

# **Overall Evaluation of Refined Preferred Options and Mitigation Measures**

## **Chapter 17**



**CHAPTER SEVENTEEN**

**OVERALL EVALUATION OF THE REFINED PREFERRED OPTIONS**

1. An overview of the key issues of the foregoing assessments is presented along with pertinent mitigation measures which would improve the performance of individual components of the two options. A summary of the overall performance of each option are summarised in the following table.

**Table 17.1 SUMMARY OF THE KEY ISSUES**

Strategy	Scenario A	Scenario B
<b>Strategic Growth Areas</b>	outstanding issues to be resolved include the review of effluent collection, treatment and disposal facilities in the NWNT and the coordination of SSDS and the Green Island developments	additional studies required to seek options for disposal of effluent from Green Island if SSDS is delayed, and for the collection, treatment and appropriate disposal of effluent generated in the NWNT. Particular concerns centre on the development of the Border Area, San Tin/Lok Ma Chau and Fanling.
<b>Mitigation/Additional Study</b>	<p>Maintain proposed phasing studies required for long term proposals</p> <p>Studies required for Green Island to ensure no interface problems between inter alia traffic/residential or industry/residential areas, provision of temporary and long term effluent treatment and disposal requirements.</p> <p>Tseung Kwan O requires further consideration with respect to the location of special industries and additional populations.</p>	<p>Maintain proposed phasing with additional detailed studies/assessments required especially in the long term.</p> <p>Same comments apply for Green Island.</p> <p>Tseung Kwan O - same comments apply (even greater population forecast). San Tin/Lok Ma Chau requires further study to ensure no interface etc. problems with port back up and residential developments (nb the port back up is planned from 2001).</p>
<b>Industrial Development</b>  <b>Industrial Development Strategies</b>	<p>Generation of effluent, a concern especially in the NWNT and NENT as the existing treatment systems could be constrained by the extent of the additional development. Noise associated with the delivery of parts and goods, especially in connection with the cross border traffic is a particular concern.</p> <p>Air quality could be sustained if the anticipated development trends are followed.</p>	<p>Similar comments apply as made under Scenario A except to note that the situation in terms of effluent treatment and disposal, vehicle traffic noise and potential air pollution, are forecast to be more severe at an earlier stage in the developments.</p> <p>The industrial development strategies need to be studied in detail and not in isolation, possibly under the Strategic Environmental Management Plans proposed herein.</p>

Table 17.1 SUMMARY OF THE KEY ISSUES (Cont'd)

Strategy	Scenario A	Scenario B
	<p>In terms of air quality, the results indicate the short term impacts are due to the base growth with very minor increases in air pollution due to the strategic growth (2001). SO<sub>2</sub> emissions in Junk Bay are forecast to decline at 2006 and although a rise is predicted at 2011, the levels still do not achieve those for basegrowth. Similar reductions are forecast for Tsuen Wan - Kwai Chung. It must be stressed however, that these strategies need further very detailed impact assessments to be carried out at a district level.</p>	
<p>Mitigation/Additional Study</p>	<p>Some improvements forecast in Junk Bay and Tsuen Wan - Kwai Chung with respect to SO<sub>2</sub> emissions. Whole industrial strategy needs to be considered in detail in connection with residential, transport demands, port/freight facilities etc.</p>	<p>Some improvement forecast in Junk Bay (until 2006), and in Tsuen Wan - Kwai Chung. Whole strategy needs detailed study at district level and in terms of cumulative impacts.</p>
<p>Transport Strategies</p>	<p>In the Harbour, Tsuen Kwan O, Fanling, Port Shelter, and Tolo ACZ's, the two strategies are relatively similar in terms of NO<sub>2</sub> emissions up till 2006. Significant differences between the strategies exist in Tsuen Wan - Kwai Chung, Tuen Mun and Yuen Long by 2006 which are emphasised further at 2011.</p> <p>As with the industrial strategy, even the Scenario A transport strategy requires detailed assessment taking account of Regional, intra-territory, and district components. This should not be considered in isolation from the integral components of population, port and industry.</p>	<p>Key issues identified from the transport assessments include the provision of Route Y (long term) and the long term air quality in the Harbour, Lantau, Tsuen Wan - Kwai Chung, and Tuen Mun Air Control Zones. Dust has been identified as a major problem which requires detailed studies to be carried out throughout the territory.</p> <p>Detailed and concerted efforts will be required to ensure these transport strategies can be refined especially in the long term such that the goals and objectives of the TDS can be realised. This will require a detailed transport - environment study at both the local and regional level.</p>
<p>Mitigation/Additional Studies</p>	<p>Detailed assessments of environmental transport studies required especially for the long term forecasts</p>	<p>Key areas with respect to air quality are Harbour, Lantau, Tsuen Wan - Kwai Chung, and Tuen Mun Air Control Zones. Detailed environmental - transport studies required to find solutions in terms of air pollution. Route Y requires detailed study especially with respect to water quality and effects of any proposals on the hydrodynamic regime in both near and far field. The cumulative effects of the Route Y and deep channel between south west Lantau and Black Point also need to be studied in detail.</p>

Table 17.1 SUMMARY OF THE KEY ISSUES (Cont'd)

Strategy	Scenario A	Scenario B
<p>Port and Open Storage</p> <p>Port Back Up</p>		<p>Main off-site port back up and open storage land is supplied under Scenario B at San Tin/Lok Ma Chau. Detailed assessments will be required to ensure no interface, noise, congestion of local traffic or chronic water pollution (uncontrolled runoff to catchments) arises especially as the residential developments are not required until 2011.</p>
<p>Additional Study</p>		<p>Detailed study of the port back up/open storage areas esp. at San Tin/Lok Ma Chau to ensure the haphazard development currently taking place in the NT does not escalate. Also if the proposed deep channel between south west Lantau Island and Black Point is carried forward then detailed hydrodynamic studies will be required to check whether there are any alterations to the existing tidal flow regime (and dispersion of effluent from the outfalls in the area) and to define the extent of any benefits accrued in terms of air quality and noise.</p>