

The Hong Kong Jockey
Club

**Main Arena of the 2008
Olympic Equestrian
Event**

Quarterly EM&A
Summary Report –
August to October 2007

FINAL

The Hong Kong Jockey
Club

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Olympic Equestrian
Event**

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Summary Report –
August to October 2007

November 2007

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Job number 24469




**INDEPENDENT ENVIRONMENTAL CHECKER
CHECK CERTIFICATE**

**Independent Environmental Checker for
Main Arena of the 2008 Olympic Equestrian Event
Quarterly EM&A Summary Report – August 2007 to October 2007 (Final)**

We confirm having used reasonable skill and care in the preparation of the Quarterly EM&A Report and we certify that we can verify the report.

Signed:



Independent Environmental Checker
H. J. Cochrane
Director and IEC

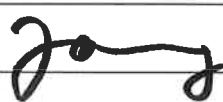


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Construction Programme

(Construction work was completed in mid-July 2007)

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Executive Summary

This is the fifth quarterly environmental monitoring and audit (EM&A) report presenting the progress of environmental monitoring and audit works for the period between August and October 2007, including noise monitoring and landscape and visual audit. Noise was measured in terms of $L_{eq(30min)}$ with L_{10} and L_{90} measurements for reference. Environmental audit works included the weekly environmental audit and the bi-weekly landscape & visual monitoring and audit.

Noise measurements were conducted at three locations during the reporting period. The highest noise level of 65.5dB(A) was recorded at the roof of Racecourse Villa (NM2) on 26 October 2007 while the lowest noise level of 58.7dB(A) was recorded at the podium outside Block 1 of Ravana Garden (NM3) on 2 August 2007.

There was no exceedance of noise A/L Level recorded during the reporting period.

A total of 6 landscape and visual monitoring and audits had been carried out in the reporting period by a Registered Landscape Architect (RLA). The RLA had the following observations:

- The construction of main arena and stables had been completed during the reporting period. Visual impacts were greatly mitigated as the stable walls and all of the planting works in arena and stables had been completed. With further growth of vegetation, the impact would be further reduced. Most transplanted and retained trees were generally in fair condition.
- The Contractor was reminded to pick up the stone and gravel to the hydrseeded area and remove all dead branches of retained trees in August 2007. The Contractor was reminded to remove all wild climbers on the transplanted trees and remove all dead branches of retained trees in September 2007. The Contractor was reminded to keep on regular watering to ensure the healthy establishment of planted vegetation in October 2007.

No Construction & Demolition (C&D) waste and C&D materials were disposed of at Landfill and Public Fill Area respectively during the reporting period. No chemical waste was disposed of during the reporting period.

One environmental complaint was received during the reporting period.

No exceedance of noise monitoring action/limit levels was recorded during the reporting period.

One summon in court was attended on 16 October 2007 in relation to the Inspection Report issued by EPD on 18 April 2007.

No Construction Noise Permit was granted during the reporting period.

Test Event competition was carried out on 11 and 13 August 2007. Results of environmental monitoring conducted during the Test Event period will be presented in separate reports.

1 Introduction

1.1 Project Background

Having considered the advantage of established international equine import and export protocols as well as the supporting facilities already in place, the International Olympic Committee (IOC) has accepted the Beijing Organising Committee for the Games of the 29th Olympiad (BOCOG)'s proposal of staging the 2008 Olympic and Paralympic Equestrian Events in Hong Kong.

Given the very tight schedule of the project, Hong Kong Sports Institute (HKSJ) in Shatin will be temporarily converted into the core competition venues for the Olympic Equestrian Event. Facilities to be provided on the core venues include:

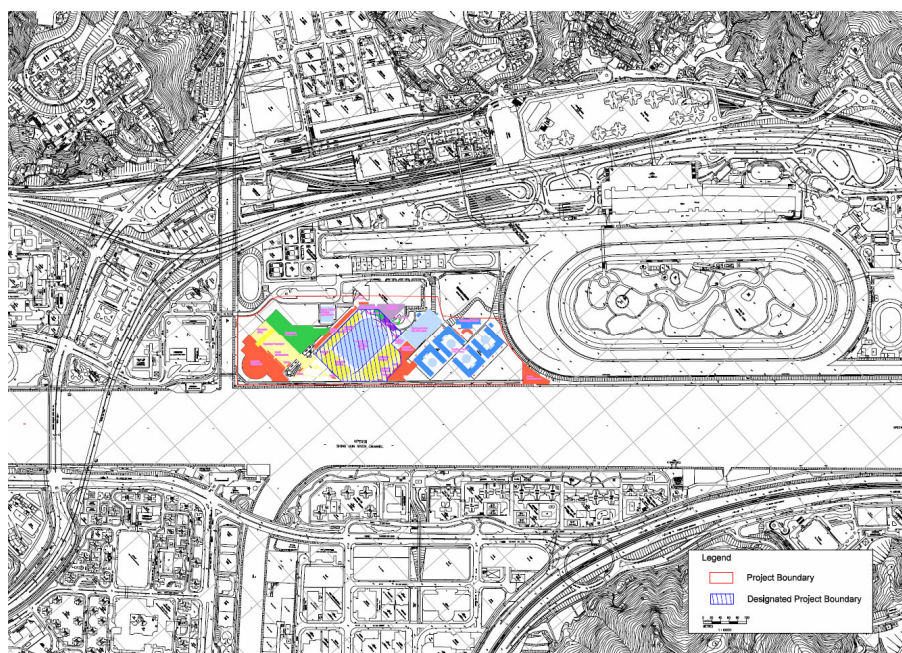
- Main Competition Arena for 20,000 spectators
- Stable Complex
- Training Arenas
- Logistic Compound
- Spectator Entry & Broadcast Compound
- Food & Merchandise

