For discussion on 24 April 2006

Legislative Council Panel on Environmental Affairs Tung Chung - Ngong Ping Cable Car Project

PURPOSE

This paper addresses Members' concerns on the environmental impacts arising from the Tung Chung - Ngong Ping Cable Car Project (CCP).

BACKGROUND

- 2. The CCP comprising the construction and operation of a cable car system of about 5.7 Km long between Tung Chung Town Centre and Ngong Ping on Lantau Island. The development of the cable car system aims to further develop Ngong Ping as a major tourist attraction in Hong Kong.
- 3. The CCP is a Designed Project (DP) under the Environmental Impact Assessment Ordinance (EIAO). MTR Corporation Limited (MTRCL) prepared an Environmental Impact Assessment (EIA) report under the EIAO in January 2003 and the report was exhibited for public to comment in accordance with the statutory requirement from 29 March 2003 to 27 April 2003. Twelve sets of comments were received from the public including those from the nearby residents and the green groups. The Advisory Council on the Environment (ACE) endorsed the EIA report without conditions on 14 May 2003. After considering the comments received from the public and the advice from ACE, the Director of Environmental Protection approved the EIA report with conditions on 9 June 2003 and granted an environmental permit (EP) to MTRCL on 7 November 2003. The approved EIA report, the approval conditions and the latest version of the EP for the CCP are all available on the EIAO website.
- 4. To ensure compliance with the recommendations of the EIA, the EP requires MTRCL to implement an environmental monitoring and auditing (EM&A) programme. As an important part of the control mechanism, the EM&A programme is implemented by the Environmental Team (ET) Leader and the Independent Environmental Checker (IEC) appointed by MTRCL. The ET

Leader and IEC are experienced personnel in the field of EM&A and environmental management. They are responsible respectively for conducting the various environmental monitoring in accordance with the approved EM&A Manual and for verifying the results. The Environmental Protection Department (EPD) monitors the environmental performance of the CCP on a regular basis through site inspections, liaison meetings and auditing the EM&A reports. From the monitoring results obtained so far, no exceedance of the relevant limits has been recorded.

- 5. Since commencement of the works, EPD has received 11 complaints relating to the CCP. In response to these complaints and for the purpose of carrying out random compliance check, EPD staff has conducted a total of 29 field inspections. Whilst EPD staff has identified some irregularities of minor nature and has given advice/warning as appropriate, no non-compliance leading to prosecution action has been spotted.
- 6. As the CCP traverses the Lantau North Country Park, the Country and Marine Parks Board was consulted on the project in May 2003. The Board had no in-principle objection to the project. The Country and Marine Parks Authority (i.e. Director of Agriculture, Fisheries and Conservation), approved the CCP in November 2003. To minimize the potential or possible impact of the project to country parks area during the construction, operation and maintenance phases of the CCP, the Authority has imposed suitable conditions in giving consent to the project. Officers of the Agriculture, Fisheries and Conservation Department (AFCD) also patrol the project site regularly.

ENVIRONMENTAL CONCERNS

- 7. The Hon. Albert CHAN Wai-yip submitted on 10 March 2006 a proposal to restore the environment and ecology of Ngong Ping. The Proposal is in Annex A which remarks that the CCP has not been properly managed thus causing serious threat to the environment and ecology of Ngong Ping. The key issues of concern are a) site hygiene; b) ecological impacts; c) soil erosion; d) ground contamination; e) fire hazard; f) Red Fire Ant and g) use of toxic material.
- 8. We have investigated the issues highlighted in the above proposal and our findings and response are provided in the following paragraphs:

8.1 Site Hygiene

- 8.1.1 **Waste Storage on Site** All construction sites generate waste and need room to store waste and materials temporarily on site and the CCP is no exception. In the past, we noted that packs of construction materials or wastes had been temporarily stored along the trail side within the CCP's works area pending removal by helicopters. Whilst some grass or vegetations could have been affected by the temporary storage of materials/wastes, no protected species had been damaged. Recent inspection in March 2006 reveals that most of the construction materials, litter and wastes etc. have been cleared.
- 8.1.2 **Inadequate Toilet Facilities** Toilet facilities are available at the site office inside the Ngong Ping Terminal Building. In addition to that, two mobile toilets are also provided at the Theme Village/Public Transport Interchange area next to the Terminal site. After the issue of inadequate toilets was raised in January 2006, two more mobile toilets have been installed at the back of the Terminal. Since the CCP covers a large works area extending along the 5.7 km cable route, there are physical constraints in providing mobile toilets along a lengthy but narrow strip of rough terrain area under the cable route. Site inspection does not reveal any sign of ground or water contamination outside CCP's works boundary caused by a lack of toilet facilities.
- 8.1.3 Muddy Water Discharge Disturbs the Ecology of Streams No muddy discharge into rivers has been observed in the past inspections. The presence of wildlife has been reported in the diverted Ngong Ping Stream since the completion of its diversion works, AFCD also reports such findings in its recent field visits to the stream.

