/5/20 | | | |
| 356 | Ready for FSD & OP Inspection | 0 days | Sat 30/5/20 | Sat 30/5/20 | | | |
| 357 | Section G - A&A Works at No. 4 C.W. Intake at Area E12 | 143 days | Wed 1/1/20 | Sun 31/5/20 | c.I(i) | | |
| 358 | Permit to work | 0 days | Wed 1/1/20 | Wed 1/1/20 | | | |
| 359 | Erection of temp. platform | 14 days | Wed 1/1/20 | Tue 14/1/20 | | | |
| 360 | Demolition work | 30 days | Wed 15/1/20 | Sat 22/2/20 | | | |
| 361 | Modify existing slab openings | 75 days | Sun 23/2/20 | Thu 7/5/20 | | | |
| 362 | Curing + Removal of platform | 24 days | Fri 8/5/20 | Sun 31/5/20 | | | |
| 363 | Section H - L11 Steel flue liner at No. 4 Chimney | 186 days | Tue 1/1/19 | Mon 15/7/19 | c.I(ii) | | |
| 364 | Complete erection of L10 Steel flue | 0 days | Tue 1/1/19 | Tue 1/1/19 | | | |
| 365 | Modification of erection equipment | 21 days | Tue 1/1/19 | Mon 21/1/19 | | | |
| 366 | Erection temp. platform and demolition work | 30 days | Tue 22/1/19 | Sat 2/3/19 | | | |
| 367 | Structural steel delivery & Erection | 85 days | Sun 3/3/19 | Sun 26/5/19 | | | |
| 368 | Removal of temp. work | 5 days | Mon 27/5/19 | Fri 31/5/19 | | | |
| 369 | Reinstale G/F louvre wall and access door | 45 days | Sat 1/6/19 | Mon 15/7/19 | | | |
| 370 | Section I - (i) 275kV cable trenching works connecting the 275kV Switching Station Extension and L11 MSB at Area E9 (B) | 232 days | Sun 15/9/19 | Fri 15/5/20 | c.I(i) | | |
| 371 | Obtain Permit to work & Road close permit | 0 days | Sun 15/9/19 | Sun 15/9/19 | | | |
| 372 | Excavation & construction new cable trench | 160 days | Mon 16/9/19 | Wed 4/3/20 | | | |
| 373 | Re-excavate cable trench for cable laying | 72 days | Thu 5/3/20 | Fri 15/5/20 | | | |
| 374 | Section I - (ii) Interconnector 2 Trench Modification Works at Area E10 | 275 days | Wed 1/4/20 | Thu 31/12/20 | c.I(ii) | | |
| 375 | Obtain Permit to work & Road close permit | 0 days | Wed 1/4/20 | Wed 1/4/20 | | | |
| 376 | Re-excavate & new cable trench for cable laying | 275 days | Wed 1/4/20 | Thu 31/12/20 | | | |

| ID | Task Name | Duration | Start | Finish | Timeline | | |
|-----|---|-----------------|-------------------|--------------------|--|----------|-----------|
| | | | | | April 2020 | May 2020 | June 2020 |
| 377 | Section J - (i) Demolition of Retractable Cover A&B & (ii) Construction of new LOT 3 & 4 | 426 days | Sun 1/3/20 | Fri 30/4/21 | | | |
| 378 | Obtain permit to work & Road close permit | 0 days | Sun 1/3/20 | Sun 1/3/20 | | | |
| 379 | Erection of Hoarding | 21 days | Sun 1/3/20 | Sat 21/3/20 | | | |
| 380 | Removal of existing cover & structural steel | 30 days | Sun 22/3/20 | Mon 20/4/20 | Removal of existing cover & structural steel | | |
| 381 | Demolish of existing bund wall and staircases | 45 days | Tue 21/4/20 | Thu 4/6/20 | Demolish of existing bund wall and staircase | | |
| 382 | Demolish of existing slab & foundation | 60 days | Fri 5/6/20 | Mon 3/8/20 | | | |
| 383 | Consent for new work | 30 days | Tue 4/8/20 | Wed 2/9/20 | | | |
| 384 | Construction of new bund wall and foundation | 100 days | Thu 3/9/20 | Fri 11/12/20 | | | |
| 385 | Construction of new oil separator | 80 days | Wed 23/9/20 | Fri 11/12/20 | | | |
| 386 | Construct underground drainage and surface channel | 40 days | Sat 12/12/20 | Wed 20/1/21 | | | |
| 387 | Construction on-grade slab | 60 days | Thu 21/1/21 | Sun 21/3/21 | | | |
| 388 | Removal of hoarding and ground reinstatement | 40 days | Mon 22/3/21 | Fri 30/4/21 | | | |
| 389 | Section K1 - External works at Area 15 (E) and 15(F) | 365 days | Mon 1/6/20 | Mon 31/5/21 | 1 Jun '20 Sec.K1 | | |
| 390 | Removal of surcharge | 30 days | Mon 1/6/20 | Tue 30/6/20 | | | |
| 391 | Construct new drainage and utilities work | 200 days | Wed 1/7/20 | Sat 16/1/21 | | | |
| 392 | Road & Paving | 135 days | Sun 17/1/21 | Mon 31/5/21 | | | |
| 393 | Section K2 - Removal of Southern Bund and External Works at Area D5, D6 and D7 | 365 days | Mon 1/6/20 | Mon 31/5/21 | 1 Jun '20 Sec.K2 | | |
| 394 | Demolition work | 30 days | Mon 1/6/20 | Tue 30/6/20 | | | |
| 395 | Construct new drainage and utilities work | 200 days | Wed 1/7/20 | Sat 16/1/21 | | | |
| 396 | Road & Paving | 135 days | Sun 17/1/21 | Mon 31/5/21 | | | |
| 397 | Section K3 - All remaining works shall be completed for reporting completion to BD and ready for OP inspection (PS1.4.4) | 623 days | Wed 8/1/20 | Thu 30/9/21 | | | |
| 398 | Completion of remaining roof after over headcrane move in | 30 days | Wed 8/1/20 | Sat 15/2/20 | | | |
| 399 | Construction of G/F Lube Oil Tank Room (BY TDK) | 61 days | Tue 6/10/20 | Sat 5/12/20 | | | |
| 400 | Construction of wall and staircase at G/F after Condensor Move in | 90 days | Mon 6/7/20 | Sat 3/10/20 | | | |
| 401 | Construction of Durasteel Steel wall panel after IBP installation | 30 days | Sun 20/9/20 | Mon 19/10/20 | | | |
| 402 | Construction of Transformer fence wall, cladding & associated FS services | 122 days | Tue 1/9/20 | Thu 31/12/20 | | | |
| 403 | Final restatement of road & paving around MSB & HRSG | 122 days | Tue 1/9/20 | Thu 31/12/20 | | | |
| 404 | Installation of trench covers and gratings after plant installation | 151 days | Thu 1/10/20 | Sun 28/2/21 | | | |
| 405 | Backfill and reinstatement after 275kV cable laying | 122 days | Tue 1/6/21 | Thu 30/9/21 | | | |

