



**APPENDIX J**

## **APPENDIX J**

### **SUMMARY EVALUATION SHEETS FOR STRATEGIC RESIDENTIAL DEVELOPMENTS**

(General comments pertaining to potential environmental impacts arising from the development of such areas are given in more detail in Chapter Twelve.)

Metro area Component	:	Hong Kong South
Description	:	Comprehensive residential development potentially enhanced by the improvement of Route 7 and the implementation of the Aberdeen LRT. Primarily medium density, high rise, comprehensive development with G/IC facilities and landscaped open space.
Water Quality	:	Southern Water Control Zone. Existing water quality is acceptable; no difficulty about connecting this development to existing sewerage system. Part of the SSDS II proposals.
Air Quality	:	at present air quality within the HK Island South Air Control Zone is good.
Noise	:	potential rail (LRT) residential interface problems. Requires detailed examination at local level.
Waste Disposal	:	Island West RTS is located 2km from the proposed development.
Ecology	:	No issues pertaining to ecology.
Mitigation Measures	:	Provision of setbacks between roads and residential, and adequate attenuation of noise from LRT and residential dwellings in Telegraph Bay and Ap Lei Chau.

Metro area Component	:	Kowloon Bay Reclamation
Description	:	The new reclamation at Kai Tak will comprise office, retail, hotel, high-tech industrial and high density residential development in a landscaped area with interlinked open spaces. The commercial centre is expected to be similar to Tsim Sha Tsui with tertiary and service elements mixed with hotels, tourist attractions and shopping centres. Later stages of the development intend to link this area with Metro by an MTR extension and the E-W Kowloon link.
Water Quality	:	Victoria Harbour Water Control Zone. Existing water quality is very poor but will improve with the implementation of the SSDS Scheme.
Air Quality	:	partly confined airshed, generally poor air quality prevails.
Noise	:	railway depot and sidings need to be considered carefully to avoid interface problems.
Solid Waste	:	with the Kowloon Bay RTS located some 2km from the site there should be no impact (other than on local roads) from this activity.
Ecology	:	no issues pertaining to ecology.
Mitigation measures	:	noise mitigation will be required.

Metro area Component	:	Green Island
Description	:	Green Island is a major strategic growth area offering opportunities to alleviate cross harbour congestion. The close proximity to the CBD offers potential for expanding the commercial and financial centre. On completion Green Island could accommodate 120,000 people and 0.5 million sq.m of office floor area with substantial hotel accommodation; equivalent to the Tsim Sha Tsui area. The public cargo working area for port related activities along the waterfront in Western may be considered for privatization.
Water Quality	:	poor water quality within the Western Buffer Water Control Zone. Development hinges on early implementation of the SSDS II for the disposal of effluent.
Air Quality	:	Harbour Air Control Zone, this location presently enjoys good air quality.
Noise	:	could be significant at various locations on the reclamation especially at the tunnel portals.
Solid Waste	:	Island West Refuse Transfer Station is located <1km from the development.
Ecology	:	no ecological issues associated with these developments.
Mitigation Measures	:	possible noise and air pollution mitigation measures.

NWNT Component	:	NWNT
Description	:	Pressure to develop the NWNT is a consequence of improved cross-border links, Route 3, Route Y, NWNT Rail, Freight Rail, and increases in border trade. It is the stated intent of the TDS to identify more centrally located pockets along the strategic route to allow private rezoning and redevelopment rather than permitting random development without any planning controls or targets. Accessibility to flat land in Ngau Tam Mei, Nam Shan Wai, Pak Wai and Chuk Yuen may provide potential for land assembly and the provision of sewage treatment facilities making the area attractive for comprehensive redevelopment.
Water Quality	:	Deep Bay Water Control Zone (via Sham Chun River) is grossly polluted. Also the zero discharge policy has been promulgated for this water body. Presently an unsewered area which presents problems for the disposal of effluent. Effluent will need to be collected, treated and disposed of to a location which does not drain into Deep Bay. Possible mechanism would be to connect to a strategic NWNT link to the Trunk Sewer. This depends on the available capacity of the system and the timing of the developments.
Air Quality	:	despite Fanling Air Control Zone being very confined air quality is presently good in this location.
Noise	:	mitigation measures will be required to allow residential developments in this area.
Solid Waste	:	solid waste will be disposed of at WENT/NENT landfill site depending on the exact location of the developments and the road connection.
Ecology	:	needs to be studied in detail to ensure the ecosystems supported within these areas are not at risk due to proposed developments.
Mitigation measures	:	sewerage for the area and at least secondary treatment with nutrient removal prior to disposal (not into Deep Bay).

