

## APPENDIX A – INFORMATION SOURCES USED IN COMPILING THIS REVIEW REPORT

LITERATURE REVIEW	
<b>Public Sector Organisations</b>	<ul style="list-style-type: none"> <li>• 2002 Environmental/Health/Safety Report – Architectural Services Department</li> <li>• 2002 Environmental Report – Buildings Department</li> <li>• 2002 Environmental Report – Civil Engineering Department</li> <li>• 2002 Environmental Report – Drainage Services Department</li> <li>• 2002 Environmental Report – Environmental Protection Department</li> <li>• 2002 Environmental Report – Environment, Transport and Works Bureau</li> <li>• 2001/2002 Environmental Report – Hong Kong Housing Authority</li> <li>• various <i>Technical Circulars</i> issued by the Environment, Transport and Works Bureau and its predecessors (listed in <i>Appendix C</i>)</li> <li>• (<i>Environmental Reports</i> for the Housing, Planning &amp; Lands Bureau and Highways Department were unavailable at the time of the review)</li> </ul>
<b>Utility Companies</b>	<ul style="list-style-type: none"> <li>• 2003 EHS Interim Review – CLP Holdings Limited</li> <li>• 2002 Health, Safety and Environment Report – Hong Kong and China Gas Company Ltd</li> </ul>
<b>Private Sector Client Organisations</b>	<ul style="list-style-type: none"> <li>• 2002 Annual Report – Cheung Kong Infrastructure Holdings Limited (Infrastructure Materials and Infrastructure-related Businesses, pp 20-21)</li> <li>• 2001 Environmental Report – China State Construction Engineering (H.K.) Ltd.</li> <li>• 2002 Health, Safety and Environment Report – Gammon Construction Ltd</li> <li>• 2002 Sustainability Report – MTR Corporation Limited</li> <li>• 2002 Annual Report – New World Development (Environment, Community Involvement, Employee Care, Investor Outreach, pp 30)</li> <li>• 2002 Annual Report – Sun Hung Kai Properties Ltd (Review of Operations - Environmental Protection and Promotion, pp 68)</li> <li>• 2002 Annual Report – Swire Pacific (Environmental &amp; Social Responsibility, pp 41)</li> </ul>
<b>Other Publications</b>	<ul style="list-style-type: none"> <li>• <i>Construct for Excellence</i> – Report of the Construction Industry Review Committee, January 2001</li> <li>• <i>Best Practice Guide: Environment</i> – Hong Kong Construction Association Ltd, 2002</li> </ul>
WEBSITE REVIEWS	
<b>Government Organisations</b>	<ul style="list-style-type: none"> <li>• Architectural Services Department (Arch SD) <a href="http://www.archsd.gov.hk">www.archsd.gov.hk</a></li> <li>• Buildings Department (BD) <a href="http://www.bd.gov.hk">www.bd.gov.hk</a></li> <li>• Drainage Services Department (DSD) <a href="http://www.dsd.gov.hk">www.dsd.gov.hk</a></li> <li>• Environmental Protection Department (EPD) <a href="http://www.epd.gov.hk">www.epd.gov.hk</a></li> <li>• Environment, Transport and Works Bureau (ETWB) <a href="http://www.etwb.gov.hk">www.etwb.gov.hk</a></li> <li>• Hong Kong Housing Authority (HKHA) <a href="http://www.housingauthority.gov.hk">www.housingauthority.gov.hk</a></li> <li>• Housing, Planning and Lands Bureau (HPLB) <a href="http://www.hplb.gov.hk">www.hplb.gov.hk</a></li> <li>• Trade Industry Department (TID) <a href="http://www.tid.gov.hk">www.tid.gov.hk</a></li> <li>• Waste Reduction <a href="http://www.wastereduction.gov.hk">www.wastereduction.gov.hk</a></li> </ul>
<b>Private Corporations</b>	<ul style="list-style-type: none"> <li>• China State Construction Engineering (H.K.) Ltd <a href="http://www.cscechk.com/main_e.htm">www.cscechk.com/main_e.htm</a></li> <li>• CLP Holdings Limited <a href="http://www.clpgroup.com">www.clpgroup.com</a></li> <li>• Gammon Construction Ltd <a href="http://www.gammonconstruction.com">www.gammonconstruction.com</a></li> <li>• Hong Kong and China Gas Company Ltd <a href="http://www.towngas.com">www.towngas.com</a></li> <li>• Hongkong Land <a href="http://www.hkland.com">www.hkland.com</a></li> <li>• Swire Properties Limited <a href="http://www.swireproperties.com">www.swireproperties.com</a></li> </ul>