Schedule of U11 Construction

| ID | タスク名 | |
|-----|---|--|
| 1 | Key Date | |
| 2 | H/O HRSG Foundation | |
| 3 | H/O OHC Installation | |
| 4 | H/O Condenser foundation | |
| 5 | H/O Aux. equipment foundation of HRSG noi | |
| 6 | H/O HRSG Exhaust duct | |
| 7 | H/O GT Exhaust duct foundation | |
| 8 | H/O MSB building | foundation → 05/01 |
| 9 | H/O Foundation around CCW-Cooler | SB building → 05/01 /O Foundation around CCW-Cooler → 0 |
| 10 | Hydrostatic test | |
| 11 | Receiving Lube oil | |
| 12 | Synchronization | |
| 13 | | |
| 14 | HRSG | _____ |
| 75 | | |
| 76 | HRSG Exhaust duct | _____ |
| 91 | | |
| 92 | Over Head Crane | |
| 102 | | |
| 103 | Condenser | _____ |
| 128 | | |
| 129 | GT/ST/Generator | Generator _____ |
| 161 | | |
| 162 | GT Air inlet | GT Air inlet _____ |
| 175 | | |
| 176 | Auxiliary Equipment (O/B) | _____ |
| 247 | | |
| 248 | Sea water intake area | Sea water intake area _____ |
| 260 | | |
| 261 | Tranceformer area | Tranceformer area _____ |
| 269 | Building structure | _____ |
| 276 | | |
| 277 | Piping | _____ |
| 285 | | |
| 286 | Crane | _____ |
| 304 | | |
| 305 | Equipment for heavy lifting | _____ |

2020年 第24回定期
 2020年04月 2020年05月 2020年06月
 11. 初半期下期比 11. 初半期下期比 11. 初半期下期比

SUNLEY ENGINEERING & CONSTRUCTION CO., LTD.

Contract No. 18/8004 - Lamma Power Station Extension Foundation Works for Unit L12

Master Programme (Rev.1)

| ID | Task Name | Duration | Start | Finish | 2019 | | | | | | | | | | | | 2020 | | | | | | | | | | | |
|----|--|-----------------|-------------------|-------------------|------|--|--|--|--|--|--|--|--|--|--|--|------|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Key Date | 542 days | Feb 1 '19 | Jul 26 '20 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Commencement date | 542 days | Feb 1 '19 | Jul 26 '20 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Total Contract Period | 542 days | Feb 1 '19 | Jul 26 '20 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Preliminaries | 21 days | Feb 1 '19 | Feb 21 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Coordination with utility companies | 14 days | Feb 1 '19 | Feb 14 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Pre-construction condition survey | 14 days | Feb 1 '19 | Feb 14 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Notification of commencement of works to Labour Department | 7 days | Feb 1 '19 | Feb 7 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Notification of air pollution control for commencement of works to EPD | 7 days | Feb 1 '19 | Feb 7 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Application of water discharge licence from EPD | 7 days | Feb 1 '19 | Feb 7 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Application for billing account for disposal of construction waste from EPD | 7 days | Feb 1 '19 | Feb 7 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | CCTV for existing underground drainage pipe around site boundary | 21 days | Feb 1 '19 | Feb 21 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Utility detection for existing underground cables | 21 days | Feb 1 '19 | Feb 21 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Site clearance | 21 days | Feb 1 '19 | Feb 21 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | Set up contractor's site office | 21 days | Feb 1 '19 | Feb 21 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | Installation of monitoring checkpoints | 20 days | Feb 1 '19 | Feb 20 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | Submission of BA10 for ELS & foundation works | 7 days | Feb 1 '19 | Feb 7 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | Predrilling Works for Section of A1 to A3 (Area P1 to P3) | 96 days | Feb 1 '19 | May 7 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Drilling rigs mobilization | 10 days | Feb 1 '19 | Feb 10 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | Predrilling works (46 holes) (8 rigs) | 81 days | Feb 11 '19 | May 2 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | Submission of predrill logs | 71 days | Feb 26 '19 | May 7 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | Completion of predrilling works | 0 days | May 7 '19 | May 7 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | Plant Mobilization for Bored Pile Construction | 151 days | Mar 18 '19 | Aug 15 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | Crawler Crane | 137 days | Mar 18 '19 | Aug 1 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | 1st & 2nd set | 21 days | Mar 18 '19 | Apr 7 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | 3rd set | 21 days | Apr 1 '19 | Apr 21 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 4th & 5th set | 21 days | Jun 14 '19 | Jul 4 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | 6th set | 21 days | Jul 12 '19 | Aug 1 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | Oscillator | 137 days | Mar 18 '19 | Aug 1 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | 1st & 2nd set | 21 days | Mar 18 '19 | Apr 7 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 34 | 3rd set | 21 days | Apr 1 '19 | Apr 21 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 35 | 4th & 5th set | 21 days | Jun 14 '19 | Jul 4 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 36 | 6th set | 21 days | Jul 12 '19 | Aug 1 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 37 | RCD | 130 days | Apr 8 '19 | Aug 15 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 38 | 1st & 2nd set | 14 days | Apr 8 '19 | Apr 21 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 39 | 3rd set | 14 days | Apr 22 '19 | May 5 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | 4th & 5th set | 14 days | Jul 5 '19 | Jul 18 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 41 | 6th set | 14 days | Aug 2 '19 | Aug 15 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 42 | Completion of plant mobilization for bored pile construction | 0 days | Aug 15 '19 | Aug 15 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 44 | Delivery of Temporary Steel Casing for Bored Pile Construction | 151 days | Mar 18 '19 | Aug 15 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 45 | Duration for delivery of temporary steel casing | 151 days | Mar 18 '19 | Aug 15 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 46 | Completion of delivery of temporary steel casing for bored pile construction | 0 days | Aug 15 '19 | Aug 15 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 47 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 48 | Delivery of Permanent Casing & Double Wall Liner | 369 days | Mar 18 '19 | Mar 20 '20 | | | | | | | | | | | | | | | | | | | | | | | | |
| 49 | Testing for double wall liner | 45 days | Mar 18 '19 | May 1 '19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 | Duration for delivery of permanent casing & double wall liner | 325 days | May 1 '19 | Mar 20 '20 | | | | | | | | | | | | | | | | | | | | | | | | |
| 51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Master Programme
24 Mar 2020