NENT Component	:	Fanling North
Water Quality	:	pollution and treatment of effluent is a key issue, especially in connection with the anticipated expansion of facilities close to sensitive water bodies (Deep Bay, Mirs Bay, Tolo Harbour).
Air Quality	:	potential impact on air quality due to increase in vehicular traffic.
Noise	:	local increases in traffic could be significant for sensitive uses.
Solid Waste	:	disposal of waste will be via the NENT landfill.
Ecology	:	ultimate is discharge to Deep Bay which require extreme care to be placed on the development in this area. Pollution protection and control and protection of ecosystems will be an integral component of the detailed design and development of this area.
Mitigation Measures	:	extend the Shek Wu Hui STW and upgrade levels of treatment, noise mitigation will also need to be considered.

NWNT Component	:	San Tin/Lok Ma Chau
Description	:	This area is likely to develop as a border town at the interchange of the road and rail network system. With the potential for additional freight rail crossing at Lok Ma Chau and the connection of the NWNT Urban Rail with the Shenzhen LRT, San Tin may become a strategic growth area with a mix of activities. Facilities provided at the border town are likely to include an interchange terminal, immigration checkpoint, stopover and queuing area, catering services, shopping centre, commercial areas for border area, hotels for short-haul China bound visitors and businessmen in addition to medium rise residential developments to accommodate border trade related workers and businessmen. In-filled fish ponds and fallow land near Lok Ma Chau will be utilised as freight stations and storage yards for cross border traffic. Constraints on development and industrial activities include the protection of water quality in the catchment area of Deep Bay.
Water Quality	:	ultimate receiving waters for this development is Deep Bay Water Control Zone via the Sham chun River which is grossly polluted.
Air Quality	:	development located within the Fanling Air Control Zone. Air quality is relatively good.
Noise	:	problems could arise from operations at the freight rail yards and from the strategic roads.
Solid Waste	:	disposal will be at the WENT landfill site 20km away or at NENT.
Ecology	:	needs to be considered in detail especially wrt to offsite impacts associated with developing this area.

Mitigation measures pertain to reduction of noise from freight yards, upgrading of STW's in reduction of visual intrusion, minimisation of off site impacts from port back up areas.



NWNT Component	:	Yuen Long
Description	:	Yuen Long is a well established rural township in NWNT with potential for additional development once the strategic road and rail networks are implemented. Commercial activities will concentrate along the high street of Yuen Long town with the key transport interchanges integrated with residential, retail and service activities. The population is likely to increase as developers are now gathering private village lands close to major road links.
Water Quality	:	receiving waters are Deep Bay Water Control Zone via Yuen Long Creek which is currently grossly polluted. Development in a sewered area but capacity of Yuen Long Sewage Treatment Works needs to be reviewed.
Air Quality	:	the developed area of Yuen Long airshed is also partly confined thus constraining the carrying capacity.
Noise	:	potential interfaces problems.
Solid Waste	:	disposal of solid waste will be at the WENT landfill some 14km from the development area. Potential local congestion noise and air pollution problems.
Ecology	:	no ecological issues identified at present.
Mitigation Measures	:	<ul style="list-style-type: none"> <li>(i) extend the Sewage Treatment Works or develop a strategic disposal scheme for the NWNT.</li> <li>(ii) cover sections of road/rail in particularly sensitives areas.</li> <li>(iii) careful design of buildings to minimise noise, air quality, visual intrusion problems.</li> </ul>

NWNT  
Component : Kam Tin

Description : Kam Tin is expected to grow from a market to a satellite town between Yuen Long and Tsuen Wan along the transport interchange of Route 3 and the NWNT Rail Link. One of the main planning assumptions is that the Kam Tin plain will maintain its rural characteristics. Thus only medium and low rise developments are proposed around the old town and southern fringes. Office blocks cum hotels are expected to accommodate China traders. Comprehensive development in Kam Tin should improve the existing situation of random workshops and storage areas.

Water Quality : receiving waters ultimately the Deep Bay Water Control Zone.

Air Quality : The development lies within the Yuen Long Air Control Zone. In general air quality is good.

Noise : interface with freight rail.

Solid Waste Disposal : disposal of solid waste will be at the WENT landfill some 15km from the development area.

Ecology : no ecological issues hitherto identified.

Mitigation measures include the enforcement of the zero discharge policy to Deep Bay, minimisation of visual intrusion.

NWNT Component	:	Tuen Mun East
Description	:	The former borrow areas provide potential residential development areas, subject to provision of local access to Castle Peak Road and the improvement of traffic in NWNT after the completion of Route 3 and Route Y. Up to 10,000 head of population are proposed under different options.
Water Quality	:	receiving waters are the North Western Water Control Zone. Site is presented unsewered but assume that connections can be made.
Air Quality	:	within the Tuen Mun Air Control Zone and will need to be considered with respect to traffic related air pollution.
Noise	:	impacts may arise due to proximity.
Ecology	:	no ecological impacts identified.
Mitigation Measures	:	noise, expansion of sewage treatment facilities.