8.2 **Ecological Impacts**

8.2.1 Rare Species Affected by CCP and the High Mortality Rate of Transplantation - The EIA report recommends the protected or rare species be maintained and fenced off from construction work to prevent any accidental damage. If any impacts are evident on rare or protected species, the affected species shall be transplanted to a similar environment as the original habitat. Also, a suitably trained person shall be present to relocate any terrestrial fauna located in the construction area. The EP also stipulates that MTRCL should avoid or minimize ecological impacts and a qualified ecologist should be engaged to conduct detailed survey to ascertain the presence of any rare or protected species in the works area. Recommendations by the qualified ecologist to protect the rare or protected species should be fully implemented. If any rare

- 8.2.2 Trees Removed for Stream Construction Works To comply with the EP conditions, MTRCL has to plant not less than 600 trees near the new streams and also, to plant new trees in an area of not less than 1 ha. within the Lantau North Country Park. Trees of reasonable health, of reasonable form and with a reasonable chance of surviving the shock of transplanting had been transplanted as far as possible. In this regard, MTRCL has generally observed these conditions.
- 8.2.3 **Landscaping Consideration -** According to MTRCL's EIA report, to avoid major ecological impact, the bi-cable car system is selected to reduce the number of towers (maximum 8 towers with 5 in the country park) so that the total area anticipated to be disturbed would be less. To avoid the high ecological sensitive areas, the locations of towers and angle stations have been selected in areas of low ecological sensitivity. The cable car alignment has also been selected after careful consideration of environmental issues and optimized to minimize the visual intrusion of the development in the sensitive landscape.
- 8.2.4 **Warning Signs For Protected Species Missing -** Warning signs and protective fences have been provided to those rare and protected species. It is possible that separate signs or fences could have been knocked off or removed accidentally as a result of nearby construction or human activities.
- 8.2.5 **Plant Affected By CCP** MTRCL is required to reinstate all areas disturbed by the CCP to their original states by means of vegetation planting. In addition, MTRCL will carry out compensatory planting of 3 ha. woodland of native trees to compensate for the loss of woodlands due to the CCP and the Ngong Ping stream diversion works. The EIA report has recommended that for the re-vegetate areas of temporary vegetation loss, particularly woodland habitat and tall shrubland habitat, species used for planting should be decided in

consultation with AFCD and take reference from the species identified in the Tree Survey and be native to Hong Kong or South China region

8.2.6 **Inadequate Protection Against Mikania Micratha -** Whilst *Mikania micratha* was once found in the diverted stream course, it has already been removed by MTRCL.

8.3 **Soil Erosion**

8.3.1 **Erosion Near Stream** - The stream banks are formed by gabion and there has been no erosion along the stream banks. The loose materials previously found near the stream banks were imported for the landscaping works, rather than a result of erosion. MTRCL has already removed the loose materials from the stream banks.

8.4 **Ground Contamination**

8.4.1 **Oil Spillage** – In January 2006, there was an incident whereby oil leaked from a power generator polluted the soil immediately adjacent to the generator. The leaking was not due to non-provision of drip tray but spillage from a damaged drip tray. MTRCL had subsequently removed the generator from site. The spilled oil only affected a very small area and the polluted soil was cleared. No permanent ground contamination is observed and MTRCL has been reminded to tighten site management to prevent recurrence.

8.5 Fire Hazard

- 8.5.1 Improper Cable Car Design For Fire Prevention The design of the Tung Chung cable car system is governed by the Aerial Ropeways (Safety) Ordinance (Cap. 211). Regulation 13 of the Aerial Ropeways (Operation and Maintenance) Regulations (Cap. 211A) prohibits smoking in any car on any aerial ropeway. Section 28 of the Tung Chung Cable Car Bylaw (Cap. 577A) also prohibits any person smoking or carrying a lighted pipe, cigar or cigarette or naked flame in cable cars. Non-complying smokers are liable to a fine of \$2,000.
- 8.5.2 **Fire Protection Control by Government** We put great emphasis on the prevention of fire and AFCD will closely monitor the operation of the cable car system and continue to implement various fire fighting measures in the country parks. We will also continue to step up fire fighting measures during hill fire peak season.

