

HGH Limited

Proposed Karting Track in D.D.
134, Lung Kwu Sheung Tan, Tuen
Mun: *Executive Summary*

December 2005

Environmental Resources Management


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For and on behalf of	
Environmental Resources Management	
Approved by:	<u>Freeman Cheung</u>
Signed:	
Position:	<u>Executive Director</u>
Date:	<u>2nd December 2005</u>

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1 INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Currently, there is no outdoor karting track in Hong Kong that meet international standard for kart racing. The project proponent, HGH Limited, is proposed to develop an outdoor karting track at Lung Kwu Tan, Tuen Mun. The design of the karting track will meet international standard for kart racing and safety standard, and will only serve members of the Hong Kong Kart Club for sporting purposes. The karting track will not be opened to the general public for recreational uses.

The karting track will be managed by the Project Proponent and oversee by the Hong Kong Kart Club (HKKC). HKKC is a member of the Sports Federation and Olympic Committee of Hong Kong, China, as well as one of the sporting organizations under the subvention of the Leisure and Cultural Services Department.

1.2 PURPOSE AND SCOPE OF THE EIA

The Project is classified as a Designated Project by virtue of Item O.4 of Part I of Schedule 2 (ie a motor racing circuit) under the *Environmental Impact Assessment Ordinance (Cap. 499) (EIAO)*.

The main objective of this Environmental Impact Assessment (EIA) study is to provide information on the nature and extent of potential environmental impacts arising from the construction and operation of the proposed Project and related activities taking place concurrently. The criteria and guidelines stipulated in the EIAO-TM, the EIA Study Brief, and other relevant legislation, polices, and guidelines are adopted in carrying out this EIA Study. To address the environmental concerns associated with the proposed karting track, the EIA study has made reference to the operation of an existing karting track located in Macau. In particular, on-site noise measurement was conducted to ensure that the potential noise emissions from the karting track operations are fully address in the EIA Study. The study will also contribute to decisions on the overall environmental acceptability of the Project, after the implementation of environmental mitigation measures.

The EIA provides a detailed assessment of the potential environmental impacts associated with the Project, in relation to the issues specified in the *EIA Study Brief* (No. ESB-135/2005), including air quality, noise, water quality, waste, land contamination and landscape and visual.

2.1 LOCATION AND SCALE OF THE PROJECT

The Project site is located at various lots in D.D.134, Lung Kwu Sheung Tan, Tuen Mun. Location of the site is shown in *Figure 2.1*. The total site area is about 1.8 ha. The proposed site is currently dominated by wasteland and only very minor site levelling will be required. No slope cutting or major site formation is required as part of the construction and no superstructure will be constructed within the site. An existing village house within the site boundary will be used as an office for the karting track and four units of mobile toilets will be provided at the site together with thirteen containers to be used as maintenance and storage area for the petrol kart. The proposed site layout plan is shown in *Figure 2.2*.

2.2 CONSTRUCTION AND OPERATIONAL ACTIVITIES

The facilities required at the proposed karting track are as described in *Section 2.1*. All the construction activities will be restricted within the Project Area. As discussed in *Section 2.1*, no slope cutting or major site formation is required and the construction work on site is minimal and will not result in adverse impacts to the environment.

The main activities and construction sequence are:

- Site levelling and associated drainage work;
- Compacting;
- Track paving works; and
- Fence installation.

The proposed karting track is for sporting purposes and can only be used by members of the HKKC. The karting track will not be opened to the general public for recreational uses. A kart driving licence, issue by the HKKC, is required for driving the petrol karts and the proposed track will hold a maximum of 200 visitors with about 20 staffs. No on-site parking facility is provided at the proposed karting track. To control the number of visitors, a shuttle bus service would be provided for the visitors. A 45-person bus would run between Tuen Mun Town Centre and the karting track every hour.