The venues will be in operation for approximately one month during the Olympic event, with the competition expected to last from between 10 to 14 days. 14 days after the Olympic Events, the Paralympic competition will be staged, which will last for a few days.

One year before the 2008 Olympic Event, the site will be occupied for the Test Event, which is used by all divisions of the Olympic Organising Committee to test their organisational capabilities for the Games and Event Management to trail the equine facilities and the footing (riding surface) of the Main Arena, Stables and Training Facilities. These mock up events are known as the 'Test Event Mode', and limited public access will be given.

Figure 1-1 shows the site location plan of the project.

Figure 1-1: Location plan of the project



The implementation of the Project is scheduled from July 2006 to December 2008. Table 1-1 gives the tentative project timetable and phasing.

Table 1-1: Timetable and phasing for the Project

| Task | Start | Finish |
|------------------------------|-------------------------|---------------|
| Pre- Test Event Construction | July 2006 | June 2007 |
| Test Event | August 2007 (2 weeks) | |
| Post Test Event Construction | December 2007 | June 2008 |
| Olympic Event | August 2008 (2 weeks) | |
| Paralympic Event | September 2008 (1 week) | |
| Reinstatement of HKSI | October 2008 | December 2008 |

The Main Arena of the 2008 Olympic Equestrian Event is classified as a Designated Project (DP) under item O7, Part 1, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) – an outdoor sporting facility with a capacity to accommodate more than 10,000 persons.

In accordance with the requirements of Section 5(1) of the EIAO, a project profile (No. PP-266/2005) was submitted to Environmental Protection Department (EPD) for the application of an EIA Study Brief on 17 October 2005. Pursuant to Section 5(7)(a) of the EIAO, EPD issued to The Hong Kong Jockey Club (HKJC) a study brief (ref: EIA Study Brief No: ESB-136/2005 dated 7 November 2005) to carry out an EIA study.

The EIA Report for the Project (EIA-118/2005) was approved and an Environmental Permit (EP) (EP-236/2006) granted by EPD on 24 and 25 March 2006 respectively.

1.2 Project Organisation

The Project Proponent is the Hong Kong Jockey Club (HKJC); the Engineer's Representative (ER) is Ove Arup & Partners Hong Kong Ltd (Arup); the Contractor is China State Construction Engrg (HK) Ltd; the Independent Environmental Checker (IEC) is Meinhardt Infrastructure and Environment Ltd; the Environmental Team (ET) is Arup.

1.3 Scope of Impact EM&A

The impact environmental monitoring and audit for the Project included noise monitoring, landscape and visual audit, and environmental site audit.

1.4 Purpose of the Report

The purpose of this quarterly EM&A summary report is to provide information on monitoring methodology, monitoring results, environmental permit status, recommendations and conclusions of the EM&A of the project.

This is the fifth quarterly EM&A summary report prepared by Arup for the submission to the HKJC summarising the implementation of the EM&A programme from 1 August to 31 October 2007.

2 Scope of Construction Works

2.1 Construction Programme

The construction works commenced on 15 August 2006. Pre-Test Event construction works was completed in mid July. No construction work was carried out during the reporting period. Post Test Event construction works will be started in December 2007. **Appendix A** shows the latest construction programme provided by the Contractor.

2.2 Construction Activities of the Reporting Period

There was no construction work carried out during the reporting period.

Test Event competition was carried out on 11 and 13 August 2007. Results of environmental monitoring conducted during the Test Event period will be presented in separate reports.

3 Summary of EM&A Requirements

3.1 Construction Noise

3.1.1 Monitoring Parameters

Construction noise is measured in terms of A-weighted equivalent continuous sound pressure level (L_{eq}). L_{10} and L_{90} were also recorded as supplementary reference information for data auditing.

3.1.2 Monitoring Frequency

Noise monitoring was performed on a weekly basis in accordance with the EM&A Manual. The monitoring time periods, parameters and frequency are summarised in Table 3-1.

