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Environmental Protection Department  
香港政府環境保護署

North West New Territories  
Refuse Transfer Station Study  
新界西北廢物轉運站研究

Initial Environmental Impact Assessment  
Executive Summary  
初步環境影響評估摘要



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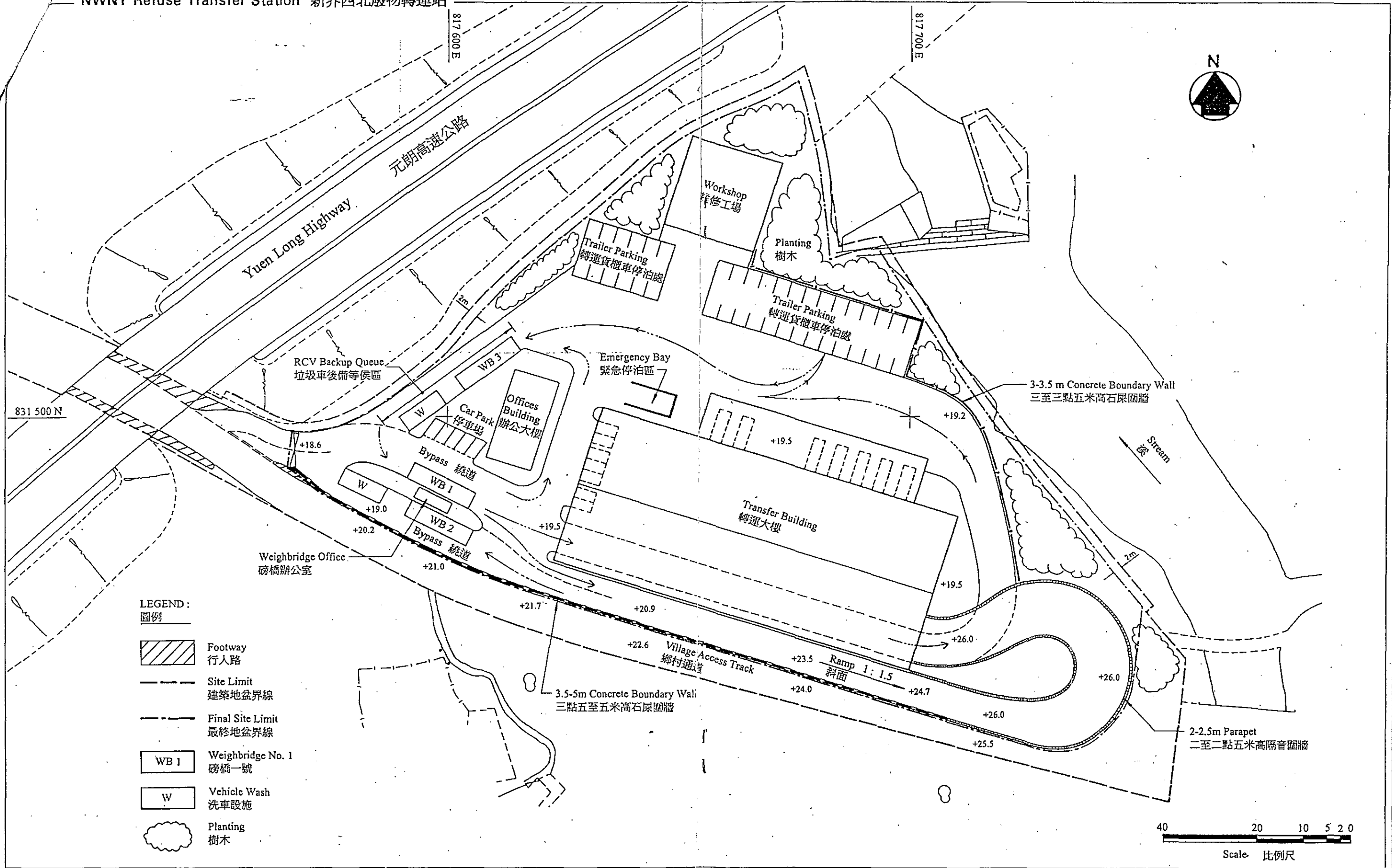
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- LEGEND:  
圖例
- Footway 行人路
  - Site Limit 建築地盆界線
  - Final Site Limit 最終地盆界線
  - Weighbridge No. 1 磅橋一號
  - Vehicle Wash 洗車設施
  - Planting 樹木

Conceptual Design Layout 廢物轉運站設計大綱

May 1994  
一九九四年五月

Mouchel 萬碩
Figure No. 圖號 <b>1</b>

## 1.0 INTRODUCTION

### 1.1 Background

The North West New Territories Refuse Transfer Station (NWNT RTS) forms part of the Territory's waste disposal strategy as set out in the White Paper "Pollution in Hong Kong - a time to act" as well as in the Waste Disposal Plan for Hong Kong.