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<b>Other Websites</b>	<ul style="list-style-type: none"> <li>• Business Environment Council (BEC) <a href="http://www.bec.org.hk">www.bec.org.hk</a></li> <li>• HK-BEAM Society <a href="http://www.hk-beam.org.hk">www.hk-beam.org.hk</a></li> <li>• Hong Kong Construction Association (HKCA) <a href="http://www.hkca.com.hk">www.hkca.com.hk</a></li> <li>• Hong Kong Housing Society (HKHS) <a href="http://www.hkhs.com">www.hkhs.com</a></li> <li>• Hong Kong Polytechnic University, Department of Civil &amp; Structural Engineering <a href="http://www.cse.polyu.edu.hk">www.cse.polyu.edu.hk</a> &amp; <a href="http://www.cse.polyu.edu.hk/~cecspoon/lwbt">www.cse.polyu.edu.hk/~cecspoon/lwbt</a></li> <li>• Hong Kong Productivity Council (HKPC) <a href="http://www.hkpc.org">www.hkpc.org</a></li> <li>• Support and Consultation Centre for SMEs (SUCCESS) <a href="http://www.success.tid.gov.hk">www.success.tid.gov.hk</a></li> <li>• Websites of the supporting organisations identified in <i>Appendix E</i></li> </ul>
<b>QUESTIONNAIRE SURVEYS</b>	
The survey sought to identify the supply chain environmental pressures or requirements imposed by industry stakeholder organisations, principally government works and buildings related departments, utility companies, private developers and main contractors.	
<b>Government Bureaux &amp; Departments</b>	<ul style="list-style-type: none"> <li>• Architectural Services Department</li> <li>• Buildings Department</li> <li>• Housing Department</li> <li>• Environmental Protection Department</li> <li>• Environment, Transport and Works Bureau</li> <li>• Housing, Planning and Lands Bureau</li> </ul>
<b>Private Corporations</b>	<ul style="list-style-type: none"> <li>• China State Construction Engineering (H.K.) Ltd</li> <li>• CLP Power HK Ltd</li> <li>• Gammon Construction Ltd</li> <li>• Henderson Land Development Co. Ltd</li> <li>• Hong Kong and China Gas Company Ltd</li> <li>• Hongkong Land Ltd</li> <li>• Sun Hung Kai Properties Ltd</li> <li>• Swire Properties Management Ltd</li> </ul>
<b>Trade Associations</b>	<ul style="list-style-type: none"> <li>• Hong Kong Construction Association</li> <li>• Real Estates Developers Association Of Hong Kong</li> </ul>

## **APPENDIX B – PROGRESS WITH ENVIRONMENTALLY-RELATED RECOMMENDATIONS OF THE CONSTRUCTION INDUSTRY REVIEW COMMITTEE**

Source: PCICB Paper No. 114 *Progress Report on Implementation of Recommendations of the Construction Industry Review Committee* (July 2004), available from the PCICB website [www.pcicb.gov.hk](http://www.pcicb.gov.hk)

The *Construction Industry Review Committee* report *Construct for Excellence* (January 2001) identified room for improvement in the construction industry in terms of quality, efficiency, productivity, site safety, environmental sustainability and customer satisfaction. The report recommended that thorough consideration be given to all relevant factors, such as, compliance to environmental legislation, consideration to adopt ISO14001 EMS, life-cycle costing, greener and more energy efficient designs, and also end-user education to create market demand for environmentally friendly construction to facilitate downstream activities. Findings in the executive summary specific to environmental protection were:

*Paragraph 32. The construction industry is among the worst polluters. To improve the environmental performance of local construction and to improve the quality of life for the community, we should widely promote the concept of sustainable construction with an emphasis on life-cycle benefits rather than short-term efficiency. We urge major clients to take a lead in practising the concept of life-cycle costing, which refers to the systematic evaluation of all relevant costs associated with the acquisition and ownership of a built structure. The proposals recently put forward by the Task Force on Building Safety and Preventive Maintenance on defect liability warranty will help to promote more durable and maintainable buildings and have our support.*

*Paragraph 33. To encourage the industry to adopt greener and more energy efficient designs, we need a supportive regulatory framework, market demand as well as access to information on the environmental performance of different construction technologies and materials. We support the Buildings Department's initiatives to promote excellence in the environmental performance of the construction industry, and recommend the provision of incentives to create market momentum in the construction of green buildings and upgrading of existing buildings. Education of the end-users is important to create market demand for environmentally friendly construction. Major developers, including the Housing Authority, can lead the market by using green designs in their developments. We also look to regulators, industry stakeholders and the local research community to build up a knowledge base for industry participants with the necessary guidelines, design tools and databases.*

*Paragraph 34. We need to motivate the industry to comply with the regulatory requirements by making environmental performance a factor for consideration in tender evaluation and ongoing performance assessment. Contractors should be encouraged to employ dedicated personnel on site to assist line managers in managing the environmental aspects of construction activities. We also urge the Government to conduct a regulatory impact assessment on the cumulative impact of environmental legislation on the construction industry vis-à-vis the community.*

*Paragraph 35. We support the Government's efforts in addressing the problem of construction waste management. In addition, we recommend the wider use of recycled materials and modern construction methods (such as use of system formwork and prefabrication) to reduce construction waste. The Government should also identify suitable sites for off-site sorting facilities, "fill" banks and recycling or prefabrication facilities. Incentives should be provided to encourage the upgrading of existing buildings and urban renewal through private initiatives. Environmental assessment schemes and environmental management systems provide a systematic basis for tackling various environmental issues arising from construction. We support their wider adoption within the industry on a voluntary basis.*

Progress with specific recommendations is tabulated below.