Table 3-1: Construction noise monitoring parameters and frequency

| Time Period (when construction activity is found) | Parameters | Monitoring Frequency | No. of Measurements for Each Monitoring |
|--|--------------------------|----------------------|---|
| Between 0700-1900 hours on normal weekdays | $L_{eq(30\text{ min})}$ | Once per week | 1 |
| Between 1900-2300 hours on normal weekdays | $L_{eq(5\text{ min})}^*$ | | 3 (consecutive) |
| Between 2300-0700 hours of next day | | | |
| Between 0700-1900 hours on holidays | | | |

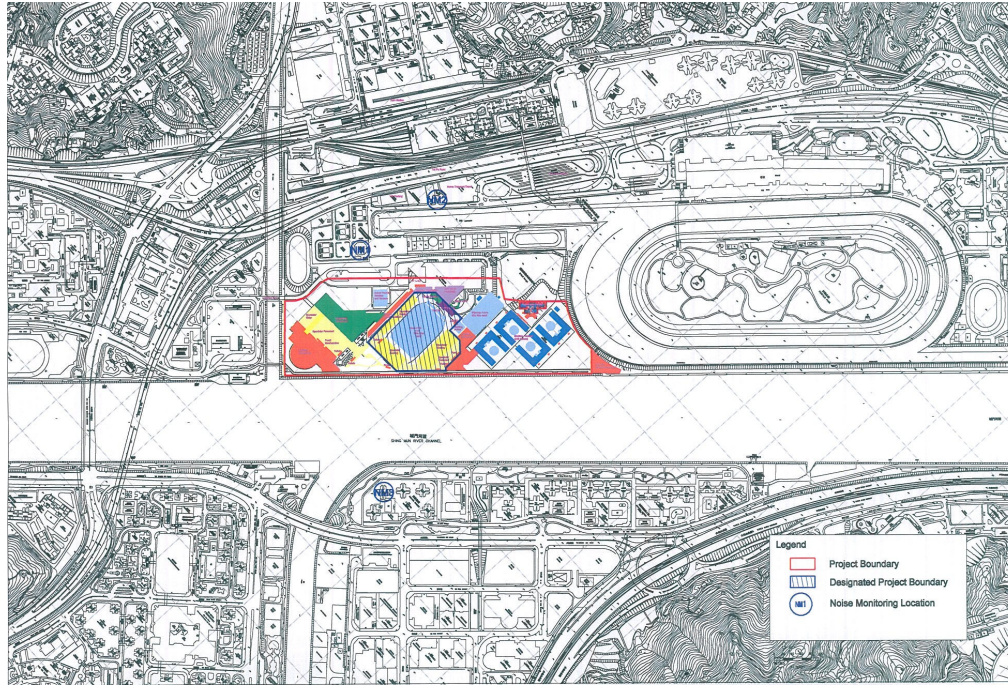
*The $L_{eq(5\text{ min})}$ will only be measured if construction activities are conducted in holidays and between the period of 1900 and 0700 hours during normal weekdays.

3.1.3 Monitoring Locations

A total of three locations were specified for the noise monitoring as shown in Table 3-2 and Figure 3-1. Measurements are conducted at a position 1.2m above ground and kept away from reflective surface.

Table 3-2: Construction noise monitoring locations

| Monitoring Station ID | Location | Monitoring Point |
|-----------------------|---|---|
| NM1 | Chung Cheung Court, HKJC Staff Quarters | On the roof, 1 meter from façade, facing the main works area |
| NM2 | Racecourse Villa | On the roof, 1meter from façade, facing the main works area |
| NM3 | Ravana Garden | On the podium outside Block 1, 1 meter from façade, facing the main works area. |

Figure 3-1: Noise Monitoring Location

3.2 Landscape and Visual

3.2.1 Audit Parameters

All landscape and visual mitigation measures implemented by both the Contractor Team (CT) and the Landscape Contractor during the construction phase and the first year of the operational phase will be audited by a landscape auditor, to ensure compliance with the intended aims of the mitigation measures.

3.2.2 Audit Frequency

The landscape and visual monitoring and audit will be undertaken once every two weeks throughout the construction, operation and reinstatement phases.

3.2.3 Audit Location

The landscape and visual monitoring and audit will be conducted throughout the entire site area.

3.3 Performance Limits and Event-Action Plans

The monitoring results will be checked against appropriate standards and requirements. A two-tier system performance limits have been established in the Project specific EM&A Manual. The "Action Level" and the "Limit Level" (A/L) are established according to the EPD requirements. The ET, ER, IEC, and CT will take corresponding action in accordance with the Event-Action Plans if the monitoring results exceed the performance limits.

3.3.1 Construction Noise

The A/L Levels for construction noise have been established in accordance with TM-EIAO as summarised in Table 3-3.

Table 3-3: Action and Limit Levels for construction noise

| Time Period | Action Level | Limit Level |
|---|---|-------------|
| 0700 – 1900 hours on any day not being a Sunday or public holiday | When one documented complaint is received | 75 dB(A) |

The action required to be taken by different parties in the case of occurrence of exceedance of A/L Levels are summarised in the Event and Action Plan in Table 3-4.

