GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
FORM 22
AMUSEMENT RIDES (SAFETY)(OPERATION AND MAINTENANCE) REGULATION, CHAPTER 449
SECTION 5
CERTIFICATE OF APPROVAL AS A COMPETENT PERSON

Certificate No. C-075

[redacted]

Electrical and Mechanical
Services Department
98 Caroline Hill Road
Causeway Bay
Hong Kong

Date 10 January 2002

I hereby approve, under Section 5 of the Amusement Rides (Safety) (Operation and Maintenance) Regulation, [redacted] Being the holder of
(name of certificate holder)

#Hong Kong Identity Card / ~~Passport No.~~ [redacted] to carry out the duties of a Competent Person *under the conditions as stipulated in the Annex to this certificate for the following amusement ride owner(s) and for the amusement rides installed in the following location(s) -

Name of Amusement ride Owner(s)	**Location of Amusement Ride(s)**
Sinopower Consultants Limited	Zone 3, Tsing Fat Street, Lok On Pai Area 59, Tuen Mun, N.T

(LAW Yu-wing)
for Director of Electrical and Mechanical Services

Notes: ① *This certificate shall become null and void when the person named herein shall no longer be employed in the capacity and shall forthwith be returned to the issuing officer at the above address.*
② **The duties which the Competent Person may perform are limited to those stipulated in the Annex to this certificate.*

#*Delete if inappropriate*

EMSD/GLA22

Name of Applicant	:	[redacted]
HKID No.	:	[redacted]
Ride Name & Location No.	:	Karting (XSI-00-001)
Location of Amusement Ride	:	Zone 3, Tsing Fat Street, Lok On Pai, Area 59, Tuen Mun, N.T..

Appendix 6

Information provided by Project Proponent (Sinopower Consultants Ltd)

中力顧問有限公司
Sinopower Consultants Ltd.

To : Westwood Hong & Associates Ltd.
Attn : Mr. Westwood Hong
Fax : 25916189
Date: March 27, 2002

Dear Sir,

Kart Motor Track at Lok On Pai, Area 59, Tuen Mun
Additional Information required to support the Project Profile

For the additional information as required to support the Project Profile, please be informed of the followings:

Additional Information :

1. The overall track length of the Kart Motor Track is 500 Metres.
2. There is no specific requirement in the Lease condition of the subject on decommissioning and the restoration.
3. There is no specific requirement on the decommissioning period.
4. For the Boundary Wall, the height is 2.2 metres.
5. The quantities of chemical waste estimated to be generated are 20 litres per month. And, the household waste estimated to be generated are 5 kgs per day.
6. For the attraction of traffic to site, it is estimated to be 10 vehicles per day.

Please note for your information and let us know if you have further comments to the above.

Best Regards,

Patrick Choi.

香港新界屯門青山公路小欖青發街59號 (三號場)
Zone 3, Tsing Fat Street, Lok On Pai, Area 59, Tuen Mun, N.T. Hong Kong.
Tel: (852) 2441 4447 (852) 2441 4446 Fax: (852) 2441 5291

Appendix 7

Construction Schedule provided by Client

中力顧問有限公司
Sinopower Consultants Ltd.

To : Westwood Hong & Associates Ltd.
Attn: Mr. Westwood Hong
c.c. : Angela

Fax: 2591 6189 Date: Apr 2, 2002

Dear Sir,

Kart Motor Track at Lok On Pai,
Area 59, Tuen Mun

We are pleased to inform you the building process of the subject site:

	Item	Duration
1.	Outlying fence:	takes 2 days
2.	Cleaning of waste	takes 2 days
3.	Positioning of the tyres for the track 5.5 ton truck was used for unloading the tyres.	takes 3 days
4.	Build the bitumen on the track workers used compactor in this process	takes 3 days,
5.	Pedestrian bridge	takes 3 days

(Note: Item 1, 2, 3 are going to take place simultaneously)

Please note and let us know if you have any query.

Best Rgds,
Tommy Ho

香港新界屯門青山公路小欖青發街59號 (三號場)
Zone 3, Tsing Fat Street, Lok On Pai, Area 59, Tuen Mun, N.T. Hong Kong.
Tel: (852) 2441 4447 (852) 2441 4446 Fax: (852) 2441 5291

Appendix 8

Air Impact Assessment

Air Impact Assessment

Methodology

1) The air impacts caused by the kart emissions have been predicted by employing CALINE4 model which is a line source air quality model developed by the California Department of Transport. The prediction model is based on the Gaussian diffusion equation and employs a mixing zone concept to characterize pollutant dispersion over the roadway.

2) Based on an approximate 2-minute lap time and maximum allowable 10 karts on the track, the flow is estimated as 300 karts per hour on the track.

3) The computer plot of the simulation model for the kart emissions assessment is presented in Figure A8.1.

4) According to Trinity Consultants Inc, the supplier of the CALINE4 software, the 24-hour averages of RSP could be estimated by multiplying the maximum 1-hour concentration with multiplication factor of 0.4. This factor is accepted by the regulatory agencies in the USA.

5) The 1-hour NO_2 having more stringent criterion is presented. The predicted 1-hour NO_2 and 24-hour RSP concentrations including background concentrations were presented in contour maps, plotted by employing the program *Surfer* by *Golden Software*.

Background Concentrations

6) Background concentrations for NO_2 and RSP in the vicinity are taken as the annual average concentrations at Tsuen Wan area as stated in the Air Quality in Hong Kong Year 2000, as shown in Table A8-1.