The proposed karting track is for running with petrol karts. To operate any karting track, the design of the karting track must satisfy the international safety standard for kart racing. The karting track will operate from Monday to Sunday with operating hours from 09:30 to 19:00. A maximum of 40 karts would be allowed on the track for training or rental run and 34 karts for match. Each run would not last more than 30 minutes including kart

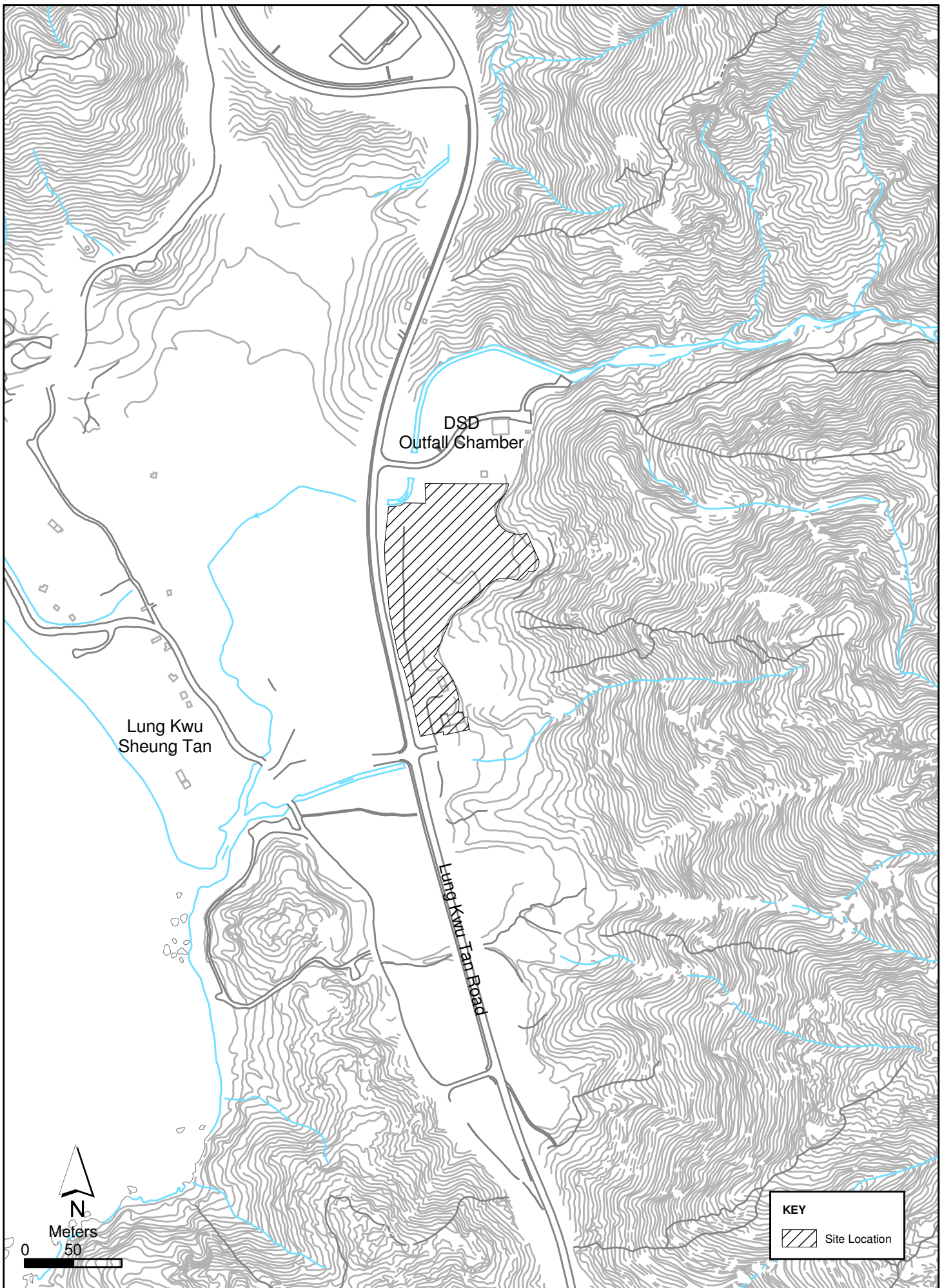
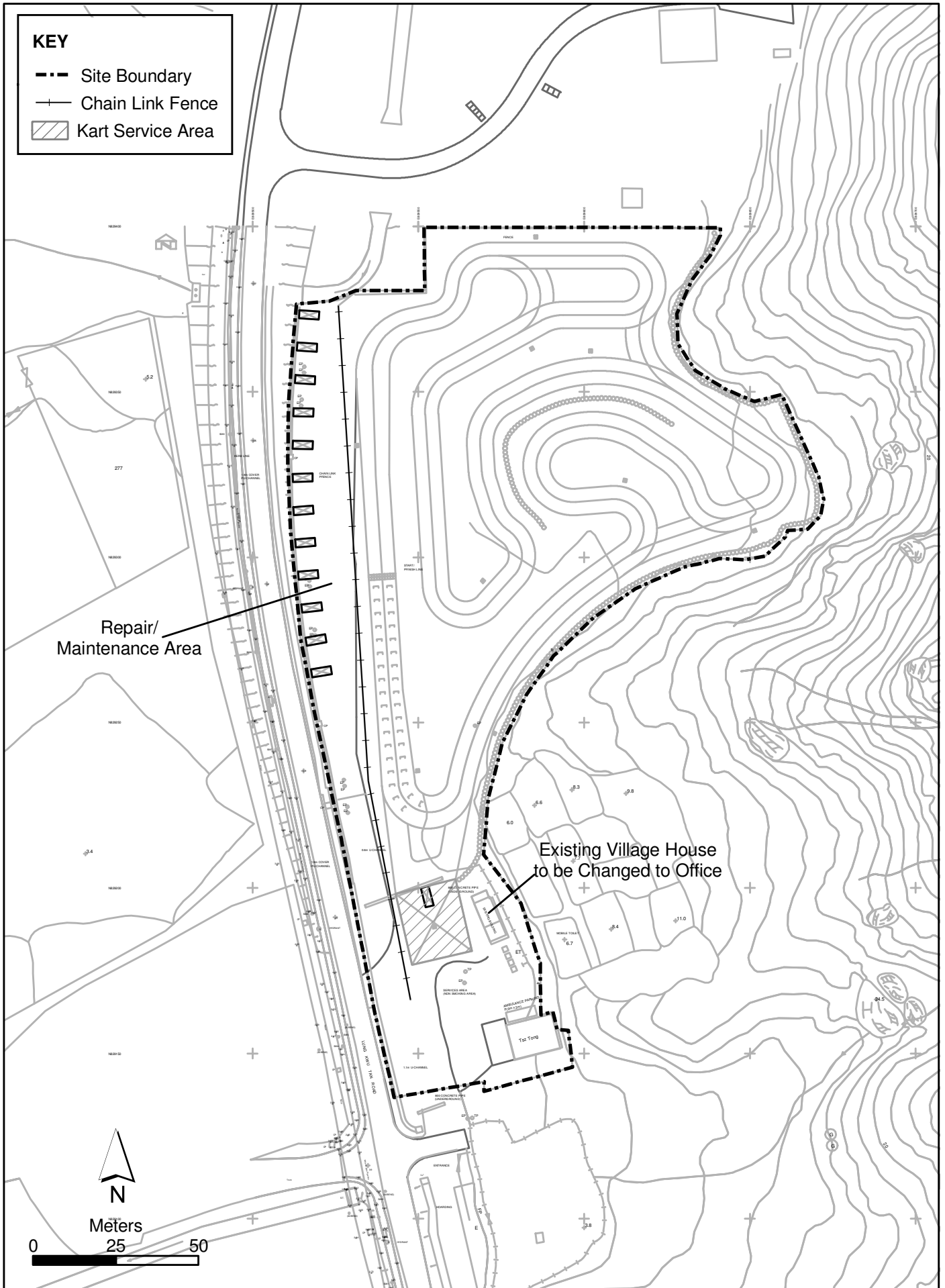