Table 3-4: Event and Action Plan for construction noise exceedance

| Event | Action | | | |
|---------------------|---|--|---|---|
| | ET Leader | IEC | ER | Contractor |
| Action Level | <ol style="list-style-type: none"> 1. Notify IEC, ER and the Contractor within 24 hours of identification of the exceedance. 2. Carry out investigation. 3. Report the results of investigation to IEC, ER and the Contractor. 4. Discuss with the Contractor and formulate remedial measures. 5. Increase monitoring frequency to check mitigation measures. | <ol style="list-style-type: none"> 1. Review with analysed results submitted by ET. 2. Review the proposed remedial measures by the Contractor and advise ER accordingly. 3. Supervise the implementation of remedial measures. | <ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. | <ol style="list-style-type: none"> 1. Submit noise mitigation proposals to ER and IEC. 2. Implement noise mitigation proposals. |
| Limit Level | <ol style="list-style-type: none"> 1. Identify the source. 2. Notify IEC, ER, EPD and the Contractor within 24 hours of identification of the exceedance. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency. 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. 6. Inform IEC, ER, and EPD the causes & actions taken for the exceedances. 7. Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 8. If exceedance stops, cease additional monitoring 9. Report the results of investigation to the IEC, EPD and ER. | <ol style="list-style-type: none"> 1. Discuss amongst ER, ET Leader and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly. 3. Supervise the implementation of remedial measures. | <ol style="list-style-type: none"> 1. Confirm receipt of notification of exceedance in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated. | <ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance. 2. Submit proposals for remedial actions to IEC and ER within 3 working days of notification. 3. Implement the agreed proposals. 4. Resubmit proposals if problem still not under control. 5. Stop the relevant activity of works as determined by the ER until the exceedance is abated. |

3.4 Site Inspection and Environmental Complaint Handling

3.4.1 Site Inspection

Site inspections provide a direct means to trigger and enforce the specified environmental protection and pollution control measures. They shall be undertaken routinely to inspect the construction activities to ensure appropriate environmental protection and pollution control/mitigation measures are properly implemented. With well-defined pollution control and mitigation specifications and a well-established site inspection, deficiency and action reporting system, site inspection is one of the most effective tools to enforce the environmental protection requirements on the construction site.

The ET Leader shall be responsible for formulating the environmental site inspection, deficiency and action reporting system, and carrying out the site inspection works. He shall

submit a proposal on site inspection, deficiency and action reporting procedures within 21 days prior to construction commencement to the Contractor for approval by the ER and IEC.

Regular site inspections shall be carried out at least once per week. The areas of inspection shall not be limited to the environmental conditions, pollution control and mitigation measures within the site. It should also review the environmental condition outside the site area which is likely to be affected, directly or indirectly, by the site activities. The ET Leader shall make reference to the following information in conducting the inspection:

- the EIA recommendations on environmental protection and pollution control mitigation measures;
- works progress and programme;
- individual works methodology (which shall include proposal on associated pollution control measures);
- Contract Specifications on environmental protection;
- relevant environmental protection and pollution control laws; and
- previous site inspection results.

The Contractor shall update ET Leader with all relevant information of the construction Contract for him to carry out the site inspections. The inspection results and its associated recommendations on improvements to the environmental protection and pollution control works shall be submitted to ER, IEC and the Contractor within 1 working day for reference and for taking immediate actions. The Contractor shall follow the procedures and time-frame as stipulated in the environmental site inspection, deficiency and action reporting system formulated by the ET Leader to report on any remedial measures subsequent to the site inspections.

Ad hoc site inspections shall also be carried out if significant environmental problems are identified. Inspections may also be required subsequent to receipt of an environmental complaint, or as part of the investigation work, as specified in the Action Plan for environmental monitoring and audit.

3.4.2 Environmental Complaints

Complaints shall be referred to the ET Leader for carrying out complaint investigation. The ET Leader shall undertake the following procedures upon receipt of the complaints:

- log complaint and date of receipt onto the complaint database;
- investigate the complaint to determine its validity, and to assess whether the source of the problem is due to works activities;
- identify mitigation measures if a complaint is valid and due to works;
- advise the Contractor accordingly if mitigation measures are required;
- review the Contractor's response on the identified mitigation measures and the updated situation;
- submit interim report to ER on status of the complaint investigation and follow-up action within the time frame assigned by the ER;
- undertake additional monitoring and audit to verify the situation if necessary, and review that any valid reason for complaint does not recur;
- report the investigation results and the subsequent actions to the source of complaint for responding to complainant (If the source of complaint is EPD, the results should be reported within the time frame assigned by EPD); and
- record the complaint, investigation, the subsequent actions and the results in the monthly EM&A reports.

The Contractor and the ER shall also be notified of the nature of complaints. An investigation shall be initiated to determine the validity of the complaint and to identify the source of the problem. As necessary, the ER shall undertake the following steps:

- Investigate and identify the source of the problem;
- Liaise with the ET and IEC to identify remedial measures;
- Require the Contractor to take action to mitigate the situation;
- Repeat monitoring to check compliance with Action and Limit level; and
- Repeat review procedures to identify further possible areas of improvement if monitoring results show exceedances.

The outcome of the investigation and the action taken shall be documented on the complaints proforma. Where possible, a formal response to each complaint received shall be prepared, within a maximum of seven days, so as to notify the concerned person(s) that action has been taken.

All enquires which trigger this process shall be reported in the monthly EM&A reports which shall include results of inspections undertaken by site staff, and details of the measures taken, and additional monitoring results. It should be noted that the receipt of complaints or enquiries will not, in itself be sufficient reason to introduce additional mitigation measures. They will however initiate the Event/Action Plan and these procedures may lead to the introduction of mitigation measures if they are considered necessary. In all cases the complainant shall be notified of the findings of the Event/Action Plan and audit procedures put in place to ensure that the problem does not recur.