NENT Component	:	Whitehead
Description	:	Development of Shatin and Ma On Shan will create a demand for high class residential dwellings in more rural areas. Whitehead is considered convenient for low density residential developments incorporating amenity, sports, and recreational facilities. Constraints on development include the traffic network and the need to protect Three Fathoms Cove from any adverse impacts on water quality arising in connection with providing dwellings for a population up to 2,400.
Water Quality	:	receiving waters are Tolo Harbour where water quality is currently poor but expenditure committed to improving the situation through various mechanisms.
Air Quality	:	Development lies within the Tolo Air Control Zone. The airshed is partly confined but air quality is currently good.
Noise	:	detailed layout planning required.
Ecology	:	the developments are located adjacent to the sensitive water body.
Mitigation measures	:	<ul style="list-style-type: none"> <li>(i) divert pollution loads from Tolo (via effluent export scheme which is in progress).</li> <li>(ii) avoid noise impacts through detailed layout planning.</li> </ul>

SWNT Component	:	Tung Chung Phases 3 & 4
Description	:	Further extension of Tung Chung beyond Phases 1 & 2 is assumed for all options to optimise the transport capacity of North Lantau. Strategic growth of Tung Chung would cater for additional population of 50,000 - 75,000 and some airport related office accommodation. Further development is constrained as Tung Chung lies within a confined airshed.
Water Quality	:	Poor water quality within the adjacent area (North Western Water Control Zone). Inbuilt design to minimise deterioration in water quality.
Air Quality	:	lies within the Lantau Air Control Zone. Very confined airshed but air quality is presently good.
Noise	:	road alignment was subject to detailed modelling in the NLD study. Mitigation measures already included in the design.
Waste Disposal	:	Siu Ho Wan Refuse Transfer Station is located some 8km from the development area and has been designed to accommodate the solid waste arisings from the new airport, and support community.
Ecology	:	SSSI adjacent to residential areas needs to be given due consideration when detailing recreational strategies.
Mitigation Measures	:	setbacks from roads to reduce noise and minimise interface problems already included.

SWNT Component	:	Tai Ho
Description	:	The design concept of Tai Ho is a self contained new town with a high degree of local employment to optimise the transport links of North Lantau in addition to serving the needs of the airport and port on their full development. Its importance is likely to be further enhanced by the freight rail link up with the Lantau Port and the additional crossing to Sham Tseng and Route Y connection to PRD bypassing Tuen Mun.
Water Quality	:	receiving waters are the North Western WCZ.
Air Quality	:	good air quality prevails.
Noise	:	setbacks and noise minimisation measures considered in the NLDs.
Waste Disposal	:	disposal at the purpose built Siu Ho Wan RTS.
Ecology	:	proposals to protect the Tai Ho Wan streams and watercourses were included in the NLDs.
Mitigation Measures	:	increase levels of treatment at the Siu Ho Wan STW's. Permit only high tech industries which do not generate liquid or solid wastes which create another problem during disposal.

SENT Component	:	Tseung Kwan O Extension
Description	:	TKO Extension will accommodate an additional 75,000 people, optimising the infrastructure bringing the ultimate population to 450,000. Improved access by the MTR extension and the possible TKO West coast road, TKO could be integrated into the urban area via East Kowloon. Developments comprise high-rise high-density except close to Pak Shing Kok, where a 10 hectare Science Park is proposed on the former borrow area. To the SE major industrial area comprise general industrial area for traditional I(A), A(B) and I(C) uses; HKIEC to cater for diversified needs, waterfront and special industries along the coastal area of Fat Tau Chau, and sheltered waterfront sites for PHI's of Fat Tau Chau.
Water Quality	:	currently poor receiving water quality, Junk Bay Water Control Zone. The implementation of the SSDS I will connect TKO to the principal collection system and the effluent generated in this area will be treated to primary level at the STW on Stonecutters Island prior to discharge to the Western Harbour.
Air Quality	:	Junk Bay Air Control Zone. Currently air quality is good.
PHI's	:	new PHI's located in Tseung Kwan O
Noise	:	possible noise from railway sidings.
Waste	:	no problems disposing of waste at SENT landfill.
Ecology	:	no ecological issues associated with this site.
Mitigation Measures	:	<ul style="list-style-type: none"> <li>(i) detailed design of cross bay bridge and the possible extension of land (Scenario B) needs detailed study.</li> <li>(ii) fuel restrictions would reduce industrial emissions.</li> <li>(iii) layouts need careful planning to avoid encroachment on the Sai Kung Peninsula.</li> </ul>