FIGURE 2.1

Site Location



running time and break time between each run. The karts to be running on the track are powered by Rotax Max FR125 2-stroke single cylinder engines with displacement of 125 c.c. The fuel tank capacity of the kart is small, i.e., about 3 litres, and re-fuelling will be required once or twice a day. The re-fuelling will be undertaken on site using a hand pump. Only limited quantities of petrol, a standard 18 litre safety petrol tank, will be stored on site. Only minor maintenance works will be conducted on-site, which may include the use of lubricants, chain oil, and brake cleaner. If any engine maintenance works are required, the kart vehicle will be transported to a garage.

2.3

PROJECT PROGRAMME

The construction of the Project is expected to be completed in two months. All the construction activities are expected to be undertaken during normal working hours (ie Monday to Saturday, from 07:00 to 19:00 hours). No restricted hour works are anticipated.

The nature and extent of the environmental impacts associated with the construction and operation phases of the Project are summarised below. Specific mitigation measures for the Project have been developed during this EIA. The Implementation Schedule of the recommended measures is presented in *Table 10.1* of the EIA Report.

3.1**AIR QUALITY**

Given the small scale of the construction works, the dust impact at ASRs is minimal. In addition, due to the small scale of site area, the number of construction plant operating on site is limited, therefore, the gaseous emissions from the construction equipment is minimal and no adverse impact is anticipated.

In view of the limited emissions from karts on tracks and separation distances between ASR and tracks, air quality impact is not expected. Since the number of shuttle bus running between the karting track and Tuen Mun Centre is limited, the air quality impacts due to additional traffic arising from karting track would not be anticipated. Besides, with the proper handling of petrol stores and re-fuelling and regular maintenance of karts, no odour nuisance is expected.

Based on the impact assessment, no EM&A measures are required.

3.2**NOISE**

Due to the large separation distances, unmitigated construction activities associated with the Project will not cause adverse noise impact at the NSRs. The predicted construction noise levels are in the range of 35 – 37 dB(A), which complied with the stipulated noise criterion.

Based on the worst case scenario by adopting a maximum sound pressure level of 98 dB(A) at 1 m for 13-kart movement, the predicted facade noise levels for a maximum of 40-kart event is well below the daytime noise criterion of 55 dB(A) at all NSRs located at more than 1km from the site boundary.

Based on the impact assessment, no EM&A measures are required.

3.3**WATER QUALITY**

Given the small scale of the construction works, short duration of construction period and no identified WSRs within the study area, water quality impacts are negligible and minimal during construction phase of the Project.

For the operation of karting, the main concern is the water quality impact may be caused by the servicing and petrol re-fuelling activities. Nevertheless, the surface runoff can be well controlled by adoption of a proper drainage system with peripheral channel and petrol interceptor. Addition to the proper handling of petrol tank and re-fuelling and regular maintenance of karts, no adverse water quality impacts are anticipated.

Based on the impact assessment, no EM&A measures are required.

3.4 WASTE ASSESSMENT

The anticipated quantities of C&D materials to be generated from site clearance and building renovation, and chemical wastes, sewage and general refuse to be generated during both the construction and operational phases will be minimal. Minimal residual impacts are anticipated from the construction and operation of the karting track.

3.5 LAND CONTAMINATION

Given the small scale of the construction works, short duration of construction period and minimal use of heavy-duty construction machinery, fuel and oils, land contamination impacts are negligible during construction phase of the Project

For the operation of the Project, the main concern is the potential land contaminations caused by the karting activities, servicing, repairing and oil filling activities. Nevertheless, all the above activities will be carried out on paved areas. Any leakage can be well controlled by secondary containments or a proper drainage system with peripheral channel and petrol interceptor. With consideration of the infrequent refuelling activities and the minimal amount of fuel handled each time, as well as proper handling of petrol tank, precaution on refuelling activities and regular maintenance of karts, no adverse impacts on land contamination are anticipated.

Based on the impact assessment, no EM&A measures are required.

3.6 LANDSCAPE AND VISUAL

Given that the proposed karting track is selected to be located within a remote and shielded area, the proposed karting track would be only visible from limited viewpoints, including the transient road users along Lung Kwu Tan Road and the users of the Lung Kwu Tan firing range. Project works would result in small losses of landscape character/resource areas confining to 1.8ha of disturbed area. Based on the assessment, the landscape and visual impact of the proposed karting track are considered to be acceptable after the implementation of the landscape and visual mitigation measures.

OVERALL CONCLUSIONS

The EIA has critically assessed the overall acceptability of any environmental impacts likely to arise as a result of the construction and operation of the proposed karting track.

This EIA Study has predicted that the Project will comply with all environmental standards and legislation and thus demonstrated the acceptability of any residual impacts from the Project and the protection of the population and environmentally sensitive receivers. The Study concluded that there would be no adverse long term or cumulative effects/impacts on the environment.