During the complaint investigation work, the Contractor and ER shall cooperate with the ET Leader in providing all the necessary information and assistance for completion of the investigation. If mitigation measures are identified in the investigation, the Contractor shall promptly carry out the mitigation. The ER shall ensure that the measures have been carried out by the Contractor.

The Contractor should provide a manned hotline (tape recording is not acceptable) to serve as the community liaison channel to complaints, comments, suggestions or requests for information during the construction and reinstatement of the Project, so that action can be immediately taken to reduce the environmental nuisance in response to complaints raised by nearby residents or relayed from other Government Department.

3.5 Environmental Mitigation Measures

Environmental mitigation measures as recommended in the EIA report were stipulated in the EM&A Manual for the Contractor to adopt. A list of mitigation measures and their implementation status are given in **Appendix B**.

4 Noise Monitoring

4.1 Weather Conditions and Other Factors

No adverse weather conditions, in particular adverse wind speed & wind direction and fog & rain that may significantly affect or invalidate the collected noise monitoring data, were recorded during the reporting period.

Neither unusual operation of the construction site nor abnormal noise source was observed during the reporting period.

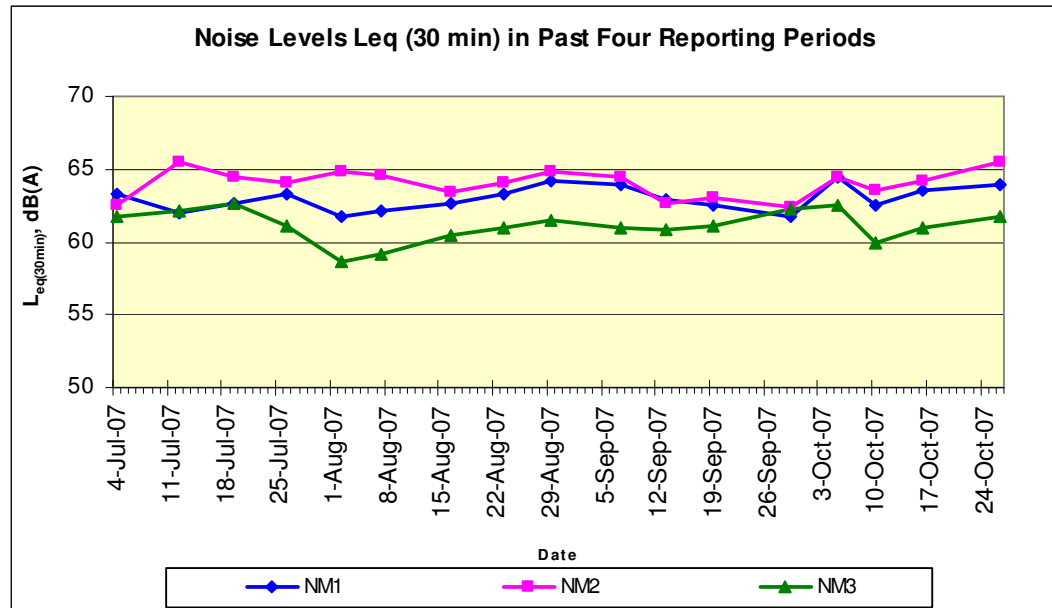
4.2 Summary of Results

A total of 13 sets of daytime (0700 – 1900 hours) noise monitoring was conducted during the reporting period.

The highest noise level of 65.5dB(A) was recorded at the roof of Racecourse Villa (NM2) on 26 October 2007 while the lowest noise level of 58.7dB(A) was recorded at the podium outside Block 1 of Ravana Garden (NM3) on 2 August 2007. There was no exceedance of noise A/L Levels recorded during the reporting period.

Graphical presentation of the noise levels at each monitoring location is illustrated in Figure 4-1.

Figure 4-1: Graphical presentation of day-time noise levels in the past four reporting periods



5 Landscape and Visual Monitoring and Audit

A total of 6 landscape and visual monitoring and audits had been carried out in the reporting period by a Registered Landscape Architect (RLA). The RLA had the following observations:

- The construction of main arena and stables had been completed during the reporting period. Visual impacts were greatly mitigated as the stable walls and all of the planting works in arena and stables had been completed. With further growth of vegetation, the impact would be further reduced. Most transplanted and retained trees were generally in fair condition.
- The Contractor was reminded to pick up the stone and gravel to the hydrseeded area and remove all dead branches of retained trees in August 2007. The Contractor was reminded to remove all wild climbers on the transplanted trees and remove all dead branches of retained trees in September 2007. The Contractor was reminded to keep on regular watering to ensure the healthy establishment of planted vegetation in October 2007.

6 Quarterly Summary of Waste Disposal, Environmental Complaints, Environmental Licenses and Non-compliance Records

6.1 Waste Disposal

Disposal of waste material during the reporting period generally complied with the corresponding waste disposal requirements. The waste disposal quantity during the reporting period is summarised in Table 6-1.