From the findings of the study on site selection, the Shun Tat Street site which is located at the centre of the NWNT region was selected after careful and comprehensive investigations covering environmental, operational and land use aspects. The selected site is secluded from the nearby villages including Chung Uk Tsuen, Shun Fung Wai and the main settlement of the Wo Ping San Tsuen by the natural topography and the elevated structure of the Yuen Long Highway. A notional "outline design" layout for the facility was produced, based on what is likely to be required for optimum operational efficiency, whilst also taking into account the environmental constraints identified during site selection. Environmental impact mitigation measures, based on an appreciation of the potential impacts, were thus integrated into the design process from the outset.

This Initial Environmental Impact Assessment (IEIA) is based on the outline or 'conceptual' design and has the purposes of identifying the key environmental issues and outlining possible mitigation measures, as well as developing the Terms of Reference for the detailed EIA, which will be carried out by the successful tenderer for the RTS.

### 1.2 Facility Concept

The NWNT RTS was planned to reduce extensive travelling of refuse collection vehicles (RCVs) to the WENT Landfill and the resulting environmental nuisance currently experienced. It will cater for the forecast increases in waste arisings within the Yuen Long and Tuen Mun catchment areas.

The RTS will be operational by early 1997 and have an ultimate throughput of upto 1100 tonnes/day. Refuse collected both publicly and privately from the NWNT (including Tuen Mun and Yuen Long) will be compacted and containerised at the RTS and then transferred to the WENT Landfill in purpose-built sealed refuse transfer containers for final disposal. A portion of the waste arisings from the west of Tuen Mun will be directly hauled by RCVs to the WENT Landfill.

### 1.3 Site Layout and Structures

The site occupies an area of approximately 1.5 ha with the entrance located at the western corner of the site. The 2 storey transfer building, located at the southern part of the site will, as far as possible, conform to the natural landform. The conceptual design layout of the RTS facility is shown in Figure 1.



#### 1.4 Land use

The impact of the construction of the RTS on the surrounding land use has been examined. The loss of the site area to the RTS is not considered to be significant with regard to the planning resource allocation in the overall area. It is not, therefore, considered that the presence of the RTS will affect the surrounding land use.

#### 1.5 Activities during Construction

The main construction activities will be:

- Earthworks
- Piling
- Concrete works
- Steelwork erection
- Access road construction
- Plant installation

#### 1.6 Activities during Operation

The main operational activities at the RTS will be:

- The entering and exiting of RCVs
- The entering and exiting of refuse transfer containers
- Activities inside the building from pushpits and compactors
- Workshop activities

## 2.0 POTENTIAL ENVIRONMENTAL IMPACTS

### 2.1 Potential Impacts During Construction

#### 2.1.1 Air Quality

Construction activities have the potential to generate significant amount of dust if uncontrolled. The dominant sources of dust will be from site formation, excavation, stockpiling and vehicle movements on unpaved roads. Dust modelling has predicted that the maximum hourly and daily coarse dust (Total Suspended Particulates) concentrations at the site boundary will be  $340 \mu\text{g}/\text{m}^3$  and  $130 \mu\text{g}/\text{m}^3$  respectively which are well below the EPD's recommended hourly limit of  $500 \mu\text{g}/\text{m}^3$  and the daily Air Quality Objectives (AQO) limit of  $260 \mu\text{g}/\text{m}^3$ . However, dust suppression measures including frequent watering of unpaved roads, covering or enclosing stockpiles and compaction of loose surfaces are recommended, as a part of good housekeeping practice, to minimise the potential for dust nuisance.

Dust monitoring and audit programmes are recommended in this IEIA to monitor the effectiveness of dust suppression measures and to ensure the dust levels at sensitive receptors are within the recommended limits.