## APPENDIX B – PROGRESS WITH ENVIRONMENTALLY-RELATED RECOMMENDATIONS OF THE CONSTRUCTION INDUSTRY REVIEW COMMITTEE (CIRC)

Source: PCICB Paper 114 *Progress Report on Implementation of Recommendations of the CIRC* (July 2004), available from the PCICB website [www.pcicb.gov.hk](http://www.pcicb.gov.hk)

Recommendation, Implementing Parties, Timeframe (from Jan 01)		Position at November 2003
89	<i>Coherent policy framework for integrating sustainable construction into sustainable development</i>  Government, within 2 years	A consultancy study commenced in April 2003 to review the current responsibilities among policy bureaux and departments and propose options for a policy framework of sustainable construction by mid-2004 for further consideration.
90	<i>Taking the lead in practicing lifecycle costing</i>  Public sector major private sector clients Start within 1 year	For public housing projects, HA has commissioned a consultancy study to develop tools for the selection of building materials and components based on their life-cycle cost and environmental performance. For public works projects, EMSD has commissioned a consultancy study to develop design tools for life-cycle costing, whilst ETWB is preparing a reference guide on application of life-cycle costing in evaluating procurement options.
91	<i>Develop life cycle costing resources</i> ETWB, major clients, professional institutions, researchers, Start within 2 years	After collating information from relevant professional bodies and academic institutions, ETWB has identified a number of areas on life-cycle costing models and tools that call for additional research work.
92	<i>Strengthening defects liability warranty for new buildings</i>  BD, REDA and developers Within 3 years (subject to enactment of legislation)	The Law Reform Commission has stated in its report on “Local Completed Residential Properties” that there is no compelling reason to lengthen the current 12 month defect liability period. However property sale brochures should state the start date and duration of the defects liability period to encourage developers to ensure the provision of defects liability warranties. BD is exploring with REDA a voluntary scheme managed by industry.
93(a)*	<i>Encouraging green designs – floor area exemptions for green features and facilities</i>  HPLB, BD, Lands D and Plan D, ongoing action	BD, Lands D and Plan D issued a Joint Practice Note (JPN1) in 2001 to provide incentives for green features in new buildings and the adoption of green construction methods. A second Joint Practice Note (JPN2) to encourage more green features was subsequently issued in February 2002.
93(b)	<i>Encourage green designs – additional gross floor area to offset extra costs of green construction methods and materials</i>  HPLB, BD, Lands D and Plan D, within 1 year	The incentives under item 93(a) have provided an initial impetus and industry responding favourably with green features beyond the scope of JPN1 and JPN2. As part of a holistic approach, BD has commissioned a consultancy study on the comprehensive environmental performance assessment scheme for buildings.
93(c)	<i>Encourage green designs – waiving premium for modifying existing leases to provide green features</i>  HPLB, BD, Lands D and Plan D, within 1 year	See items 93(a) & (b). In addition, the current land administration policy requires premium to be charged if there is an increase in land value obtained through a lease modification.
94*	<i>Wider use of green designs in housing estates</i>  HA, REDA and other major clients, within 1 year	The green design approach has been adopted in new public housing projects.

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Source: PCICB Paper 114 *Progress Report on Implementation of Recommendations of the CIRC* (July 2004), available from the PCICB website [www.pcicb.gov.hk](http://www.pcicb.gov.hk)