	Pollutants	
	NO_2	RSP
Background concentrations (μgm^{-3})	61	50

Table A8-1 The background concentrations for NO_2 and RSP

Pollutant Emission Rates

7) The major pollutants emitted by vehicles include Nitrox (NO_x) and Respirable Suspended Particulates (RSP). The emission factors for these pollutants have been calculated according to the EPD's Fleet Average Vehicle Emission Factors at Year 2002. The emission rates of NOx and RSP is 1.68 and 0.05 g/mile/veh respectively.

Parameters for CALINE4

8) The parameters employed in the CALINE4 model are given in Table A8-2. These parameters are the worst-case meteorological data.

Parameters employed in CALINE4	Value
Wind Speed	1m/s
Stability Class	D
Ambient Temperature	25 degree C
Mixing Height	500m
Wind Direction Standard Deviation	12 degree
Aerodynamic Roughness Coefficient	100cm
Pollutant Settling Velocity	0 cm/s
Pollutant Deposition Velocity	0 cm/s

Table A8-2 Parameters employed in CALINE4 model

Interpretation of Results

9) NO_2 is assumed to behave as an inert gas. The concentrations for NO_2 are taken to be 20% of the predicted NO_x results.

Predicted Pollutant Concentrations

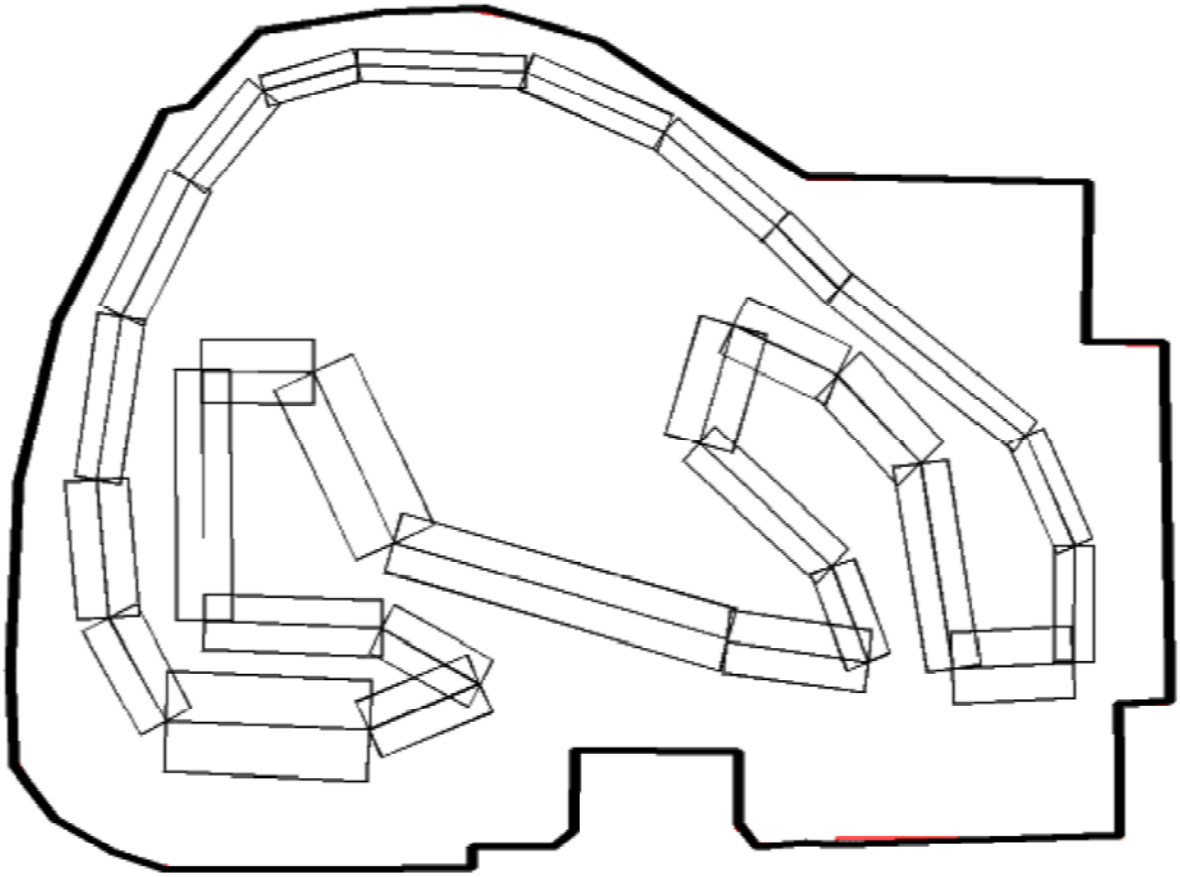
10) The prediction results are summarized in Table A8-3 and shown in Figures A8-2 & A8-3. Prediction results indicate that the air pollutant concentrations caused by the karts are well within the HKAQO limits for all the nearby air sensitive receivers. A typical CALINE output file is given in Appendix 8.1.

Air Pollutant	Predicted Maximum Pollutant Concentrations, $\mu g/m^3$	HKAQO limit, $\mu g/m^3$
1-hr Nitrogen Dioxide	78*	300
24-hr Respirable Suspended Particulates	51**	180

Table A8-3 Predicted Maximum Pollutant Concentrations within the subject site

Note:
* Predicted concentration including background concentration of $61\mu g/m^3$.
** Predicted concentration including background concentration of $50\mu g/m^3$.

NORTH



Legend

Site location

Westwood Hong & Associates Ltd	TITLE :	FIGURE
PROJECT : 21564	A Computer plot of road scheme (Air impact assessment)	A8-1
Karting Track at Tuen Mun		