Task Critical Task Milestone Summary

Master Programme (Rev.1)

| ID | Task Name | Duration | Start | Finish | 2019 | | | | | | | | | | | | 2020 | | |
|-----|---|-----------------|-------------------|-------------------|------------------|--|--|--|--|--|--|--|--|--|--|--|------|-----|-----|
| | | | | | Gantt Chart Area | | | | | | | | | | | | M15 | M16 | M17 |
| | | | | | | | | | | | | | | | | | A | M | J |
| 52 | Section A1 | 320 days | Mar 18 '19 | Jan 31 '20 | | | | | | | | | | | | | | | |
| 53 | Bored Pile Construction at P1 (17 piles) | 299 days | Apr 8 '19 | Jan 31 '20 | | | | | | | | | | | | | | | |
| 54 | 1st set plant - BP1 > BP5 > BP9 > BP26 > BP13 > BP12 > BP8 > BP4 > G2 > G4 > G6 | 273 days | Apr 8 '19 | Jan 5 '20 | | | | | | | | | | | | | | | |
| 55 | 3rd set plant - G8 | 45 days | Apr 22 '19 | Jun 5 '19 | | | | | | | | | | | | | | | |
| 56 | 3rd set plant - BPC3 > BPC4 > BPC5 > BPC6 > BPC7 | 135 days | Aug 30 '19 | Jan 11 '20 | | | | | | | | | | | | | | | |
| 57 | Interface & sonic test | 28 days | Jan 4 '20 | Jan 31 '20 | | | | | | | | | | | | | | | |
| 58 | Completion of bored pile construction at P1 | 0 days | Jan 31 '20 | Jan 31 '20 | | | | | | | | | | | | | | | |
| 59 | | | | | | | | | | | | | | | | | | | |
| 60 | Sheet Pile at P1 | 215 days | Jul 1 '19 | Jan 31 '20 | | | | | | | | | | | | | | | |
| 61 | Delivery of sheet pile material | 14 days | Jul 1 '19 | Jul 14 '19 | | | | | | | | | | | | | | | |
| 62 | Installation of sheet pile (approx. 57 piles) (1 rig) | 10 days | Jul 17 '19 | Jul 26 '19 | | | | | | | | | | | | | | | |
| 63 | Installation of sheet pile (approx. 254 piles) (1 rig) | 38 days | Dec 17 '19 | Jan 23 '20 | | | | | | | | | | | | | | | |
| 64 | Prepare & submit as-built record plan | 7 days | Jan 24 '20 | Jan 30 '20 | | | | | | | | | | | | | | | |
| 65 | Submission of BA14 | 1 day | Jan 31 '20 | Jan 31 '20 | | | | | | | | | | | | | | | |
| 66 | Completion of sheet pile at P1 | 0 days | Jan 31 '20 | Jan 31 '20 | | | | | | | | | | | | | | | |
| 67 | | | | | | | | | | | | | | | | | | | |
| 68 | Cone Penetration Test | 104 days | Mar 18 '19 | Jun 29 '19 | | | | | | | | | | | | | | | |
| 69 | Plant mobilization | 14 days | Mar 18 '19 | Mar 31 '19 | | | | | | | | | | | | | | | |
| 70 | Carry out CPTU testing (9 nos.) (1 rig) | 90 days | Apr 1 '19 | Jun 29 '19 | | | | | | | | | | | | | | | |
| 71 | Completion of cone penetration test | 0 days | Jun 29 '19 | Jun 29 '19 | | | | | | | | | | | | | | | |
| 72 | Completion of section A1 | 0 days | Jan 31 '20 | Jan 31 '20 | | | | | | | | | | | | | | | |
| 73 | | | | | | | | | | | | | | | | | | | |
| 74 | Section A2 | 197 days | Apr 8 '19 | Oct 21 '19 | | | | | | | | | | | | | | | |
| 75 | Bored Pile Construction at P2 (11 piles) | 197 days | Apr 8 '19 | Oct 21 '19 | | | | | | | | | | | | | | | |
| 76 | 2nd set plant - BP23 > BP24 > BP27 > BP16 > BP20 > BP17 | 158 days | Apr 8 '19 | Sep 12 '19 | | | | | | | | | | | | | | | |
| 77 | 3rd set plant - G10 > BP21 > BPC8 > BPC1 > BPC2 | 135 days | May 12 '19 | Sep 23 '19 | | | | | | | | | | | | | | | |
| 78 | Interface & sonic test | 28 days | Sep 24 '19 | Oct 21 '19 | | | | | | | | | | | | | | | |
| 79 | Completion of bored pile construction at P2 | 0 days | Oct 21 '19 | Oct 21 '19 | | | | | | | | | | | | | | | |
| 80 | Completion of section A2 | 0 days | Oct 21 '19 | Oct 21 '19 | | | | | | | | | | | | | | | |
| 81 | | | | | | | | | | | | | | | | | | | |
| 82 | Section A3 | 386 days | May 18 '19 | Jun 6 '20 | | | | | | | | | | | | | | | |
| 83 | Bored Pile Construction at P3 (18 piles) | 338 days | Jul 5 '19 | Jun 6 '20 | | | | | | | | | | | | | | | |
| 84 | 4th set plant - G1 > G3 > G5 > G7 > G9 | 225 days | Jul 5 '19 | Feb 14 '20 | | | | | | | | | | | | | | | |
| 85 | 5th set plant - BP15 > BP19 > BP22 > BP25 > BP3 | 285 days | Jul 5 '19 | Apr 14 '20 | | | | | | | | | | | | | | | |
| 86 | 6th set plant - BP28 > BP6 > BP7 > BP11 > BP2 > BP18 > BP14 > BP10 | 264 days | Aug 2 '19 | Apr 21 '20 | | | | | | | | | | | | | | | |
| 87 | Interface & sonic test | 14 days | Apr 22 '20 | May 5 '20 | | | | | | | | | | | | | | | |
| 88 | Prepare & submit as-built record plan | 14 days | May 6 '20 | May 19 '20 | | | | | | | | | | | | | | | |
| 89 | Submission of BA14 | 1 day | May 13 '20 | May 13 '20 | | | | | | | | | | | | | | | |
| 90 | Allow 14 days for selection of pile for concrete full core test | 14 days | May 14 '20 | May 27 '20 | | | | | | | | | | | | | | | |
| 91 | Concrete full core test | 10 days | May 28 '20 | Jun 6 '20 | | | | | | | | | | | | | | | |
| 92 | Completion of bored pile construction at P3 | 0 days | Jun 6 '20 | Jun 6 '20 | | | | | | | | | | | | | | | |
| 93 | | | | | | | | | | | | | | | | | | | |
| 94 | Sheet Pile at P3 | 60 days | May 18 '19 | Jul 16 '19 | | | | | | | | | | | | | | | |
| 95 | Plant mobilization | 7 days | May 25 '19 | May 31 '19 | | | | | | | | | | | | | | | |
| 96 | Delivery of sheet pile material | 14 days | May 18 '19 | May 31 '19 | | | | | | | | | | | | | | | |
| 97 | Installation of sheet pile (approx. 626 piles) (2 rigs) | 46 days | Jun 1 '19 | Jul 16 '19 | | | | | | | | | | | | | | | |
| 98 | Completion of sheet pile at P3 | 0 days | Jul 16 '19 | Jul 16 '19 | | | | | | | | | | | | | | | |
| 99 | Completion of section A3 | 0 days | Jun 6 '20 | Jun 6 '20 | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | |
| 101 | Section B | 265 days | Nov 5 '19 | Jul 26 '20 | | | | | | | | | | | | | | | |
| 102 | Shunt Reactor | 144 days | Mar 2 '20 | Jul 23 '20 | | | | | | | | | | | | | | | |