Recommendation, Implementing Parties, Timeframe (from Jan 01)		Position at November 2003
96	<i>Promoting public awareness of energy efficiency, provide guidelines to assess life-cycle energy costs</i> EMSD, BD, industry co-ordinator and researchers Start within 2 years	EMSD has commissioned a consultancy study for completion in late-2004 to develop tools and guidelines to assess the energy efficiency of building design.
97(a)*	<i>Abating environmental nuisance during construction – giving weight to environmental performance in assessing tenders and performance of contractors</i>  All clients, start within 1 year	For public housing projects, contractors are already required to submit an EMP for demolition, piling, building and civil contracts. HA also assigns an appropriate weight to environmental issues in the accession to its Premier League of Contractors. For public works projects, a standard marking scheme including the assessment of contractors' environmental performance was introduced in June 2002. Procedures for regulatory actions against contractors with environmental convictions were introduced in April 2003.
97(b)	<i>Abating environmental nuisance during construction - Separate contract accounts for pollution prevention and control measures</i> All clients, start within 1 year	ETWB introduced in March 2002 site tidiness / cleanliness requirements and specific measures on target setting, monitoring, control, on-site sorting and pay-for-waste-management in mid-2003, with enhanced contract requirements on environmental nuisance abatement. An integrated pay for safety, environment and hygiene scheme was introduced in public housing projects in October 2003.
97(c)*	<i>Abating environmental nuisance during construction – encouraging contractors to employ dedicated environmental personnel onsite</i> All clients, start within 1 year	For public works, the appointment of dedicated personnel has been specified as part of contract requirements for waste management since mid-2003. For public housing projects, contractors are required to employ dedicated personnel under their Environmental Management Plans.
98*	<i>Assessment of cumulative impacts of the environmental legislation on the construction industry</i> ETWB and EPD, start within 1 year	EPD has enhanced the business friendliness of its operations following a BSPU consultancy study and made a presentation to PCICB in October 2003 on key initiatives to reduce the regulatory impact on the construction industry.
99*	<i>Promotion of partnership between the construction industry and the EPD</i> EPD, ongoing action	EPD has continued to strengthen partnership with the construction industry through handbooks, training packs, seminars and workshops. Two websites with information on green working practices and environmentally friendly construction equipment were completed in April 2003.
100	<i>Charges for waste disposal</i> ETWB, EPD, as soon as possible	A bill giving effect to the charging scheme for construction and demolition waste was introduced into LegCo in December 2003 and is being scrutinized by a Bills Committee.
101	<i>Sites for handling construction and demolition materials</i> ETWB, HPLB, EPD, Lands D, Plan D, start within 1 year	In addition to barging points, a recycling facility and two fill banks has been put in place to cope with increasing waste volumes. ETWB is setting up two sorting facilities to tie in with the construction waste disposal charging scheme in 2005/06.

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Recommendation, Implementing Parties, Timeframe (from Jan 01)		Position at November 2003
102*	<i>Wider use of recycled materials</i> Public sector clients Within 2 years	Specifications for public works and public housing projects have been revised to facilitate use of recycled materials as hardcore in foundations, sub-base in road pavement and concrete in technically less demanding works. ETWB has identified some 100 projects for using recycled aggregates in both permanent and temporary works.
103	<i>Encouraging more durable buildings to minimize the generation of demolition materials</i> BD, as soon as possible	BD is collecting data on the use of new materials and technologies for building construction in order to compile a new practice note and will carry out a feasibility study on adaptive reuse of existing buildings to minimize maintenance and renovation. A practice note on "Use of Recycled Aggregates in Concrete" was issued in February 2003.
104	<i>Extending incentives scheme for green features to existing buildings</i> HPLB, BD, Lands D and Plan D, within 2 years	See item 93. BD will review the effectiveness of JPN1 and JPN2 before considering extending the incentive scheme to cover existing buildings.
105	<i>Comprehensive environmental assessment scheme for buildings with appropriate incentives</i> BD and other industry stakeholders, within 3 years	BD has commissioned a consultancy study for completion in late-2004 to devise a comprehensive scheme to assess the environmental performance of buildings in Hong Kong.

\* Recommendations substantially implemented by Government and further improvements will be ongoing.

## APPENDIX C – LEGISLATION, REGULATIONS AND INDUSTRY STANDARDS

Details of the following ordinances and regulations can be found in the “Bilingual Laws Information System” website of the Department of Justice at [www.doj.gov.hk](http://www.doj.gov.hk).

For details of the codes of practice, technical memoranda, guidelines, and technical circulars, please visit the websites of the corresponding authorities

### Air Pollution Control – Ordinances and Regulations

- *Air Pollution Control Ordinance (Cap. 311)*
- *Air Pollution Control (Asbestos) (Administration) Regulation*
- *Air Pollution Control (Construction Dust) Regulation*
- *Air Pollution Control (Dust and Grit Emission) Regulations*
- *Air Pollution Control (Fuel Restriction) Regulations*
- *Air Pollution Control (Furnaces, Oven and Chimneys) Installation and Alteration) Regulations*
- *Air Pollution Control (Motor Vehicle Fuel) Regulation*
- *Air Pollution Control (Open Burning) Regulation*
- *Air Pollution Control (Smoke) Regulation*
- *Ozone Layer Protection Ordinance (Cap. 403)*
- *Ozone Layer Protection (Controlled Refrigerants) Regulation*
- *Ozone Layer Protection (Products Containing Scheduled Substances) (Import Banning) Regulation*
- *Road Traffic Ordinance (Cap. 374)*
- *Road Traffic (Construction and Maintenance of Vehicles) Regulations*
- *Shipping and Port Control Ordinance (Cap. 313)*