Table 6-1: Waste disposal quantity between August and October 2007

| Type of waste or material | | Disposal at | No. of loads or quantities |
|---------------------------|----------------|---------------------------------|----------------------------|
| C&D waste | | SENT Landfill | 0 tonne |
| C&D material | | Public Filling Area in TKO 137 | 0 tonne |
| Chemical waste | Spent lube oil | Collected by licensed collector | 0 L |

6.2 Complaint Record

One environmental complaint was received during the reporting period.

An environmental complaint from EPD on floodlight nuisance after completion of Test Event was received on 14 August 2007. The Equestrian Company was telephoned by EPD and requested to turn off the light as soon as possible. Rectification results included advance notification to the public if there will be any light testing and reviewing the conditions in the EP.

A log record on the environmental complaint is given in **Appendix C**.

6.3 Summary of Exceedance

There were no exceedances for noise monitoring during the reporting period.

6.4 Notification of Summons and Successful Prosecution

The Contractor was summoned in court on 16 October 2007 for first hearing in relation to the Inspection Report issued by EPD on 18 April 2007. Dust emission was found from construction site and construction works was not carried out in accordance with the requirements of Air Pollution Control (Construction Dust) Regulation for the control of dust emission.

Second hearing was arranged on 11 and 12 December 2007.

6.5 Environmental Licenses

No new Construction Noise Permit (CNP) was granted in the reporting period. A summary of the valid environmental licenses is given in Table 6-2.

Table 6-2: Summary of valid environmental licenses

| Type of Licence | Reference No. | Valid from | Valid to | Remarks |
|---------------------------|---------------|---------------|------------------|-------------------|
| Environmental Permit | EP-236/2006 | 25 March 2006 | -- | - |
| Construction Noise Permit | GW-RN0067-07 | 1 March 2007 | 31 August 2007 | Road paving |
| Construction Noise Permit | GW-RN0088-07 | 6 March 2007 | 5 September 2007 | Cable laying |
| Construction Noise | GW-RN0125-07 | 6 April 2007 | 5 October 2007 | General earth and |

| Type of Licence | Reference No. | Valid from | Valid to | Remarks |
|---------------------------------|------------------------|------------|-------------|--------------------|
| Permit | | | | MS finishing works |
| Registration of Waste Producer | WPN: 5213-753-C3317-11 | 1 Nov 2006 | -- | - |
| Site Effluent Discharge Licence | Licence No: 3448 | 1 Nov 2006 | 30 Nov 2011 | - |

6.6 Contacts and Hotline

Contractor: China State Construction Engrg (HK) Ltd

Contact Person: Michael Tsang

Contact Number: 9277 4956

7 Comments, Recommendations and Conclusion

7.1 Comments and Recommendations

Construction activities have all been completed in mid-July in accordance with the EIA Report and EP requirements. Mitigation measures being implemented on site were effective in general. The environmental performance of the Contractor during the reporting period was in general satisfactory. According to the environmental site inspections performed during the reporting period, the following recommendations were provided:

- Stone and gravel should be removed to the hydroseeded area;
- All dead branches of retained trees should be removed;
- All wild climbers on the transplanted trees should be removed; and
- Regular watering should be kept on to ensure the healthy establishment of planted vegetation.

The monitoring work in the past reporting period of the project is proving effective and the monitoring data confirmed that the works complied with the corresponding environmental standards.

The environmental monitoring methodologies and procedures were regularly reviewed by the ET. No modification to the existing EM&A programme was recommended.

7.2 Conclusion

Construction phase impact monitoring and audit was conducted in the reporting period. Monitoring and audit programme included construction noise monitoring, landscape and visual monitoring and audit, and weekly site inspection.

Daytime noise levels were monitored at 3 monitoring locations during the reporting period. No exceedance of Limit Level was recorded.

Weekly site inspections were conducted in the reporting period. Some mitigation measures were still being set up. Remedial measures were advised for those deficiencies observed for the Contractor to follow up.

No Construction Noise Permits were obtained in the reporting period.

One environmental complaint was received during the reporting period.

One summon in court was attended on 16 October 2007 in relation to the Inspection Report issued by EPD on 18 April 2007.

Appendix A

**Construction
Programme
(Construction work was
completed in mid-July
2007)**

Appendix B

**Environmental
Mitigation
Implementation
Schedule**

Appendix C

**Log records and details
of environmental
complaints**

Log Record on Environmental Complaints

| No. | Date of Complaint Received | Description | Investigation Result and Proposed Actions | Completion Date | Remarks |
|-----|----------------------------|---|--|-----------------|--|
| 001 | 28 Aug 2006 | Discharge of muddy water into Shing Mun River | <p>No evidence had shown the source of the muddy water discharge from subjected site. In fact, there were three main contractors working inside the HKSI area and all share the same discharge outlet. However, contractor had carried out the following measures to prevent any further discharge of muddy water from the subject site areas:</p> <ol style="list-style-type: none">1. Keep closely checking on the performance of the wastewater treatment system;2. Closely monitoring of the discharge outlet at Shing Mun River and tracing of the source origin immediately if muddy water was observed;3. Made use of the shallow ground areas on site to temporary trap stormwater inside the site to prevent any direct discharge;4. Construction of temporary drainage channel and use of water pump to properly divert the trapped stormwater to the temporary sump pit;5. Control pumping of all muddy water collected from the sump pit to the wastewater treatment plant within its treatment capacity before discharging. | 1 Sept 2006 | EPD inspected the site drainage system on 1 Sept 2006 and was satisfied. |