### 2.1.2 Water Quality

The RTS will be located next to a stream upstream of the Yuen Long Creek. Baseline monitoring results indicate that the existing water quality of the stream is generally good. Water quality impacts which might arise during the construction stage would be those from normal construction activities and sewage from the construction workforce. With proper site management and good housekeeping practices, the impacts from construction work on the water quality of the adjacent stream will be insignificant. Monitoring of the stream water quality in term of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Suspended Solids and Dissolved Oxygen is recommended to ensure no significant deterioration of water quality during the construction of the RTS.

### 2.1.3 Noise

The environment in the vicinity of the site was predominately rural, but is now affected by the new Yuen Long Highway. Construction noise from plant and equipment such as piling rigs, excavators and haul vehicles might have impacts on the village houses in the vicinity if used in the restricted periods. Therefore, construction works should not be carried out during the restricted periods ie. general holidays (including Sundays) and all days from 1900 to 0700 hrs, as far as possible. A construction noise permit has to be applied for, from Environmental Protection Department (EPD) of the Hong Kong Government, if works are to be carried out in restricted periods. To meet the day-time (0700 - 1900 hrs) construction noise standard of 75 dB(A), early construction of noise barriers around the site and the use of silenced equipment are recommended.

### 2.1.4 Visual Impact

Sensitive visual receptors to the RTS will be the few nearby villagers to the south and east. Visual impact from the construction works including formation, piling, concrete works, steel erection and access road construction is expected on these receptors despite the disturbed rural landscape character of the surroundings.

Appropriate mitigation measures should be adopted in order to minimise the visual impact of the construction works. These include:

- Screening
- Height restrictions
- Minimisation of exposure time
- Use of visually recessive colours

### 2.1.5 Ecology

A preliminary ecological survey indicated that the site is of very low ecological value. The direct loss of natural habitats through land take for the RTS is therefore not anticipated to result in any adverse ecological impacts. Furthermore, potential dust impacts are unlikely to cause damage or disturbance to nearby habitats. Thus, the construction of the proposed RTS will have no significant ecological impact.

### 2.1.6 Cultural Heritage

The land-take of the site avoids the Fung Shui woodland and the existing graves and urns on the hillside to the south, which have significant cultural value to the villages in the area. The construction of the RTS will therefore not involve the removal and/or disturbance of these cultural resources within the site boundary. The only concern is the potential for the RTS construction works to impinge on the Fung Shui value of the woodland and graves and the construction Contractor will be expected to take all due care when working in the vicinity.

## 2.2 Potential Impacts During Operation

### 2.2.1 Air Quality

The main air quality issues associated with the operation of the RTS were identified as follows:

- Dust emissions from refuse tipping in the tipping hall
- Vehicle emissions from RCVs and refuse transfer containers
- Odour impacts from refuse tipping, compacting and transport

Most of the potential impacts can be mitigated through careful design of the transfer station and good on-site practice. It should be noted that most of the dust and odour emissions will be confined within the main transfer building and the potential for air quality impacts to the surrounding environment is considered to be insignificant.

The ventilation system for the tipping hall will be equipped with odour and dust control systems. Discharge outlets for the compactor area and the wastewater treatment plant should be installed with an odour control system. In addition, the tipping hall should be sealed as far as possible in order to minimise fugitive dust impacts from its operation.

To minimise odour impacts during transit, the outsides of all RCVs and refuse transfer containers should be washed before leaving the station.

Nitrogen dioxide is considered to be the critical parameter for vehicle emission impact assessment. Modelling has predicted that the hourly maximum concentration of nitrogen dioxide generated from RTS vehicle movements along the Shun Tat Street will only be  $13 \mu\text{g}/\text{m}^3$ . The increase is small compared with

the hourly AQO of  $300 \mu\text{g}/\text{m}^3$  for nitrogen dioxide. The vehicle emission impact associated with the RTS is therefore considered to be minimal.

### 2.2.2 Water Quality

The operation of the RTS will not generate a significant volume of effluent. There are three main sources of effluent arisings; foul water (leachates) from RCVs, waste compaction, the tipping hall and other internal operational areas, and the vehicle washing facility; and sewage from RTS staff.

Foul water will be treated at an on-site wastewater treatment plant. Discharges will have to comply with the effluent standards stipulated in the Technical Memorandum of the Water Pollution Control Ordinance. Sewage from the RTS workforce will be discharged to the local foul sewerage system.