8.5.3 Fire Protection Control by MTRCL - In parallel with our effort, MTRCL will make every effort to prevent hill fire. MTRCL has stated in the EIA report that its contractor will propose a Fire Prevention Strategy which covers measures to prevent hill fires, including that no smoking; cooking or use of open fires on any site; that no cigarette lighters or matches shall be carried onto the site in connection with the CCP. Welding or hot work is also not permitted and temporary fire fighting equipment is provided in all work areas. MTRCL will review its fire prevention measures during the testing phase of cable car system and refine these measures if necessary. MTRCL will strictly enforce the smoking ban to reduce hill fire risk and has developed a fire prevention programme for the operation of the cable car system. The programme includes arranging staff to remind passengers of the smoking ban before boarding the cabins, having staff travel on the cableway and base at the angle stations to monitor passenger behaviors and to look out for signs of potential fire risk, and posting signs at terminals and cabins to remind passengers of the smoking ban, etc.

8.6 **Red Fire Ant**

8.6.1 Lack of Control on Red Fire Ant - AFCD is very concerned about the potential introduction of red fire ants through imported vegetation and has already requested MTRCL to impose a quarantine period for inspection of any imported vegetation used in the cable car project before planting in the country parks.

8.7 Toxic Materials

8.7.1 **Use of Tanalith Oxide Treated Timber** - The timber used for construction of emergency rescue trails is copper chromium arsenic (CCA) treated timber. According to overseas experience, CCA treated timber is widely used for outdoor structures. The risk of any toxicology impact on the local environment is minimal so long as MTRCL conducts proper maintenance to the timber trails.

8.8 **Zoning of Ngong Ping**

8.8.1 **Re-zone Ngong Ping as a Conservation Protection Zone** - Most of the Ngong Ping areas are already zoned as Conservation, Sites of Special Scientific

Interest or Green Belt zones under the Draft Ngong Ping Outline Zoning Plan no. S/I-NP/5.

WAY FORWARD

- 9. The Administration will work with MTRCL to ensure all conditions stipulated in the EP and those required by the Country and Marine Parks Authority would be properly carried out. AFCD will also refine various fire prevention measures during the testing and commissioning stage of the cable car system. We will continue monitoring the CCP closely to ensure that its environmental impacts are mitigated to an acceptable level.
- 10. Members are invited to note the above investigation findings.

Environmental Protection Department April 2006

東涌吊車工程環境保護建議書 保護昂平珍貴生態資源

立法會陳偉業議員 2006年3月10日

1. 引言

- 1.1 政府近年大力發展大嶼山的旅遊事業,並展開多項工程。當中東涌吊車途經的地方擁有美麗的自然環境,然而在發展東涌吊車項目的同時,政府及東涌吊車的承辦商沒有充份顧及工程對環境的影響,損害了昂平珍貴的生態環境,令瀕危珍貴的動植物的存續受到威脅。
- 1.2 基於政府及東涌吊車承辦商沒有充份顧及吊車工程和吊車啟用後對環境的影響,因而對沿途的生態環境構成多方面的損害,包括:未能妥善處理衛生和垃圾問題;工程損害珍貴樹木,遷移樹木死亡率達六成;土壤缺乏保護,終至水土流失;工程污染溪流,引致生態災難;忽視山火威脅,缺乏防火措施;增加傳入紅火蟻的風險,危害珍貴動植物;吊車使用有毒物料,損害環境;東涌吊車車箱設計出現問題,乘客可輕易拋出煙蒂;吊車工程沿途缺乏綠化,破壞景觀;不能防止極具侵略性的薇金菊於人造溪流大量繁殖,使人造溪流生態受損。就上述問題,政府應採取有效措施保護生態環境及使受損的生態環境復原。

2. 現時東涌吊車工程所引致的多個環境問題

2.1 東涌吊車工程由於沒有全面顧及對四週環境的影響,最終對附近的生態環境帶來損害,對昂平珍貴動植物構成威脅。東涌吊車工程所引致的多個環境問如下:

2.1.1 未能妥善處理衛生和垃圾問題

2.1.1.1 工程進行期間,由於東涌吊車承辦商沒有妥善處理衛生及垃圾問題,損害附近環境。有關衛生問題,在工地沒有提供合適的流動厠所,排泄物並未經過處理,嚴重污染附近環境。而有關垃圾問題,工地附近亦棄置了大量垃圾和建築廢料,如破舊水管等,無人清理。在欠缺適當處理下,衛生及垃圾問題會對附近環境造成污染。

2.1.2 工程損害珍貴樹木,遷移樹木死亡率達六成

2.1.2.1 工程進行期間承建商並無採取有效措施保護樹木,令珍貴樹木受到傷害,而遷移

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了的樹木死亡率達六成,對昂平珍貴的林木資源造成嚴重傷害。

- 2.1.2.2 承建商為了補償因工程而填平的溪流,建造了一條人造溪流。為此,承建商砍去百多棵樹木。另外,在珍貴樹木旁邊並無放置警告牌或圍欄,承建商任由大型建築物料和垃圾,如廢棄的鋼纜捲筒等,放置在樹木旁和植被上(見附圖一、二)。這些重物均會壓毀樹幹及樹根,對植被造成損害。此外,工程中將一些索緊了的鋼纜靠著樹幹,樹幹因此而受到破壞。工程進行期間,承建商更把部份樹木的樹枝砍去,但由於採用不適當的方法砍去樹枝,在砍去樹枝後又沒有妥善修復樹木受損的部份,因而使細菌、真菌或昆蟲輕易透過樹枝的破口侵食樹幹內部,對樹木構成威脅(見附圖三)。而承建商在遷移受工程影響的植物時,有接近六成被搬遷的植物死亡,更有不少珍貴的自然植物被偷去或失蹤,當中更包括在中國受保護的自然植物,例如中國吊鐘等。由於承建商的疏忽,導致了珍貴樹木的大量死亡和損傷,造成不可補救的結果。
- 2.1.2.3 基於上述原因,在工程附近的樹木遭遇到不可補救的損害。

2.1.3 土壤缺乏保護,終至土壤受污染及水土流失

2.1.3.1 承建商並無對昂平土壤作出適當保護,終會引致土壤受污染及土壤流失。工程進行期間,承建商在操作發動機時,沒有為發動機設置接油盤,引致燃油滲漏到附近的土壤,對附近土壤構成永久性的污染(見附圖四)。此外,承建商將翻起的泥土和建築廢料一起堆在溪邊。在長時間缺乏保護下,泥土將被雨水侵蝕,造成水土流失,結果令樹木無法生長。

2.1.4 工程污染溪流,引致生態災難

- 2.1.4.1 由於承建商並無對溪流作出保護,雨水把垃圾及污染物等帶進溪流,污染溪水,對溪水的生態環境造成破壞。
- 2.1.4.2 昂平附近的溪流是香港少數未受污染的溪流。工程所產生的污染流入溪水,導致 溪流受到污染,水質下降,令原本清澈的溪水變成泥水。溪水受污染減少水中氧氣含量, 加上污濁的溪水令水中植物難於進行光合作用。在食物鏈的關係下,將會導致溪中大部 份動植物死亡。承建商對溪流保護的忽視將引致溪流的生態災難。

2.1.5 忽視山火威脅,缺乏防火措施

2.1.5.1 政府忽視昂平發生山火的風險,並沒有採取有效防火措施。昂平地區生有大量雜

草,容易發生山火。山火不但燒燬林木,更會燒死動物,對昂平的生態環境構成嚴重威脅。另外,工地中的油桶旁的不准吸煙告示已經殘舊,模糊不清,不能對工地工人起警示作用。而油桶附近既無滅火筒,在旁更發現被掉棄的空煙盒,可見工地防火設施不足,工人防火意識薄弱,此外,東涌吊車沿途缺乏山火拍、隔火路等防火設施,若發生山火,火勢將難以控制,對整個昂平的生態環境造成嚴重破壞(見附圖五)。