Master Programme (Rev.1)

| ID | Task Name | Duration | Start | Finish | 2019 | | | | | | | | | | | | 2020 | | |
|-----|---|-----------------|-------------------|-------------------|------|--|--|--|--|--|--|--|--|--|--|--|------|-----|-----|
| | | | | | | | | | | | | | | | | | M15 | M16 | M17 |
| | | | | | | | | | | | | | | | | | A | M | J |
| 103 | Site possession date | 0 days | Mar 2 '20 | Mar 2 '20 | | | | | | | | | | | | | | | |
| 104 | Plant mobilization | 4 days | Mar 2 '20 | Mar 5 '20 | | | | | | | | | | | | | | | |
| 105 | Bored Pile Construction (4 piles) | 140 days | Mar 6 '20 | Jul 23 '20 | | | | | | | | | | | | | | | |
| 106 | BP4>BP3>BP1>BP2 | 102 days | Mar 6 '20 | Jun 15 '20 | | | | | | | | | | | | | | | |
| 107 | Interface & sonic test | 7 days | Jun 15 '20 | Jun 21 '20 | | | | | | | | | | | | | | | |
| 108 | Prepare & submit as-built record plan | 16 days | Jun 22 '20 | Jul 7 '20 | | | | | | | | | | | | | | | |
| 109 | Submission of BA14 | 1 day | Jul 1 '20 | Jul 1 '20 | | | | | | | | | | | | | | | |
| 110 | Allow 14 days for selection of pile for concrete full core test | 14 days | Jul 2 '20 | Jul 15 '20 | | | | | | | | | | | | | | | |
| 111 | Concrete full core test | 8 days | Jul 16 '20 | Jul 23 '20 | | | | | | | | | | | | | | | |
| 112 | Completion of bored pile construction | 0 days | Jul 23 '20 | Jul 23 '20 | | | | | | | | | | | | | | | |
| 113 | Completion of shunt reactor | 0 days | Jul 23 '20 | Jul 23 '20 | | | | | | | | | | | | | | | |
| 114 | | | | | | | | | | | | | | | | | | | |
| 115 | Cable Bridge | 265 days | Nov 5 '19 | Jul 26 '20 | | | | | | | | | | | | | | | |
| 116 | Site possession date | 0 days | Nov 18 '19 | Nov 18 '19 | | | | | | | | | | | | | | | |
| 117 | Predrilling Works for Bored Pile | 39 days | Nov 18 '19 | Dec 26 '19 | | | | | | | | | | | | | | | |
| 118 | Predrilling works (4 holes) (1 rig) | 29 days | Nov 18 '19 | Dec 16 '19 | | | | | | | | | | | | | | | |
| 119 | Submission of predrill logs | 10 days | Dec 17 '19 | Dec 26 '19 | | | | | | | | | | | | | | | |
| 120 | Completion of predrilling works | 0 days | Dec 26 '19 | Dec 26 '19 | | | | | | | | | | | | | | | |
| 121 | | | | | | | | | | | | | | | | | | | |
| 122 | Bored Pile Construction (8 piles) | 203 days | Nov 18 '19 | Jun 7 '20 | | | | | | | | | | | | | | | |
| 123 | CP6-7 > CP6-5 > CP6-6 > CP6-8 > CP6-2 > CP6-4> CP6-1>CP6-3 (1 set of plant) | 155 days | Nov 18 '19 | Apr 20 '20 | | | | | | | | | | | | | | | |
| 124 | Interface & sonic test | 12 days | Apr 21 '20 | May 2 '20 | | | | | | | | | | | | | | | |
| 125 | Prepare & submit as-built record plan | 18 days | May 3 '20 | May 20 '20 | | | | | | | | | | | | | | | |
| 126 | Submission of BA14 | 1 day | May 14 '20 | May 14 '20 | | | | | | | | | | | | | | | |
| 127 | Allow 14 days for selection of pile for concrete full core test | 14 days | May 15 '20 | May 28 '20 | | | | | | | | | | | | | | | |
| 128 | Concrete full core test | 10 days | May 29 '20 | Jun 7 '20 | | | | | | | | | | | | | | | |
| 129 | Completion of bored pile construction | 0 days | Jun 7 '20 | Jun 7 '20 | | | | | | | | | | | | | | | |
| 130 | | | | | | | | | | | | | | | | | | | |
| 131 | Temporary Working Platform for Socketted H-Pile Construction | 66 days | Nov 5 '19 | Jan 9 '20 | | | | | | | | | | | | | | | |
| 132 | Material delivery for temporary working platform erection | 28 days | Nov 5 '19 | Dec 2 '19 | | | | | | | | | | | | | | | |
| 133 | Erection of temporary working platform | 53 days | Nov 18 '19 | Jan 9 '20 | | | | | | | | | | | | | | | |
| 134 | Completion of temporary working platform | 0 days | Jan 9 '20 | Jan 9 '20 | | | | | | | | | | | | | | | |
| 135 | | | | | | | | | | | | | | | | | | | |
| 136 | Socketted H-Pile Construction (14 piles) | 199 days | Jan 10 '20 | Jul 26 '20 | | | | | | | | | | | | | | | |
| 137 | Trial pile installation (1 pile) | 13 days | Jan 10 '20 | Jan 22 '20 | | | | | | | | | | | | | | | |
| 138 | Socketted H-pile installation (29 piles) (1 set plant) | 77 days | Jan 23 '20 | Apr 8 '20 | | | | | | | | | | | | | | | |
| 139 | Post drill | 14 days | Apr 9 '20 | Apr 22 '20 | | | | | | | | | | | | | | | |
| 140 | Prepare & submit as-built record plan | 14 days | Apr 23 '20 | May 6 '20 | | | | | | | | | | | | | | | |
| 141 | Submission of BA14 | 1 day | Apr 30 '20 | Apr 30 '20 | | | | | | | | | | | | | | | |
| 142 | Allow 14 days for selection of pile for loading test | 14 days | May 1 '20 | May 14 '20 | | | | | | | | | | | | | | | |
| 143 | Set up loading test platform for 1st pile testing | 15 days | May 15 '20 | May 29 '20 | | | | | | | | | | | | | | | |
| 144 | Loading test for 1st pile | 4 days | May 30 '20 | Jun 2 '20 | | | | | | | | | | | | | | | |
| 145 | Set up loading test platform for 2nd pile testing | 15 days | Jun 3 '20 | Jun 17 '20 | | | | | | | | | | | | | | | |
| 146 | Loading test for 2nd pile | 4 days | Jun 18 '20 | Jun 21 '20 | | | | | | | | | | | | | | | |
| 147 | Submission of the report | 5 days | Jun 22 '20 | Jun 26 '20 | | | | | | | | | | | | | | | |
| 148 | Dismantle of the platform | 30 days | Jun 27 '20 | Jul 26 '20 | | | | | | | | | | | | | | | |
| 149 | Completion of socketted H-pile construction | 0 days | Jul 26 '20 | Jul 26 '20 | | | | | | | | | | | | | | | |
| 150 | Completion of cable bridge | 0 days | Jul 26 '20 | Jul 26 '20 | | | | | | | | | | | | | | | |
| 151 | Completion of section B | 0 days | Jul 26 '20 | Jul 26 '20 | | | | | | | | | | | | | | | |
| 152 | Contract completion | 0 days | Jul 26 '20 | Jul 26 '20 | | | | | | | | | | | | | | | |