Further assessment will be required to determine the most appropriate disposal option during the detailed design stage when the exact quality and quantity of the effluent are determined. The assessment should include detailed monitoring and audit requirements together with an action plan outlining any remedial action required if discharge limits are exceeded.

### 2.2.3 Noise

The duration, level and intensity of the operational noise will depend on the type of activities and equipment used by the Contractor. For this assessment, based on realistic assumptions from operating RTSs, various aspects of operation were identified as potential noise sources.

The operational noise at the RTS is expected to come from on-site movements of RCVs and refuse transfer containers, and from fixed equipment including compactors, pushpits, ventilation fans and blowers/air compressors. Calculations based on the outline design show that the noise standard could be breached during the operational phase due largely to on-site traffic movements. A concrete wall along the southern, eastern and northern boundaries, and a parapet along the ramp can reduce the impact to acceptable levels (see Figure 1).

Off-site noise impact along Shun Tat Street due to vehicle movements of the RTS operation was predicted taking into account potential cumulative traffic noise impact from Castle Peak Road and Yuen Long Highway. Whilst traffic noise impact on noise sensitive receivers adjacent to these two major roads are predominantly affected by the roads themselves, village houses adjoining Shun Tat Street will be affected by traffic on the street. Therefore a noise barrier along this adjoining section of Shun Tat Street will be required to protect the affected houses in the vicinity. The detail requirements of the noise barrier will be determined in the detailed EIA to be carried out by the successful tenderer.

## 2.2.4 Visual Impact

The Shun Tat Street site is situated in a disturbed rural landscape set against a mountain backdrop, supporting a number of village houses, agricultural land, trees and various industrial establishments.

The landscape character of the area has been disturbed by various visually incompatible developments, notably the Yuen Long Highway situated to the immediate west, and the container handling yards on both sides of Shun Tat Street. However, the RTS structures may still cause visual intrusion to some sensitive receptors to the south and east:

- The main building
- The access road
- RCV and refuse transfer containers movements
- The workshop building
- The boundary wall/noise barrier

Noise barriers should be developed, as far as practicable, to have minimum height and maximum setback from the adjacent graves. General mitigation measures including planting to provide a softer edge and use of visually recessive colour schemes for the building structures are also recommended. More specific measures will require further consideration by the Contractor, during the detailed design to minimise the visual impact.

Visual intrusion from the recommended noise barrier along Shun Tat Street near the Village Development Area will be minimised through landscaping. The widening of the Shun Tat Street itself would have negligible visual impact. Landscaping along both sides of Shun Tat Street together with the road improvement scheme could improve the overall appearance.

## 2.2.5 Bird, Rodent and Insect Control

The following areas have been identified as possible attractions to birds, rodents or insects:

- Transfer building
- Accumulation of refuse
- Spillage of refuse

The detailed design of the RTS buildings and operational procedures will require consideration of bird, rodent and insect control measures. It is recommended that regular inspections of the facility are conducted to assess the presence of birds, rodents and insects and to undertake appropriate removal or extermination if necessary.

Refuse should be prevented from accumulating and spillages must be cleared promptly as a part of a continuous and thorough cleaning regime.



### 3.0 ENVIRONMENTAL MONITORING AND AUDITING

Environmental monitoring and auditing of air quality, water quality and noise were recommended for the RTS development, so that performance compliance can be ensured and thus potential environmental nuisance minimised.

The objectives of environmental monitoring at the NWNT RTS include:

- To provide a database from which to determine, by comparison, any short or long term environmental impacts
- To provide an early warning if any of the environmental control measures or practices are failing to achieve the acceptable standards
- To provide data to enable environmental audits of the construction and operation of the RTS

The purpose of environmental auditing will be to:

- Review changes in measured parameters during construction and operation
- Assess compliance with environmental quality objectives
- Examine effectiveness of any mitigation or control measures in achieving environmental protection
- Recommend amendments in procedures or remedial actions in the event that performance is unsatisfactory

In association with the monitoring activities, a Contractor's action plan is recommended to ensure that if any significant pollution (either accidental or through inadequate implementation of mitigation measures on the part of the Contractor) does occur, then the cause of this is quickly identified and remedied, and that the risk of a similar event re-occurring is minimised.