| No. | Date of Complaint Received | Description | Investigation Result and Proposed Actions | Completion Date | Remarks |
|-----|----------------------------|---|---|-----------------|--|
| 002 | 27 Sep 2006 | Construction dust from construction site at HKSI | No direct evidence was found during Contractor's investigation. The Contractor had reviewed the site dust mitigation measures, including more frequent haul road watering and covering the dusty materials. | 27 Sep 2006 | EPD was replied on 28 Sept 2006 by email. |
| 003 | 8 Nov 2006 | Construction Noise generated from area at HKSI on 5 Nov 2006 (Sunday) | Rectification action: a. Introduction of the Permit to Work system for works to be carried out during restricted hours. b. Consider to apply for a more realistic CNP for the construction works. | 12 Nov 2006 | EPD was replied on 10 Nov 2007 by email. |
| 004 | 9 Nov 2006 | Dust nuisance from construction site of HKSI | Rectification action: 1. Avoid stockpile of dusty materials on site. 2. Compact the exposed areas when watering on these areas is not effective. | 9 Nov 2006 | EPD inspected on 10 Nov 2006. There was no adverse comment. |
| 005 | 15 Nov 2006 | Dump trucks not covering their load were found at the dumping sites | Rectification action: 1. Enhancement of the current checking system at vehicular entrance by security personnel. 2. Give warning to subcontractors and establish penalty measures. 3. Give warning to the security company for the site and request them to enhance the checking system for every dump truck leaving the site. | 17 Nov 2006 | EPD inspected on 23 Nov 2006. The rectify actions were introduced and they had no further comment. |
| 006 | 21 Nov 2007 | Muddy water from construction site at HKSI | Muddy water was observed during Amber rainstorm. Rectification action included installing more water pumps to direct surface runoff. | 22 Nov 2006 | EPD was replied on 21 Nov 2006 by email. |

| No. | Date of Complaint Received | Description | Investigation Result and Proposed Actions | Completion Date | Remarks |
|-----|----------------------------|---|--|-----------------|---|
| 007 | 8 Jan 2007 | Dust and effluent from construction site at HKSI | Investigation Result: 1. Dust and muddy water spread to cycle track during the drilling processes. Rectification action: 1. Clean cycle track regularly 2. Erect screen along the cycle track | 9 Jan 2007 | EPD inspected on 9 Jan 2007. They were satisfied with the improvement works. EPD was replied on 12 Jan 2007 by email. |
| 008 | 15 Jan 2007 | Construction dust from construction site at HKSI | Investigation Result: 2. Dust and muddy water spread to cycle track during the drilling processes. Rectification action: 1. Additional screen was erected and worker was arranged to clean the cycle track regularly. | 15 Jan 2007 | EPD believed it was the same complaint as the one on 8 Jan 2007. EPD was replied on 15 and 16 2007 by email. |
| 009 | 2 Apr 2007 | Discharge of muddy water to Shing Mun River Channel | Rectification action: 1. Installation of additional water pump at the last manhole to direct as much muddy water as possible during rainfall to the on-site treatment facility. | 3 Apr 2007 | The discharge of muddy water occurred after a heavy rainfall on 2 April 2007. EPD was replied on 3 April 2007 by email. |
| 010 | 2 Apr 2007 | Dust and night time construction noise from construction site at HKSI | Investigation result: 1. No construction activity was scheduled during the concerned period. Rectification action: 1. more frequent haul road watering 2. covering dusty material with tarpaulin sheets. | 2 Apr 2007 | EPD was replied on 3 April 2007 by email. |

| No. | Date of Complaint Received | Description | Investigation Result and Proposed Actions | Completion Date | Remarks |
|-----|----------------------------|---|--|-----------------|---|
| 011 | 10 Apr 2007 | Public holiday construction noise and muddy water in Shing Mun River near the construction site at Yuen Wo Road | Investigation result: <ol style="list-style-type: none"> The rainfall on 8 Apr 2007 was 0.3mm, overflowing of site drainage did not occur Only internal finishing works was arranged on 8 Apr 2007, which did not lead to excessive noise <p>The complaint was not substantiated.</p> | 10 Apr 2007 | EPD inspected on 10 April and no further comment. |
| 012 | 17 Apr 2007 | Construction dust from construction site at HKSI | Rectification action: <ol style="list-style-type: none"> more frequent haul road watering covering dusty material with tarpaulin sheets | 17 Apr 2007 | EPD was replied on 19 and 22 Apr 2007 by email. |
| 013 | 18 Apr 2007 | Polluted effluent discharged from the construction site at HKSI | Investigation result: <ol style="list-style-type: none"> Muddy water was observed after the rainfall on 17 Apr 2007. <p>Rectification action: <ol style="list-style-type: none"> More pumps were installed at the last manhole </p> | 18 Apr 2007 | On site checking with EPD on the same day revealed that muddy water was caused by the tide washing over the river sediment. |
| 014 | 25 Apr 2007 | Muddy water from construction site at HKSI | Investigation result: <ol style="list-style-type: none"> Muddy water was observed at outfall, but the source of the muddy water could not be traced. The Contractor will keep tracing the source of pollutant. | 25 Apr 2007 | EPD was replied on 27 and 29 Apr 2007 by email. |
| 015 | 9 May 2007 | No water spraying during granite polishing | Investigation result: <ol style="list-style-type: none"> Check cutting processes in all stable areas EPD was replied by email and the complaint was not substantiated | 9 May 2007 | EPD was replied on 9 May 2007. |
| 016 | 23 May 2007 | Discharge of muddy material to Shing Mun River | Investigation result: <ol style="list-style-type: none"> Checking drainage system to prevent any leakage of untreated surface runoff <p>Rectification action:</p> | 31 May 2007 | EPD was replied on 31 May 2007 |