2.1.6 東涌吊車車箱設計的問題

- 2.1.6.1 雖然即將投入服務的東涌吊車每天需要運載大量遊客,而東涌吊車亦會途經大片 珍貴的植被,但東涌吊車車箱設計卻存在不少問題,不能有效防止遊客從車廂內拋出煙 蒂,因而增加出現山火的風險。
- 2.1.6.2 據悉現時東涌吊車的車箱內,設有多個可以任由遊客開啟的窗戶。由於窗戶容易開啟,部份遊客可以輕易地從車箱的窗戶拋出煙蒂(見附圖七)。由於吊車所經過的地方多是空礦、風力強勁的山坡,因此遊客由車廂拋出的煙蒂,有可能會引發大規模的山火。 基於上述原因,現時車廂的窗戶設計將會增加引發山火的風險,對東涌吊車沿途的植被帶來威脅。
- 2.1.6.3 鑒於現時東涌吊車車箱內的窗戶存在容易開啟的問題,東涌吊車經營者應考慮改善窗戶的設計,使乘客不能輕易地把未熄滅的煙蒂拋出窗外,政府及東涌吊車的經營者亦應加強執法,嚴懲在車廂內吸煙的乘客。

2.1.7 增加傳入紅火蟻的風險,危害珍貴動植物

- 2.1.7.1 承建商從外地運來不少植物,但政府卻缺乏嚴格監管,這將增加引入紅火蟻的風險。
- 2.1.7.2 承建商從外地運來的植物不少是來自紅火蟻出沒的地區,而盛載這些植物的土壤可能帶有紅火蟻巢。紅火蟻一旦落地生根,便開始繁殖,極難清除。紅火蟻巢遭到騷擾後,紅火蟻便會傾巢而出,攻擊任何威脅牠們的生物。紅火蟻不但會對農業做成影響,亦會吃掉青蛙蛋和鳥蛋,以及小型或初生的哺乳動物,對附近生物構成嚴重威脅。紅火蟻亦會對基建造成破壞,如對道路、電箱、電腦等。若紅火蟻攻擊吊車設施,將造成短路或停電,甚至發生意外,造成人命傷亡。在外國如澳洲等地的事例證明忽視紅火蟻的威脅將造成嚴重的後果。故此,若政府沒有對購入的植進行嚴格的監察,將大大增加引入紅火蟻的風險,危害昂平的珍貴動植物。

2.1.8 由東涌至昂平的行人通道使用有毒物料,損害環境

2.1.8.1 由東涌至昂平的行人通道使用有毒物料,危害環境。由東涌至昂平的行人通道上的木材使用了不少使用外地引入的木材(詳見附圖六)。由該段行人通道使用了化學物 Tanalith oxide 作為木材防腐劑。然而 Tanalith oxide 是有毒而且含有 20%的 Arsenic(砷,即砒霜),對昂平的動植物均有害。 Tanalith oxide 會隨著雨水流入山邊土壤及溪流,會污染環境,對溪中和沿溪的動植物構成傷害,極有可能造成生態災難。

2.1.9 吊車工程沿途缺乏綠化,破壞景觀

2.1.9.1 吊車工程沿途缺乏綠化,破壞昂平優美的景觀。於工程展開後,沿途樹木和植被受到傷害,變成處處泥地,如彌勒山的山頂被毀。吊車沿途均缺乏綠化,計劃引入的都是外地樹木品種。這將損害原有生態環境平衡,令優美珍貴的昂平自然景觀受到破壞。(詳見附圖九)

2.10 不能防止極具侵略性的薇金菊於人造溪流生長,破壞人造溪流生態

- 2.10.1 鑒於東涌吊車工程對附近溪流及植被造成破壞,在政府的要求下,承建商建造一條人造溪流,為因工程而失去棲息處的生物提供居所。然而,承建商在興建人造溪流後,該溪流卻出現大量具侵略性的薇金菊(Mikania micrantha),使人造溪流的生態構成嚴重損害。
- 2.10.2 在人造溪流落成後不久,該人造溪流即被大量薇金菊覆蓋,薇金菊更攀附在人造溪流兩旁,用於固定石塊的鐵絲網上 (詳見附圖八)。據悉,該等植物為薇金菊 (Mikania micrantha)。薇甘菊會藉攀附其他植物至樹冠以攝取更多陽光, 從而有助生長。與此同時, 被薇甘菊厚密的葉和莖所覆蓋的植物, 最終可能會因爲光照不足而窒礙生長。薇甘菊亦能進行有性或無性繁殖,於春夏兩季生長迅速,故此被人冠以「一分鐘蔓延一英里的雜草」 ("Mile-a-minute weed")之稱號。承建商在興建人造溪流時,沒有採取措施防止薇金菊在河道內繁殖,最終使人造溪流被薇金菊覆蓋。薇金菊大量繁殖,使其他本土植物不能於人造溪流生長,因而不能為各種動物及昆蟲提供適當的食物,而薇金菊覆蓋河流表面,也會阻礙陽光照射河流低部,使河床的植物因為缺乏陽光,不能進行光合作用而大量死亡。薇金菊覆蓋人造溪流的表面,更會減弱人造溪流的排洪能力,增加上游泛濫的風險。
- 2.10.3 人造溪流本應是承建商為補償對生態環境構成的損害而為瀕危生物建設的棲息