### Air Pollution – Codes of Practice, Technical Memoranda, Guidelines, Technical Circulars

- *Code of Practice on Asbestos Control – Preparation of Asbestos Investigation Report, Asbestos Management Plan and Asbestos Abatement Plan [Source: EPD]*
- *Code of Practice on Asbestos Control – Asbestos Work Using Full Containment or Mini Containment Method [Source: EPD]*
- *Code of Practice for the Prevention of Legionnaires’ Disease in Hong Kong [Source: EMSD]*
- *TM Issuing Air Pollution Abatement Notices to Control Air Pollution from Stationary Process [Source: EPD]*
- *Guidance notes for management of Indoor Air Quality in office and public places [Source: EPD]*
- *ProPECC PN 1/92 Impingement of Plumes from Boiler Chimneys on Adjacent Buildings [Source: EPD]*
- *ProPECC PN 4/94 Air Conditioning Refrigerants – A Time for Change [Source: EPD]*
- *ProPECC PN 2/96 Control of Air Pollution in Car Parks [Source: EPD]*
- *ProPECC PN 2/97 Handling of Asbestos Containing Materials in Buildings [Source: EPD]*
- *ProPECC PN 1/98 Control of Air Pollution in Semi-Confined Public Transport Interchanges [Source: EPD]*
- *ProPECC PN 1/99 Control of Radon Concentration in New Buildings [Source: EPD]*
- *PNAP 144 Control of Environmental Nuisance from Construction Sites [Source: BD]*
- *PNAP 114 Asbestos [Source: BD]*
- *ETWB TC 18/99 Particular Specification Clause for Vehicles Carrying Dusty Materials [Source: ETWB]*

#### **Noise Control – Ordinances and Regulations**

- *Noise Control Ordinance (Cap. 400);*
- *Noise Control (General) Regulations*
- *Noise Control (Construction Work) Regulation;*
- *Noise Control (Construction Work Designated Areas) Notice;*
- *Noise Control (Hand Held Percussive Breakers) Regulations*
- *Noise Control (Air Compressors) Regulations*
- *Noise Control (Motor Vehicles) Regulation*
- *Road Traffic (Construction and Maintenance of Vehicles) Regulation*
- *Factories and Industrial Undertakings Ordinance (Cap. 59)*
- *Factories and Industrial Undertakings (Noise at Work) Regulations*
- *Occupational Safety and Health Ordinance (Cap. 509)*

#### **Noise Pollution – Codes of Practice, Technical Memoranda, Guidelines, Technical Circulars**

- *Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Places or Construction Sites [Source: EPD]*
- *Technical Memorandum on Noise from Construction Work Other Than Percussive Piling [Source: EPD]*
- *Technical Memorandum on Noise from Construction Work in Designated Areas [Source: EPD]*
- *Technical Memorandum on Noise from Percussive Piling [Source: EPD]*
- *ProPECC PN 1/93 Noise from Construction Activities – Statutory [Source: EPD]*
- *ProPECC PN 2/93 Noise from Construction Activities – Non-statutory [Source: EPD]*
- *ProPECC PN 4/93 Planning and Design Noise Sensitive Developments [Source: EPD]*
- *ProPECC PN 1/96 Use of Quieter Construction Equipment for Road Opening Works during Non-Sociable Hours [Source: EPD]*
- *ProPECC PN 1/97 Streamline Planning of Residential Developments Against Road Traffic Noise [Source: EPD]*
- *PNAP 144 Control of Environmental Nuisance from Construction Sites [Source: BD]*
- *PNAP 228 Noise Annoyance Prevention Design of Pump Room and Ventilation System [Source: BD]*
- *ETWB TC No. 11/2002 Control of Site Crushers [Source: ETWB]*
- *ETWB TC No. 6/97 Prohibition of the Use of Diesel Hammers for Percussive Piling for Government Projects [Source: ETWB]*

#### **Water Pollution Control – Ordinances and Regulations**

- *Water Pollution Control Ordinance (Cap. 358)*
- *Water Pollution Control (General) Regulations*
- *Technical Memorandum Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (Cap 358AK)*

- *Shipping and Port Control Ordinance (Cap. 313)*
- *Sewage Services Ordinance (Cap. 463)*
- *Waterworks Ordinance (Cap.102)*
- *Buildings (Demolition Works) Regulations*
- *Buildings Ordinance (Cap. 123)*
- *Waste Disposal Ordinance (Cap. 354)*
- *Dumping at Sea Ordinance (Cap. 466)*
- *Foreshores and Sea Bed (Reclamations) Ordinance (Cap. 127)*
- *Merchant Shipping (Prevention and Control of Pollution) Ordinance (Cap. 413)*
- *Merchant Shipping (Prevention of Oil Pollution) Regulations*
- *Merchant Shipping (Control of Pollution by Noxious Liquid Substances in Bulk) Regulations*
- *Radiation Ordinance (Cap. 303)*
- *Fisheries Protection Ordinance (Cap. 171)*

#### **Water Pollution – Codes of Practice, Technical Memoranda, Guidelines, Technical Circulars**

- *ProPECC PN 1/94 Construction Site Drainage [Source: EPD]*
- *ProPECC PN 3/97 A Revised Streamlined Approach for vetting of Drainage Plans Referred to EPD for Comments [Source: EPD]*
- *PNAP 144 Control of Environmental Nuisance from Construction Sites [Source: BD]*
- *ETWB TC 14/2004 Maintenance of Stormwater Drainage Systems and Natural Watercourses [Source: ETWB]*
- *ETWB TC 32/2003 Protection of the Harbour [Source: ETWB]*
- *ETWB TC 9/2001 Procedures for Gazetting under the Foreshore and Sea-bed (Reclamations) Ordinance (Chapter 127) [Source: ETWB]*
- *ETWB TC 18/1995 Drainage Impact Assessment Process for Public Sector Project [Source: ETWB]*
- *ETWB TC 3/1995 Control of Wave Reflection in Victoria Harbour [Source: ETWB]*
- *ETWB TC 3/1992 Abatement of Sanitary Nuisance from Defective Drains and Sewers in Private Streets and Service Lanes [Source: ETWB]*