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|-----|----------------------------|---|---|-----------------|---|
| | | | <ol style="list-style-type: none"> 1. Install more water pumps to direct surface runoff 2. Arrange workers entering the manholes to clear all settled soil | | |
| 017 | 31 May 2007 | Strong light effect from lighting test | Rectification Action: <ol style="list-style-type: none"> 1. Switch off the light within 15 mins after receipt of complaint 2. Respond to complainant about the rectification action taken 3. Check the angle of the light to ensure it is not directed to the residential buildings 4. Self-checking of light at night | 1 June 2007 | The complainants were informed on 31 May and 1 June of the rectification action taken |
| 018 | 13 June 2007 | Light nuisance from HKSI after 11:00pm | Rectification Action: <ol style="list-style-type: none"> 1. Cancellation of light test on 13 June 2007. 2. The complainant was contacted and agreed to shorten the light test to 10:00pm. 3. All antiglare baffles and visor shields were checked on 14 June to be properly installed. 4. The electricians were reminded on 14 June to aim the flood lights at the main arena and warm up arena before switching on the lights. | 16 June 2007 | EPD was replied on 16 June 2007. |
| 019 | 26 Jun 2007 | Discharge of muddy water to Shing Mun River from outfall near the site office and wastewater treatment unit | Investigation result: <ol style="list-style-type: none"> 1. The Hong Kong Observatory record was checked which showed that raining occurred in Shatin during the concerned period. Rectification Action: <ol style="list-style-type: none"> 1. Checking of drainage system on 26 June to ensure no leakage of untreated water to Shing Mun River Channel occurred. 2. Checking of water pumps on 26 June to ensure they were well functioned and that all surface runoff was diverted to the wastewater treatment unit. 3. Checking of wastewater treatment unit on | 27 June 2007 | EPD was replied on 27 June 2007. |

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|-----|----------------------------|---|---|-----------------|---------------------------------|
| | | | 26 June to ensure that it was well functioned. | | |
| 020 | 29 June 2007 | Dust and night time construction noise beyond 12:00am | <p>Investigation Result:</p> <ol style="list-style-type: none"> 1. Muddy water absorbed on the cycle track was suspected to lead to the dust complaint. 2. No construction works was arranged beyond 11:00pm. It was estimated the operation of the permanent ventilation system arisen the misunderstanding. <p>Rectification Result:</p> <ol style="list-style-type: none"> 1. Covering the exposed slope to prevent soil from washing to cycle track during rain on 1 July. 2. Intercepting the site boundary along cycle track on 3 July to prevent leakage. 3. Clearing up the cycle track on 4 July. | 4 July 2007 | EPD was replied on 4 July 2007. |
| 021 | 30 June 2007 | Discharge of muddy materials into Shing Mun River channel and cycle track | <p>Investigation Result:</p> <ol style="list-style-type: none"> 1. Seeping of minor muddy water to Shing Mun River occurred after heavy rainfall from the outfall near the wastewater treatment unit. 2. Some soil was washed to cycle track due to the removal of site hoarding. <p>Rectification Result:</p> <ol style="list-style-type: none"> 1. Checking of water pumps on 30 June 2007 to ensure they functioned well and all surface runoff was diverted to the wastewater treatment unit 2. Checking of wastewater treatment unit on 30 June 2007 to ensure it was well functioned. 3. Covering the exposed slope to prevent soil from washing to cycle track during rain on 1 July. 4. Intercepting the site boundary along cycle track on 3 July to prevent leakage. 5. Clearing up the cycle track on 4 July. | 4 July 2007 | EPD was replied on 4 July 2007. |

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| 022 | 27 July 2007 | Light nuisance from HKSI beyond 10:00pm till 11:00pm | <p>Investigation Result:</p> <ol style="list-style-type: none"> 1. Light testing for all Arenas was completed on 14 July and the whole HKSI venue was locked down on 16 July 2007. There was no light testing has been carried out since 15 July 2007 and no more light testing was anticipated to be required. <p>Rectification Action:</p> <ol style="list-style-type: none"> 1. Agreed to address to Equestrian Company via HKJA to notify the public in advance if there is any emergent light testing. | 27 July 2007 | EPD was replied on 27 July 2007. |
| 023 | 14 August 2007 | Floodlight nuisance after completion of Test Event | <p>Rectification Result:</p> <ol style="list-style-type: none"> 1. To notify the public in advance if there is any light testing. 2. To review the conditions in the EP. | | |