地,因此人造溪流已是東涌至昂平一帶瀕危生物僅有的棲息地。然而,由於政府及承建商的疏忽,使薇金菊可在人造溪流內大量繁殖。薇金菊的大量繁殖,使人造溪流成為不適合本土植物及瀕危生物生活及繁衍的地方,如政府不能即時處理薇金菊於人造溪流大量繁殖的問題,東涌至昂平一帶的瀕危生物將會因為失去適合的棲息地而大量死亡。

2.2 基於上述原因,東涌吊車工程使生態遭受破壞。雖然承建商為補償對生態造成的損害而建造了人造溪流,但由於人造溪流滿佈薇金菊,加上人造溪流需要六至十二個月才能成為另一個適合生物的棲息地。在這六個月間很多動物便失去棲息處,而且很多動物的生命週期都不足六個月,在有合適居所前,大量生物早已死亡。昂平地區是很多瀕危動物的棲息地,如盧文氏樹蛙(Romer's Tree Frog)、棕脊蛇(Burrowing snake)、赤腹鶇(Brown-headed thrush),裳鳳蝶(Common birdwing),金裳鳳蝶(Golden birdwing)等,他們的生存備受威脅。東涌吊車的工程正破壞眾多瀕危動物的棲息地,危害珍貴物種的存續。

3.建議

3.1 就上述多個工程所引起的環境問題,可從下列的措施加以改善,其中包括:加強工程 監管;加設防火措施;宣傳防火意識;加強檢疫入口植物,防範紅火蟻落地生根;沿吊 車路線種植本土樹木,加強綠化;使用不含毒素的物料;及將昂平在分區計劃大網圖增 設保護區等。

3.1.1 加強工程監管

3.1.1.1 工地垃圾、損害樹木及污染等問題,需由加強工程監管著手。工地附近棄置的垃圾必須加以清理,妥善處置堆放的建築物。傷害植被和樹木的大型鋼纜捲筒和鋼纜應盡快移走,避免進一步傷害樹木。承建商應聘請專業人士負責遷移樹木,並投入更多資源,避免樹木因遷移而死亡。在遷移過程中,應由專人負責及監察,避免珍貴植物失蹤或被盜。而附近被挖掘過的土壤應加上帆布保護,以免被雨水沖刷後造成土壤流失。承建商應避免將建築材料及垃圾堆放在溪流旁邊,以免因意外或雨水沖刷掉落溪中,以防止因工程而產生的污染物流入溪流。承建商亦應定期檢測水質,以及時作出補救及應變。油承建商應為工作人員提供合適的流動厠所,並將已污染的地方清理。桶應存在安全地方,並在附近標示清晰的警告。以上問題均由於人為疏忽及監管不力,故此必須加強對工程的監管,以免再次因人為因素而對環境造成破壞。

3.1.2 加設防火措施,宣傳防火意識

3.1.2.1 為防治山火,政府應加設防火措施,向遊客宣傳防火意識。政府應在吊車沿途增設火設施,如防火拍及山火瞭望台等,亦應在墓地旁設置隔火路,並於清明節及重陽節加強巡邏,以及早發現山火,並在其漫延之前盡早撲滅。另外,亦應向遊客加強宣傳山火危害,提高遊人防火意識。加設防火措施能為一旦發生山火作出準備,而向遊客宣傳防火意識則能防患於未然。

3.1.3 加強入口植物檢疫,防範紅火蟻落地生根

3.1.3.1 政府對承建商引入外來植物時應加強檢疫,防範紅火蟻落地生根。政府在種植植物時,該選擇從沒有紅火蟻出沒的地區購入植物。盛載植物的土壤應作出檢查,並為植物噴灑對環境無害的殺蟲劑。在種植前,應於大嶼山選出一地區作隔離區,擺放剛運到的植物,先作觀察以確定並無附有紅火蟻巢。種植後亦應定期監察。惟有政府嚴格執行檢疫措施,才能避免紅火蟻對昂平生態帶來嚴重傷害。