Monthly Waste Flow Table for March 2020

Project: Lamna Power Station Extension - Civil and Building Works for Unit L10

Contractor: Paul Y. Construction Company, Limited

Record by: Ben Lam

Year of Record: 2016, 2017, 2018, 2019 & 2020

| MM.YYYY | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | | | Actual Quantities of Non-inert C&D Materials Generated Monthly | | | | | | |
|---------|--|--------------------------------|--|---|-------------------------|--------------------------|-------------------------|--------------------------------|--|--------------------------------------|--|-----------------------------------|--|----------------------------|--|
| | Excavated Materials | | | | Non-excavated Materials | | | | Metals (steel bar / metal strip) ⁽¹⁾ | Metals (aluminum can) ⁽¹⁾ | Paper / cardboard packaging ⁽¹⁾ | Plastics ^{(1) & (4)} | Chemical waste (wasted lubricant oil/ oil container) | Other, e.g. general refuse | |
| | Disposed in Public Fill | Disposed in Sorting Facilities | Others (e.g. Reused in the Contract/ Other Projects) | Broken Concrete or Construction Waste Collected by Recycled Company | Reused in the Contract | Reused in other Projects | Disposed in Public Fill | Disposed in Sorting Facilities | | | | | | | |
| | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000L) | (in '000kg) | | |
| Jan-16 | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Feb-16 | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Mar-16 | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Apr-16 | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| May-16 | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Jun-16 | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Jul-16 | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Aug-16 | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Sep-16 | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Oct-16 | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Nov-16 | 1779.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Dec-16 | 0.00 | 1.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.48 | | |
| Jan-17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Feb-17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Mar-17 | 3160.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.17 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Apr-17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 65.84 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| May-17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 23.41 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Jun-17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Jul-17 | 2988.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 17.26 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Aug-17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 47.61 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Sep-17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.04 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Oct-17 | 1963.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 | 0.00 | | |
| Nov-17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.90 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Dec-17 | 3011.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 12.41 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Jan-18 | 117.26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.81 | 0.00 | 0.00 | 0.00 | 151.22 | | |
| Feb-18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Mar-18 | 2434.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.94 | | |
| Apr-18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.41 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| May-18 | 1390.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Jun-18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 39.35 | | |
| Jul-18 | 1655.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.11 | 0.00 | 0.00 | 0.00 | 18.35 | | |
| Aug-18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.04 | 0.00 | 0.00 | 0.00 | 35.11 | | |
| Sep-18 | 823.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Oct-18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.75 | 0.00 | 0.00 | 0.00 | 2.93 | | |
| Nov-18 | 1734.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.60 | 5.09 | | |
| Dec-18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.64 | 0.00 | 0.00 | 0.00 | 1.79 | | |
| Jan-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.94 | 0.00 | 0.00 | 0.00 | 25.57 | | |
| Feb-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Mar-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Apr-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| May-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.11 | | |
| Jun-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 38.63 | | |
| Jul-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 37.28 | | |
| Aug-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.92 | | |
| Sep-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 17.82 | | |
| Oct-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 91.07 | | |
| Nov-19 | 0.00 | 5.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.70 | | |
| Dec-19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Jan-20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Feb-20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Mar-20 | 0.00 | 5.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.82 | | |
| Total | 21057.60 | 12.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 282.34 | 0.00 | 0.00 | 1.20 | 525.18 | | |

| Total Inert C&D Waste Materials Generated | Non-inert C&D Materials | | |
|---|-------------------------|-----------------------------------|----------------|
| | C&D Materials Recycled | C&D Waste Disposed of at Landfill | Chemical Waste |
| 21069.91 tonnes | 282.34 tonnes | 525.18 tonnes | 1200 Liters |