The principle upon which the action plan is based is the prescription of procedures and actions associated with the recording of certain defined levels of pollution recorded by the environmental monitoring. These levels are:

- Trigger Levels - these give an indication of a deteriorating ambient environment.
- Action Levels - beyond which appropriate remedial actions should be taken to prevent environmental quality from going beyond the Target Level.
- Target Levels - statutory limits stipulated in the relevant pollution control ordinances, environmental quality objectives or planning guidelines established by EPD.

#### 4.0 TERMS OF REFERENCE FOR DETAILED EIA

The following key issues are identified for further study in the detailed EIA, to be carried out by the Contractor in parallel with the detailed design of the RTS, such that more finely detailed mitigation measures will be generated :

- Air quality:
  - Predictions of dust deposition and impact in the light of the detailed construction programme and operations.
  - Updated assessment of impacts along Shun Tat Street from vehicle emissions associated with the operation of the RTS.
  - Evaluation of the air quality (dust, odour, CO, NO<sub>x</sub>) at the tipping area, considering the detailed tipping area design and vehicle emissions.
- Water quality:
  - Identification and evaluation of wastewater generated from the construction and operation of the RTS with due consideration for adequate reception, handling, treatment and disposal.
- Noise:
  - Confirmation of operational noise impacts by examining the exact number of vehicle movement and other fixed noise sources.
  - Assessment of the noise impacts on sensitive receivers in the vicinity of the access road during RTS operation.
  - Confirmation of the cumulative traffic noise impact from Shun Tat Street and Yuen Long Highway when the RTS is operational.
  - Development of more specific mitigation measures such as height of the ramp parapet.
- Visual impact:
  - Detailed architectural/landscape design to enhance appearance of the RTS and reduce its visual intrusion.
- Bird, rodent and insect control:
  - Detailed design of the RTS buildings and operational procedures for vermin control.
- Environmental monitoring and audit

Confirmation and clarification of environmental monitoring and audit requirements arising from the detailed studies.

## 5.0 CONCLUSIONS

The IEIA has assessed the potential environmental impacts on sensitive receptors during the construction and operation phases, based on the details available from the preferred outline design. Issues of concern are all considered to be capable of resolution, provided the recommended mitigation measures are adopted.

All mitigation measures and performance requirements identified as necessary for environmental protection will be incorporated into the tender documents for the design, construction and operation of the RTS. Compliance with these measures and requirements will be mandatory under the contract.

## 1.0 導言

### 1.1 背景

新界西北廢物轉運站是《白皮書：對抗污染莫遲疑》及廢物處理計劃所訂全港廢物處理策略的其中一環。

根據選址研究的結果，在完成包括環境、操作、土地用途等方面的全面詳細調查後，選定位於新界西北區的順達街為興建廢物轉運站的地點。天然的地勢及元朗公路的高架結構，使場址與鄰近的鍾屋村、順風圍等村落，以及和平新村的主要民居保持隔離。在制訂廢物轉運站的概念設計大綱圖則時，曾研究達致最高操作效率的必需條件，同時顧及在選址研究中確定的環境限制。由於對可能引起的環境影響有所了解，設計過程從一開始便已包含環境影響緩解措施。

初步環境影響評估（以下簡稱「本評估」）以大綱或「概念」設計為依據，目的是確定主要的環境問題，以及列舉可能的緩解措施，同時為詳細環境影響評估制訂職責範圍。此詳細環境影響評估將由成功投得廢物轉運站的營辦商進行。

### 1.2 廢物轉運站概念

規劃新界西北廢物轉運站的目的，是避免廢物收集車長途跋涉駛往新界西堆填區，以及減少目前引起的環境滋擾。該廢物轉運站將可應付元朗和屯門區一帶的預計廢物產量增長。

廢物轉運站將於一九九七年初啓用，最終的總處理能力可達每天1,100公噸。公營部門和私營機構在新界西北區（包括屯門與元朗）收集的廢物，將在廢物轉運站壓縮，裝進特別設計的密封式貨櫃內，然後轉運往新界西堆填區作最終棄置。屯門西部所產生的部分廢物將由廢物收集車直接運往新界西堆填區。

### 1.3 場址的佈局及建築物

場址佔地約1.5公頃，入口位於場址西面角落。樓高兩層的轉運大樓建於場址的南面，將盡量配合天然地勢。廢物轉運站的概念設計圖則如圖1所示。

#### 1.4 土地用途

本研究調查了興建該廢物轉運站對四周土地用途的影響。就整個地區的土地資源分配規劃而言，將場址用於發展廢物轉運站不會構成明顯的土地損失。因此，廢物轉運站的存在不致影響附近的土地用途。