#### **Waste Management – Ordinances and Regulations**

- *Waste Disposal Ordinance (Cap. 354)*
- *Waste Disposal (Chemical Waste) (General) Regulation*
- *Waste Disposal (Charges for Disposal of Chemical Waste) Regulation*
- *Waste Disposal (Charges for Disposal of Waste) Regulation*
- *Merchant Shipping (Prevention and Control of Pollution) Ordinance (Cap. 413)*
- *Merchant Shipping (Prevention of Oil Pollution) Regulations*
- *Merchant Shipping (Control of Pollution by Noxious Liquid Substances in Bulk) Regulations*
- *Foreshores and Sea Bed (Reclamations) Ordinance (Cap. 127)*
- *Buildings Ordinance (Cap. 123)*
- *Pesticides Ordinance (Cap. 133)*
- *Town Planning Ordinance (Cap. 131)*
- *Land (Miscellaneous Provisions) Ordinance (Cap. 28)*
- *Radiation Ordinance (Cap. 303)*
- *Dumping At Sea Ordinance (Cap. 466)*
- *Shipping and Port Control Ordinance (Cap. 313)*

#### **Waste – Codes of Practice, Technical Memoranda, Guidelines, Technical Circulars**

- *Code of Practices on the Packaging, Labelling and Storage of Chemical Wastes [Source: EPD]*
- *Code of Practices on the Handling, Transport and Disposal of Asbestos Waste [Source: EPD]*

<ul style="list-style-type: none"> <li>• <i>A Guide to the Chemical Waste Control Scheme</i> [Source: EPD]</li> <li>• <i>A Guide to the Registration of Chemical Waste Producers</i> [Source: EPD]</li> <li>• <i>ProPECC PN 3/94 Contaminated Land Assessment and Remediation</i> [Source: EPD]</li> </ul>
<ul style="list-style-type: none"> <li>• <i>PNAP 144 Control of Environmental Nuisance from Construction Sites</i> [Source: BD]</li> <li>• <i>PNAP 155 Marine Disposal of Dredged Mud</i> [Source: BD]</li> <li>• <i>PNAP 243 Construction and Demolition Waste</i> [Source: BD]</li> <li>• <i>PNAP 252 Management Framework for Disposal of Dredged/Excavated Sediment</i> [Source: BD]</li> <li>• <i>PNAP 275 Use of Recycled Aggregated in Concrete</i> [Source: BD]</li> <li>• <i>PNAP 268 Resident Supervision and Debris Management System for Demolition Works</i> [Source: BD]</li> </ul>
<ul style="list-style-type: none"> <li>• <i>ETWB TC 15/2003 Waste Management on Construction Sites</i> [Source: ETWB]</li> <li>• <i>ETWB TC 34/2002 Management of Dredged/Excavated Sediment</i> [Source: ETWB]</li> <li>• <i>ETWB TC 33/2002 Management of Construction and Demolition Material Including Rock</i> [Source: ETWB]</li> <li>• <i>ETWB TC 21/2002 Trip-ticket System for Disposal of Construction and Demolition Material</i> [Source: ETWB]</li> <li>• <i>ETWB TC 6/2002A Enhanced Specification for Site Cleanliness and Tidiness</i> [Source: ETWB]</li> <li>• <i>ETWB TC 12/2000 Fill Management</i> [Source: ETWB]</li> <li>• <i>ETWB TC 3/2000 Management of Dredged/Excavated Sediment</i> [Source: ETWB]</li> <li>• <i>ETWB TC 25/1999 Incorporation of Information on Construction and Demolition Material</i> [Source: ETWB]</li> <li>• <i>Management in Public Works Subcommittee Papers</i> [Source: ETWB]</li> <li>• <i>ETWB TC 4/1998 Use of Public Fill in Reclamation and Earth Filling Projects</i> [Source: ETWB]</li> <li>• <i>ETWB TC 16/1996 Wet Soil in Public Dumps</i> [Source: ETWB]</li> <li>• <i>ETWB TC 2/1993 Public Dumps</i> [Source: ETWB]</li> <li>• <i>ETWB TC 10/1992 Provision of Refuse Containment Booms in Reclamation Contracts Involving Public Dumping</i> [Source: ETWB]</li> </ul>

#### **Dangerous Goods Management – Ordinances and Regulations**

<ul style="list-style-type: none"> <li>• <i>Dangerous Goods Ordinance (Cap. 295)</i></li> <li>• <i>Dangerous Goods (Application &amp; Exemption) Regulations</i></li> <li>• <i>Dangerous Goods (General) Regulations</i></li> </ul>
<ul style="list-style-type: none"> <li>• <i>Radiation Ordinance (Cap. 303)</i></li> <li>• <i>Fire Protection Notice No.4 Dangerous Goods General</i> [Source: Fire Services Department]</li> </ul>