Where (A) Inert C&D materials include bricks, concrete, building debris, rubble and excavated spoil. In total, 21069.91 tonnes of inert C&D material were generated from the Project, of which 0 tonnes were reused in this and other contracts, and the remaining 21069.91 tonnes were disposed as public fill to Fill Banks / Sorting Facilities.

(b) Non-inert C&D materials (construction wastes) include metals, paper / cardboard packaging waste, plastics and other wastes such as general refuse. Metals generated from the Project were grouped into construction wastes as the materials were not disposed of with others at the public fill.

(c) 0 kg of metals, 0 kg of papers/ cardboard packing and 0 kg of plastics were sent to recyclers for recycling during the reporting period.

(d) Construction wastes other than metals, paper/cardboard packaging, plastics and chemicals were disposed of at Landfill.

Notes:

- (1) metal, paper & plastic were collected by recycler
- (2) The performance target of waste recycling are specified in the Contract.
- (3) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (4) Plastics refer to plastic bottles/ containers, plastic/ foam from packaging material.
- (5) Broken concrete for recycling into aggregates.
- (6) Disposal of inert waste to public fill or sorting facilities will **NOT** be considered as recycled waste.

Monthly Waste Flow Table for March 2020

Project: LAMMA POWER STATION EXTENSION – Unit 10 Complete Erection, Inspection, Testing & Commissioning of Power Block Facilities

Contractor: Taihei Dengyo Kaisha, Ltd.

Record by: Stephen Sin

Year of Record: 2017, 2018, 2019, 2020

| MM.YYYY | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | | | Actual Quantities of Non-inert C&D Materials Generated Monthly | | | | | |
|-------------|--|--------------------------------|---|---|------------------------|--------------------------|-------------------------|--------------------------------|--|--------------------------------------|--|-----------------------------------|--|----------------------------|
| | Excavated Materials | | | Non-excavated Materials | | | | | Metals (steel bar / metal strip) ⁽¹⁾ | Metals (aluminum can) ⁽¹⁾ | Paper / cardboard packaging ⁽¹⁾ | Plastics ^{(1) & (4)} | Chemical waste (wasted lubricant / oil/ oil container) | Other, e.g. general refuse |
| | Disposed in Public Fill | Disposed in Sorting Facilities | Others (e.g. Reused in the Contract / Other Projects) | Broken Concrete or Construction Waste Collected by Recycled Company | Reused in the Contract | Reused in other Projects | Disposed in Public Fill | Disposed in Sorting Facilities | | | | | | |
| (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in L) | (in '000kg) | |
| Jan 2017 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Feb 2017 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Mar 2017 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Apr 2017 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| May 2017 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Jun 2017 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Jul 2017 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Aug 2017 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sep 2017 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Oct 2017 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Nov 2017 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Dec 2017 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Jan 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Feb 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mar 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.73 |
| Apr 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.09 |
| May 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.43 | 7.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Jun 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Jul 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.82 |
| Aug 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 60.00 | 67.37 |
| Sep 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.36 |
| Oct 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 91.32 |
| Nov 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.35 |
| Dec 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.23 |
| Jan 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.97 |
| Feb 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 60.00 | 7.11 |
| Mar 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Apr 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| May 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.13 |
| Jun 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.56 |
| Jul 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 44000 | 17.99 |
| Aug 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 38.40 |
| Sep 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10000 | 22.71 |
| Oct 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.85 |
| Nov 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 12.64 |
| Dec 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.10 |
| Jan 2020 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 12.27 |
| Feb 2020 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.49 |
| Mar 2020 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.49 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.43 | 7.53 | 0.00 | 0.00 | 0.00 | 0.00 | 54120 | 425.98 |

| Total Inert C&D Waste Materials Generated | Non-inert C&D Materials | | |
|---|-------------------------|-----------------------------------|----------------|
| | C&D Materials Recycled | C&D Waste Disposed of at Landfill | Chemical Waste |
| 15.96 tonnes | 0.00 tonnes | 425.98 tonnes | 54120 Liters |

Where (A) Inert C&D materials include bricks, concrete, building debris, rubble and excavated spoil. In total, 15.96 tonnes of inert C&D material were generated from the Project, of which 0 tonnes were reused in this and other contracts, and the remaining 15.96 tonnes were disposed in Public Fill and Sorting Facilities.