#### 1.5 施工期內的活動

主要施工活動如下：

- 土力工程
- 打樁
- 混凝土澆灌
- 架設鋼架
- 建造通路
- 安裝機械

#### 1.6 運作期的活動

廢物轉運站在運作期的主要活動如下：

- 廢物收集車的出入
- 廢物轉運貨櫃車的出入
- 大樓內廢物壓縮機的操作
- 工場活動

### 2.0 可能引起的環境影響

#### 2.1 施工期間可能引起的影響

##### 2.1.1 空氣質素

施工活動若不妥善控制，可能產生大量塵埃。塵埃的主要來源是地盤平整、挖掘和堆料活動，以及車輛在未鋪築的路面上行駛。塵埃模擬研究預測，在場址範圍內，空氣中每小時的最高粗粒塵埃含量（總懸浮粒子）將達340微克/立方

米，而每日的最高粗粒塵埃含量則為130微克/立方米，遠低於環境保護署建議的每小時500微克/立方米，以及每日空氣質素指標的260微克/立方米限制。然而，研究仍然建議採取抑制塵埃的措施，作為良好的內務管理方法的一部分，其中包括經常在未鋪築的路面灑水、覆蓋或圍起堆料場和壓實材料鬆散的表面，從而盡量減少可能引致的塵埃滋擾。

本評估亦建議實行塵埃監察及評審計劃，藉此監察抑制塵埃措施的成效，以及確保在易受影響的鄉村和民居所感受的塵埃水平不致超越建議的限制。

### 2.1.2 水質

廢物轉運站將設於元朗河上游的一條溪流的旁邊。基準監察結果顯示，該溪流現時的水質大致良好。施工期內可能出現的水質影響來自正常的建築活動，包括一般的施工活動和建築工人產生的污水。只要妥善管理地盤和實行良好的內務管理方法，該溪流的水質將得以維持。本評估建議收集該溪流的生化需氧量（BOD）、化學需氧量（COD）、懸浮固體和溶解氧的數據，藉此監察其水質，確保在建造廢物轉運站期間，水質不致惡化。

### 2.1.3 噪音

場址附近原本主要是鄉郊環境，但現時已受到新建的元朗公路影響。若容許打樁機、挖泥機等機械設備及運輸車輛在受限制時段內操作，可能對附近民居造成噪音滋擾。因此，在受限制時段內，即公眾假期全日（包括星期日）及平日下午七時至翌日上午七時的期間內，應盡量不進行這些工程。若需要在受限制時段內施工，必須向香港政府環境保護署申請建築噪音許可證。為符合日間（上午七時至下午七時）建築噪音不得超過75分貝（A）的規定，本評估建議須及早在場址周圍設置隔聲屏障，以及在施工時採用低噪音設備。

### 2.1.4 景觀影響

廢物轉運站將影響位於場址附近南面和東面少數鄉村的視野。儘管這些鄉村周圍都有錯落的鄉郊景物掩映，但預期這些村落在景觀上仍會受到建築工程的影響，其中包括地盤平整、打樁、混凝土澆灌、鋼架架設、通路建造工程等。

為盡量減少建築工程造成的景觀影響，必須採取適當的緩解措施，包括：

- 分隔視野
- 限制高度
- 盡量縮短影響景觀的時間
- 採用不顯眼的顏色

### 2.1.5 生態環境

初步生態環境測量顯示，場址的生態環境價值很低。因此，徵用該土地興建廢物轉運站當不會直接使動植物喪失棲息之地，以致產生不良的生態影響。此外，潛在的塵埃影響導致附近的動植物棲息地受到破壞或干擾的機會很微。因此，建造該廢物轉運站不會對附近生態造成影響。

### 2.1.6 文化傳統

徵用該場址，可避開對當地鄉村有重要文化價值的風水林及在南面山坡上現有的墓地和金塔。所以，興建該廢物轉運站毋須遷徙和/或干擾場址範圍內這些文物資源。唯一的顧慮是在進行廢物轉運站工程時所產生的滋擾可能影響林木和墓地的風水，因此承建商在附近施工時，必須謹慎顧及周圍環境。