#### **Dangerous Goods Management - Ordinances and Regulations: Codes of Practice, Technical Memoranda, Guidelines, Technical Circulars**

<ul style="list-style-type: none"> <li>• <i>ProPECC Practice Note PN 2/94 Potentially Hazardous Installations</i> [Source: EPD]</li> </ul>
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#### **Environmental Impact Assessment (EIA) – Ordinances and Regulations**

<ul style="list-style-type: none"> <li>• <i>Environmental Impact Assessment Ordinance (Cap. 499)</i></li> </ul>
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#### **EIA – Codes of Practice, Technical Memoranda, Guidelines, Technical Circulars**

- EIAO Guidance Notes (GN1/2002): *EIA Principles* [Source: EPD]
- EIAO Guidance Notes (GN2/2002): *Environmental Study Management Group* [Source: EPD]
- EIAO Guidance Notes (GN3/2002): *Mitigation Measures* [Source: EPD]
- EIAO Guidance Notes (GN4/2002): *Independent Environmental Checker* [Source: EPD]
- EIAO Guidance Notes (GN5/2002): *Implementation Schedule* [Source: EPD]
- EIAO Guidance Notes (GN6/2002): *Ecological Assessment* [Source: EPD]
- EIAO Guidance Notes (GN7/2002): *Ecological Baseline Survey* [Source: EPD]
- EIAO Guidance Notes (GN8/2002): *Landscape and Visual Impact Assessment* [Source: EPD]
- *Technical Memorandum on Environmental Impact Assessment Process* [Source: EPD]
- ETWB TC 13/2003 *Guidelines and Procedures for EIA of Government Projects and Proposals* [Source: ETWB]
- ETWB TC 27/1999 *Environmental Impact Assessment Ordinance Particular Specification Clause* [Source: ETWB]

#### **Resources Use – Codes of Practice, Technical Memoranda, Guidelines, Technical Circulars**

- *Code of Practice for Energy Efficiency of Lift and Escalator Installations* [Source: EMSD]
- *Code of Practice for Energy Efficiency of Electrical Installations* [Source: EMSD]
- *Code of Practice for Energy Efficiency of Air Conditioning Installations* [Source: EMSD]
- *Code of Practice for Energy Efficiency of Lighting Installations* [Source: EMSD]
- PNAP 153 *Tropical Hardwood Timber* [Source: BD]
- ETWB TC 12/2002 *Specifications Facilitating the Use of Recycled Aggregates* [Source: ETWB]
- ETWB TC 19/2001 *Metallic Site Hoardings and Signboards* [Source: ETWB]
- ETWB TC 4/98A *Use of Public Fill in Reclamation and Earth Filling Projects* [Source: ETWB]
- ETWB TC 2/97 *Use of PFA in Concrete Pile Caps and Substructures* [Source: ETWB]
- ETWB TC 14/94 *Use of PFA as General Fill in Reclamations* [Source: ETWB]
- ETWB TC 32/92 *The Use of Tropical Hardwood on Construction Sites* [Source: ETWB]
- ETWB TC 14/90 *The Use of PFA in Structural Concrete* [Source: ETWB]

#### **Other Ordinances and Regulations**

- *Country Parks Ordinance* (Cap. 208)
- *Country Parks and Special Areas Regulations*
- *Marine Parks Ordinance* (Cap. 476)
- *Marine Parks and Marine Reserves Regulations*
- *Antiquities and Monuments Ordinance* (Cap. 53)
- *Public Health and Municipal Services Ordinance* (Cap. 132)
- *Summary Offences Ordinance* (Cap. 228)
- *Fixed Penalty (Public Cleanliness Offences) Ordinance* (Cap.570)

#### **Other Codes of Practice, Technical Memoranda, Guidelines, Technical Circulars**

- PNAP 267 *Felling, Trimming or Replanting of Trees* [Source: BD]
- LAO PN 8/2002 *Application for Tree Felling or Transplanting for private projects* [Source: Lands Department]

- ETWB TC 08/2004 *Tender Evaluation of Works Contracts* [Source: ETWB]
- ETWB TC 34/2003 *Community Involvement in Greening Works* [Source: ETWB]
- ETWB TC 22/2003 *Additional Measures to Improve Site Cleanliness and Control Mosquito Breeding on Construction Sites* [Source: ETWB]
- ETWB TC 14/2003 *Role of Departmental Safety & Environmental Advisor on HSE Protection* [Source: ETWB]
- ETWB TC 02/2003 *Regulating Action where a Serious Incident has or Site Safety or Environmental Offences have occurred on a Construction Site* [Source: ETWB]
- ETWB TC 47/2002 *Management of Sub-Contractors by Contractors* [Source: ETWB]
- ETWB TC 24/2002 *Contractors' Performance Index System* [Source: ETWB]
- ETWB TC 14/2002 *Management and Maintenance of Natural Vegetation and Landscape Works, and Tree Preservation* [Source: ETWB]
- ETWB TC 07/2002 *Tree Planting in Public Works* [Source: ETWB]
- ETWB TC 4/97 *Guidelines for Implementing the Policy on Off-site Ecological Mitigation Measures* [Source: ETWB]
- ETWB TC 25/1993 *Control of Visual Impact of Slopes* [Source: ETWB]
- ETWB TC 28/1992 *Damage of Crops and Property on Agricultural Lands* [Source: ETWB]
- ETWB TC 25/1992 *Allocation of Space for Urban Street Trees* [Source: ETWB]