(b) Non-inert C&D materials (construction wastes) include metals, paper / cardboard packaging waste, plastics and other wastes such as general refuse. Metals generated from the Project were grouped into construction wastes as the materials were not disposed of with others at the public fill.

(c) 0 kg of metals, 0 kg of papers/ cardboard packing and 0 kg of plastics were sent to recyclers for recycling during the reporting period.

(d) Construction wastes other than metals, paper/cardboard packaging, plastics and chemicals were disposed of at Landfill.

Notes:

- (1) metal, paper & plastic were collected by recycler
- (2) The performance target of waste recycling are specified in the Contract.
- (3) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (4) Plastics refer to plastic bottles/ containers, plastic/ foam from packaging material.
- (5) Broken concrete for recycling into aggregates.
- (6) Disposal of inert waste to public fill or sorting facilities will **NOT** be considered as recycled waste.

Monthly Waste Flow Table for March 2020

Project: Lamma Power Station Extension - Civil and Building Works for Unit L11

Contractor: Paul Y. Construction Company, Limited

Record by: Ben Lam

Year of Record: 2018, 2019 & 2020

| MM.YYYY | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | | | Actual Quantities of Non-inert C&D Materials Generated Monthly | | | | | |
|-------------|--|--------------------------------|---|---|-------------------------|--------------------------|-------------------------|--------------------------------|--|--------------------------------------|--|-----------------------------------|---|----------------------------|
| | Excavated Materials | | | | Non-excavated Materials | | | | Metals (steel bar / metal strip) ⁽¹⁾ | Metals (aluminum can) ⁽¹⁾ | Paper / cardboard packaging ⁽¹⁾ | Plastics ^{(1) & (4)} | Chemical waste (wasted lubricant oil/oil container) | Other, e.g. general refuse |
| | Disposed in Public Fill | Disposed in Sorting Facilities | Others (e.g. Reused in the Contract / Other Projects) | Broken Concrete or Construction Waste Collected by Recycled Company | Reused in the Contract | Reused in other Projects | Disposed in Public Fill | Disposed in Sorting Facilities | | | | | | |
| (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000L) | (in '000kg) | |
| Jul 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Aug 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sep 2018 | 3160.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Oct 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Nov 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.87 |
| Dec 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.67 |
| Jan 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Feb 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.66 | 0.00 | 0.00 | 0.00 | 0.60 | 0.00 |
| Mar 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 19.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Apr 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.08 | 0.00 | 0.00 | 0.00 | 0.00 | 19.09 |
| May 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.63 | 0.00 | 0.00 | 0.00 | 0.00 | 59.75 |
| Jun 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.64 |
| Jul 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.66 |
| Aug 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sep 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.31 |
| Oct 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.109 | 0.00 | 0.00 | 4.76 |
| Nov 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.60 | 4.87 |
| Dec 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10226.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 18.19 |
| Jan 2020 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7981.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.157 | 0.00 | 0.00 | 26.89 |
| Feb 2020 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8782.98 | 0.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.00 | 0.00 | 0.00 |
| Mar 2020 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20252.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.00 | 0.00 | 78.96 |
| Total | 3160.23 | 0.00 | 0.00 | 0.00 | 0.00 | 47242.42 | 0.00 | 0.00 | 35.42 | 0.00 | 0.266 | 0.00 | 1.20 | 276.66 |

| Total Inert C&D Waste Materials Generated | Non-inert C&D Materials | | |
|---|-------------------------|-----------------------------------|----------------|
| | C&D Materials Recycled | C&D Waste Disposed of at Landfill | Chemical Waste |
| 50402.65 tonnes | 35.69 tonnes | 276.66 tonnes | 1200 Liters |

Where (A) Inert C&D materials include bricks, concrete, building debris, rubble and excavated spoil. In total, 50402.65 tonnes of inert C&D material were generated from the Project, of which 47242.42 tonnes were reused in this and other contracts, and the remaining 3160.23 tonnes were disposed as public fill to Fill Banks / Sorting Facilities.

(b) Non-inert C&D materials (construction wastes) include metals, paper / cardboard packaging waste, plastics and other wastes such as general refuse. Metals generated from the Project were grouped into construction wastes as the materials were not disposed of with others at the public fill.

(c) 0 kg of metals, 0 kg of papers/ cardboard packing and 0 kg of plastics were sent to recyclers for recycling during the reporting period.

(d) Construction wastes other than metals, paper/cardboard packaging, plastics and chemicals were disposed of at Landfill.

Notes:

- (1) metal, paper & plastic were collected by recycler
- (2) The performance target of waste recycling are specified in the Contract.
- (3) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (4) Plastics refer to plastic bottles/ containers, plastic/ foam from packaging material.
- (5) Broken concrete for recycling into aggregates.
- (6) Disposal of inert waste to public fill or sorting facilities will NOT be considered as recycled waste.