## 2.2 運作期間可能產生的影響

### 2.2.1 空氣質素

廢物轉運站運作引起的主要空氣質素問題確定如下：

- 在傾卸間傾卸廢物時散發的塵埃
- 廢物收集車和廢物轉運貨櫃車散發的廢氣
- 傾倒、壓縮和運輸廢物時散發的異味

審慎設計廢物轉運站和實行良好的場地管理方法，可以緩解大部分潛在的影響。必須注意，廢物轉運站散發的塵埃和異味將局限於轉運大樓內，對附近環境可能造成的空氣質素影響將是微不足道。

傾卸間的通風系統將配備異味與塵埃控制系統。壓縮機區的排氣口及廢水處理

設施的排氣口均應安裝異味控制系統。此外，傾卸間將設置在密封建築物內，以盡量減少操作引致的塵埃擴散影響。

為減少運送廢物車輛散發的異味，所有廢物收集車和廢物轉運貨櫃車均須沖洗乾淨，才駛離轉運站。

在評估車輛廢氣的影響方面，二氧化氮被視為關鍵的因素。模擬研究預測，沿順達街行駛的廢物轉運站車輛散發的二氧化氮，每小時在空氣中的最高含量將只有13微克/立方米。與空氣質素指標所訂的每小時氧化氮含量300微克/立方米比較，廢物轉運站引致的車輛廢氣影響應是微乎其微。

### 2.2.2 水質

廢物轉運站的運作不會產生大量污水。污水的主要來源有三個：廢物收集車、廢物壓縮過程、傾卸間及其他內部運作區產生的污水（滲濾污水）；洗車設施產生的污水；以及廢物轉運站職工產生的污水。

污水將由設於場址的污水處理設施處理。排出的污水必須符合《水污染管制條例技術備忘錄》所訂的污水排放標準。廢物轉運站職工產生的污水將排進附近的污水渠系統。

到詳細設計階段時，當確定污水的確切質素和排放量，屆時需要作進一步評估，以決定最適當的處理方案。評估須包含詳細的監察和評審規定，並須制訂行動計劃，列明若污水排放量超越限制，須採取的補救措施。

### 2.2.3 噪音

廢物轉運站運作時發出的噪音時間長短、音頻和強度將取決於活動類型和承辦商所用的設備。本評估根據多個運作中的廢物轉運站的數據，確定了運作上有多方面足以構成噪音來源。

預期廢物轉運站的運作噪音，將來自在站內行駛的廢物收集車和廢物轉運貨櫃車，以及壓縮機、傾卸坑、空調風機、吹風機、空氣壓縮機等固定設備。根據大綱設計作出的計算顯示，操作期間發出的噪音可能會超出標準，主要噪音影響來自站內的車輛行駛。本評估建議沿廢物轉運站的南面、東面和北面界線建



造一道混凝土圍牆，以及沿往傾卸間的引路建造一道矮牆作為隔音屏障，可以將噪音降低至可接受水平（參看圖1）。

本評估曾預測廢物轉運站在運作期間車輛行駛對順達街一帶造成的噪音影響，同時顧及青山道和元朗公路可能造成的累積噪音影響。儘管這兩條主要道路毗鄰易受噪音影響的樓宇所蒙受的交通噪音滋擾，主要來自道路本身，但現存與順達街毗連的村屋將受到順達街交通噪音的影響。因此，順達街毗連現存村屋的部分必須設置隔音屏障，以保護附近居民免受噪音滋擾。至於隔音屏障的詳細要求，將在成功投得合約的承辦商進行詳細環境影響評估時釐訂。

#### 2.2.4 景觀影響

順達街場址位於景物錯落的鄉郊地區，背面崗巒起伏，附近有疏落村屋、農地、樹林和各類工場。

多項與鄉郊風景互不協調的發展，特別是西面毗鄰的元朗公路和在順達街兩旁的貨櫃裝卸場，已使該區的風景特色蒙受影響，而以下廢物轉運站的建築物，將會對南面和東面部分易受影響的民居造成視野上的影響：

- 主樓
- 通路
- 廢物收集車和廢物轉運貨櫃車的行駛
- 工場大樓
- 圍牆/隔音屏障

設置的隔音屏障盡可能低矮和遠離毗連的墓地。本評估建議的一般緩解措施包括種植樹木，從而形成較為柔和的分界線；另外是建築物採用低調的顏色。至於更具體的措施，將有待承辦商進行詳細設計時細心考慮，務求盡量減少景觀上的影響。