3.1.4 沿吊車路線種植本土樹木,加強綠化

3.1.4.1 承建商應於吊車沿途加強綠化,美化景觀,並種植本地樹木。一方面有利大嶼山 北的旅遊業的發展,另一方面亦需要復原因吊車工程而受損的植被。為了生態環境的平 衡,在推展綠化計劃時,應根據當區生態環境,盡量多種本地樹木,及盡量避免破壞原 有正在生長的植物。惟有加強綠化和種植本土樹木,才能使本地的生態環境不會因不恰 當的綠化計劃而受到永久的破壞。

3.1.5 使用不含毒素的物料

3.1.5.1 在昂平這珍貴的生態環境中,地鐵應使用不含毒素的物料,以免對環境造成損害。 化學物 Tanalith oxide 作為木材防腐劑,可溶於水中,有可能污染環境,並毒害包括盧文 氏樹蛙等珍貴動植物。故此在興建行人通道時,應使用對環境無害不含毒素的物料,作 為東涌至昂平的行人通道,以免污染環境,保護瀕危的動植物。

3.1.6 將昂平在分區計劃大網圖或發展審批地區圖內劃為保護區

3.1.6.1 東涌吊車的發展正是提供了機會將昂平這珍貴的生態環境,劃為保護區。政府應該將昂平在分區計劃大網圖或發展審批地區圖內劃為保護區,以免這珍貴的地方再受傷害及污染,亦使瀕危的動植物得以繼續繁衍下去。政府若將昂平為保護區,將會為香港

保留一珍貴的生態環境。

4. 總結

昂平是大嶼山一片生態價值豐富的地方,政府在發展昂平興建吊車時,宜平衡生態環境和商業利益的因素,保護昂平的珍貴生態資源。大自然環境一經破壞後便很難回復到原面貌,珍貴瀕危的動植物若因而絕跡,則更是無法挽救。故此,政府在興建東涌吊車時應加強對工程的監管,盡力保護瀕危的動植物,預防山火、防止紅火蟻入侵及避免使用有毒物料。希望政府在發展昂平時,能平衡環境保護和商業發展,使昂平成為珍貴動植物的天堂。



附圖一:承建商在中國吊鐘旁邊 胡亂放置建築材料及垃圾,對中 國吊鐘構成威脅。



附圖二:承建商把大量建築材料放置在植被上, 引致大量植物枯死,破壞自然生態及景觀。

附件 A Annex A



附圖三:樹木的樹枝被不適當地砍去,承建商 又沒有妥善修復樹枝被砍去後出現的破口,使 樹木容易被細菌及真菌感染。



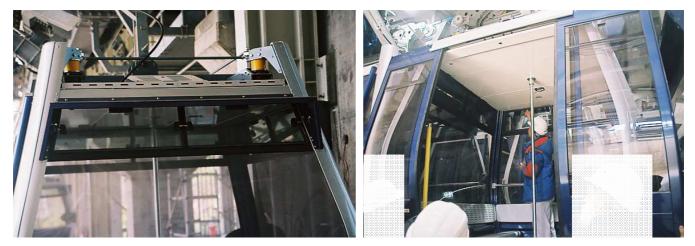
附圖四:由於地盤的發動機沒有設置接油盤,導致燃油慘漏,對附近的土壤造成永久損害。



附圖五:上圖為大東山附近山坡的植被被山火破壞後的情況的由於大東山的山坡空曠並且佈滿雜草,如發生山火,便一發不可收拾。東涌吊車沿途的植被和大東山的植被屬同一類型,如不能妥善防止山火,沿途的植被將會受到如上圖般的破壞。



附圖六:東涌至昂平沿途均有木製的 行人通道,該等木材被塗上含有砒霜 成份的防腐劑,對附近生態環境構成 嚴重威脅。



附圖七:乘客可輕易地打開東涌吊車車箱的窗戶,並可輕易地從窗戶拋下煙蒂,增 加發生山火的機會。



附圖八:人造溪流被大量薇金菊覆蓋,薇金菊 更攀附在人造溪流兩旁,用於固定石塊的鐵絲 網上,嚴重影響溪流的生態環境。



附圖九:由於政府對東涌吊車途經的植被沒有提供足夠的保護,使附近山頭的植被飽受山火破壞,僅餘下荒涼的山頭,破壞東涌吊車沿途的景色。