Monthly Waste Flow Table for March 2020

Project: LAMMA POWER STATION EXTENSION – Unit 11 Complete Erection, Inspection, Testing & Commissioning of Power Block Facilities
 Contractor: Taihei Dengyo Kaisha, Ltd.
 Record by: Stephen Sin
 Year of Record: 2019, 2020

| MM.YYYY | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | | | Actual Quantities of Non-inert C&D Materials Generated Monthly | | | | | |
|-------------|--|--------------------------------|---|---|-------------------------|--------------------------|-------------------------|--------------------------------|--|--------------------------------------|--|-----------------------------------|---|----------------------------|
| | Excavated Materials | | | | Non-excavated Materials | | | | Metals (steel bar / metal strip) ⁽¹⁾ | Metals (aluminum can) ⁽¹⁾ | Paper / cardboard packaging ⁽¹⁾ | Plastics ^{(1) & (4)} | Chemical waste (wasted lubricant oil/oil container) | Other, e.g. general refuse |
| | Disposed in Public Fill | Disposed in Sorting Facilities | Others (e.g. Reused in the Contract / Other Projects) | Broken Concrete or Construction Waste Collected by Recycled Company | Reused in the Contract | Reused in other Projects | Disposed in Public Fill | Disposed in Sorting Facilities | | | | | | |
| (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in L) | (in '000kg) | |
| Nov 2019 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| Dec 2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Jan 2020 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Feb 2020 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Mar 2020 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.35 | |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 3.35 | |

| Total Inert C&D Waste Materials Generated | Non-inert C&D Materials | | |
|---|-------------------------|-----------------------------------|----------------|
| | C&D Materials Recycled | C&D Waste Disposed of at Landfill | Chemical Waste |
| 0.00 tonnes | 0.00 tonnes | 3.35 tonnes | 0 Liters |

- Where (A) Inert C&D materials include bricks, concrete, building debris, rubble and excavated spoil. In total, 0.00 tonnes of inert C&D material were generated from the Project, of which 0 tonnes were reused in this and other contracts, and the remaining 0.00 tonnes were disposed in Public Fill and Sorting Facilities.
- (b) Non-inert C&D materials (construction wastes) include metals, paper / cardboard packaging waste, plastics and other wastes such as general refuse. Metals generated from the Project were grouped into construction wastes as the materials were not disposed of with others at the public fill.
- (c) 0 kg of metals, 0 kg of papers/ cardboard packing and 0 kg of plastics were sent to recyclers for recycling during the reporting period.
- (d) Construction wastes other than metals, paper/cardboard packaging, plastics and chemicals were disposed of at Landfill.

Notes:
 (1) metal, paper & plastic were collected by recycler
 (2) The performance target of waste recycling are specified in the Contract.
 (3) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 (4) Plastics refer to plastic bottles/ containers, plastic/ foam from packaging material.
 (5) Broken concrete for recycling into aggregates.
 (6) Disposal of inert waste to public fill or sorting facilities will **NOT** be considered as recycled waste.

Monthly Waste Flow Table for March 2020

Project: Foundation Works for Lamma Power Station Extension Unit L12
 Contractor: Sunley Engineering & Construction Co Ltd
 Record by: Eric Liu
 Year of Record: 2019 & 2020

| MM/YYYY | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | | | Actual Quantities of Non-inert C&D Materials Generated Monthly | | | | | |
|--------------|--|--------------------------------|---|---|------------------------|--------------------------|-------------------------|--------------------------------|--|--------------------------------------|--|-----------------------------------|---|----------------------------|
| | Excavated Materials | | | Non-excavated Materials | | | | | Metals (steel bar / metal strip) ⁽¹⁾ | Metals (aluminum can) ⁽¹⁾ | Paper / cardboard packaging ⁽¹⁾ | Plastics ^{(1) & (4)} | Chemical waste (wasted lubricant oil/oil container) | Other, e.g. general refuse |
| | Disposed in Public Fill | Disposed in Sorting Facilities | Others (e.g. Reused in the Contract / Other Projects) | Broken Concrete or Construction Waste Collected by Recycled Company | Reused in the Contract | Reused in other Projects | Disposed in Public Fill | Disposed in Sorting Facilities | | | | | | |
| (in tonne) | (in tonne) | (in tonne) | (in tonne) | (in tonne) | (in tonne) | (in tonne) | (in tonne) | (in tonne) | (in tonne) | (in tonne) | (in tonne) | (in L) | (in tonne) | |
| Apr/2019 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| May/2019 | 7417.96 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Jun/2019 | 8470.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Jul/2019 | 5056.58 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.29 |
| Aug/2019 | 9705.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.51 |
| Sep/2019 | 5432.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 400.00 | 2.96 |
| Oct/2019 | 10767.96 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 55.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Nov/2019 | 8646.72 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 400.00 | 4.75 |
| Dec/2019 | 11100.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Jan/2020 | 2996.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Feb/2020 | 5063.82 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.73 |
| Mar/2020 | 4365.99 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.07 |
| Total | 79024.74 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 73.32 | 0.00 | 0.00 | 0.00 | 800.00 | 33.31 |

| Total Inert C&D Waste Materials Generated | Non-inert C&D Materials | | |
|---|-------------------------|-----------------------------------|----------------|
| | C&D Materials Recycled | C&D Waste Disposed of at Landfill | Chemical Waste |
| 79024.74 tonnes | 73.32 tonnes | 33.31 tonnes | 800.00 liter |

- Where (a) Inert C&D materials include bricks, concrete, building debris, rubble and excavated spoil. In total, 79024.74 tonnes of inert C&D material were generated from the Project, of which 0.00 tonnes were reused in this and other contracts, and the remaining 79024.74 tonnes were disposed as public fill to Fill Banks/Sorting Facilities.
- (b) Non-inert C&D materials (construction wastes) include metals, paper / cardboard packaging waste, plastics and other wastes such as general refuse. Metals generated from the Project were grouped into construction wastes as the materials were not disposed of with others at the public fill.
- (c) 11.00 tonne of metals, 0.00 tonne of paper / cardboard packing and 0.00 tonne of plastics were sent to recyclers for recycling during the reporting period.
- (d) Construction wastes other than metals, paper/cardboard packaging, plastics and chemicals were disposed of at Landfill.

- Notes:
- (1) metal, paper & plastic were collected by recycler
 - (2) The performance target of waste recycling are specified in the Contract.
 - (3) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 - (4) Plastics refer to plastic bottles/ containers, plastic/ foam from packaging material.
 - (5) Broken concrete for recycling into aggregates.
 - (6) Disposal of inert waste to public fill or sorting facilities will NOT be considered as recycled waste.
 - (7) Quantity of metal recycled is revised.