美化環境，可以減少沿順達街近鄉村發展區設置的隔音屏障引起的視覺影響。擴闊順達街帶來的視覺影響將微不足道。綠化順達街兩旁及實行道路改善計劃，可以改善附近的整體面貌。

### 2.2.5 防止雀鳥、齧齒類動物和昆蟲滋生

以下地點和情況確定為有可能吸引雀鳥、齧齒類動物或昆蟲：

- 轉運大樓
- 廢物堆積
- 廢物散落

廢物轉運站的詳細設計和運作程序的安排均須考慮防止雀鳥、齧齒類動物和昆蟲滋生的措施。本評估建議經常巡視廢物轉運站，評估是否有雀鳥、齧齒類動物和昆蟲聚集和滋生，並在必要時採取適當的消滅和根絕措施。

應避免廢物堆積，若有廢物散落，必須從速清理，以實行持續徹底清掃的守則。

## 3.0 環境監察及評審

本評估建議為發展廢物轉運站進行空氣質素、水質和噪音方面的環境監察及評審，確保環境質素符合標準，從而減少潛在的環境滋擾。

新界西北廢物轉運站的環境監察目標包括：

- 建立數據庫，以便透過比較，確定各項短期或長遠的環境影響
- 若任何環境管制措施或做法不能使環境達到可接受標準，便及早發出警告
- 提供數據，方便對廢物轉運站的施工和操作進行環境評審

環境評審的目的是：

- 在施工和操作期間審核已量度的參數變化
- 評估廢物轉運站是否符合環境質素指標
- 檢討各種環境保護緩解或管制措施是否奏效

- 如成績未如理想，建議修改操作程序或採取補救行動

除進行監察活動外，還建議承辦商提交行動計劃，確保萬一有污染問題發生（因意外或承辦商實施的緩解措施不足），能盡快確定污染來源，採取補救措施，並且避免同類事故再發生。

行動計劃的基本原則，是規定當環境監察錄得的污染情況達到既定水平時應採取的步驟和行動。這些既定水平是：

- 戒備水平—顯示附近環境惡化。
- 行動水平—超越此行動水平便須採取補救措施，避免環境質素下降至低於指標水平。
- 指標水平—有關的污染管制條例訂明的法例限制、環境質素指標或環境保護署制訂的規劃指南。

#### 4.0 詳細環境影響評估的職責範圍

以下列出的主要問題確定為需要在詳細環境影響評估時作進一步研究。詳細環境影響評估將於廢物轉運站的詳細設計階段由承辦商進行，以便制訂更具體的污染緩解措施：

- 空氣質素：
  - 根據詳細的施工進度和操作情況，預測塵埃積聚和影響。
  - 廢物轉運站操作引致的車輛廢氣，對順達街一帶影響的最新評估。
  - 評估廢物傾卸區車輛所產生的廢氣及其他空氣質素（塵埃、異味、一氧化碳和二氧化氮），考慮廢物傾卸區的詳細設計。
- 水質：
  - 確定及評估因廢物轉運站施工和運作產生的污水，特別考慮是否有足夠的接收、處理和排放設施。

- 噪音：
  - 調查車輛行駛的確切次數及其他固定的噪音來源，從而確定廢物轉運站運作時的噪音影響。
  - 評估在廢物轉運站運作時，通路附近對噪音感應強的民居蒙受的噪音影響。
  - 確定廢物轉運站投入服務時，順達街與元朗公路的累積交通噪音影響。
  - 制訂更具體的緩解措施，例如規定隔音矮牆的設計。
- 景觀影響：
  - 制訂詳細的建築/美化環境設計，美化廢物轉運站的外觀，減少其對視覺的影響。
- 防止雀鳥、齧齒類動物及昆蟲滋生：
  - 詳細設計廢物轉運站及運作程序，以收控制害蟲之效。
- 環境監察及評審
  - 確定和說明以詳細環境影響評估為依據的環境監察及評審要求。

## 5.0 結論

初步環境影響評估根據選定的大綱設計所提供的詳細資料，評估在施工和運作階段對易受影響的民居帶來的潛在環境影響。若能採用建議的緩解措施，所有關注的環境問題應可解決。

所有確定為必需的環境保護緩解措施及功能規範，均將納入廢物轉運站的設計、施工和運作投標文件內。合約將明文規定承辦商必須遵守這些措施和規定。