## APPENDIX D – ENVIRONMENTAL REQUIREMENTS EMBRACED BY HONG KONG GOVERNMENT TECHNICAL CIRCULARS RELATING TO CONSTRUCTION

Technical Circular Reference and Title (The full list of Technical Circulars and their downloads is available at the Environment, Transport and Works Bureau website <a href="http://www.etwb.gov.hk">www.etwb.gov.hk</a> )		Contract Payment / Evaluation	Site Cleanliness / Hygiene	Air / Noise Pollution	Ecology	Water Pollution / Harbour Protection	Waste Management	Visual Impacts	EIA Ordinance	Environmental Offences
08/2004	Tender Evaluation of Works Contracts	✓								
34/2003	Community Involvement in Greening Works				✓			✓		
32/2003	Protection of the Harbour					✓				
22/2003	Additional Measures to Improve Site Cleanliness and Control Mosquito Breeding on Construction Sites		✓							
15/2003	Waste Management on Construction Sites	✓					✓			
14/2003	Role of Departmental Safety & Environmental Advisor on Health, Safety and Environmental Protection on Construction Sites	✓								
13/2003	Guidelines and Procedures for Environmental Impact Assessment of Government Projects and Proposals								✓	
02/2003	Regulating Action where a Serious Incident has or Site Safety or Environmental Offences have occurred on a Construction Site									✓
47/2002	Management of Sub-Contractors by Contractors	✓								
34/2002	Management of Dredged/Excavated Sediment					✓	✓			
33/2002	Management of Construction and Demolition Material Including Rock						✓			
24/2002	Contractors' Performance Index System	✓								

## APPENDIX D – ENVIRONMENTAL REQUIREMENTS EMBRACED BY HONG KONG GOVERNMENT TECHNICAL CIRCULARS RELATING TO CONSTRUCTION

Technical Circular Reference and Title (The full list of Technical Circulars and their downloads is available at the Environment, Transport and Works Bureau website <a href="http://www.etwb.gov.hk">www.etwb.gov.hk</a> )		Contract Payment / Evaluation	Site Cleanliness / Hygiene	Air / Noise Pollution	Ecology	Water Pollution / Harbour Protection	Waste Management	Visual Impacts	EIA Ordinance	Environmental Offences
21/2002	Trip-ticket System for Disposal of Construction & Demolition Material						✓			
14/2002	Management and Maintenance of Natural Vegetation and Landscape Works, and Tree Preservation				✓			✓		
12/2002	Specifications Facilitating the Use of Recycled Aggregates						✓			
11/2002	Control of Site Crushers						✓			
07/2002	Tree Planting in Public Works				✓			✓		
06/2002A	Enhanced Specification for Site Cleanliness and Tidiness		✓							
06/2002	Enhanced Specification for Site Cleanliness and Tidiness		✓							
09/2001	Procedures for Gazetting under the Foreshore and Sea-bed (Reclamations) Ordinance (Chapter 127)					✓				
12/2000	Fill Management						✓			
27/1999	Environmental Impact Assessment Ordinance Particular Specification Clause								✓	
25/1999 (A, C)	Incorporation of Information on Construction and Demolition Material Management in Public Works Subcommittee Papers						✓			
18/1999	Particular Specification Clause for Vehicles Carrying Dusty Materials			✓						

## APPENDIX D – ENVIRONMENTAL REQUIREMENTS EMBRACED BY HONG KONG GOVERNMENT TECHNICAL CIRCULARS RELATING TO CONSTRUCTION

Technical Circular Reference and Title (The full list of Technical Circulars and their downloads is available at the Environment, Transport and Works Bureau website <a href="http://www.etwb.gov.hk">www.etwb.gov.hk</a> )		Contract Payment / Evaluation	Site Cleanliness / Hygiene	Air / Noise Pollution	Ecology	Water Pollution / Harbour Protection	Waste Management	Visual Impacts	EIA Ordinance	Environmental Offences
17/1998	Environmental Impact Assessment Ordinance – Guidance on the Preparation of Briefs for Consultancy Agreements								✓	
04/1998A	Use of Public Fill in Reclamation and Earth Filling Projects						✓			
04/1998	Use of Public Fill in Reclamation and Earth Filling Projects						✓			
06/1997	Prohibition of the Use of Diesel Hammers for Percussive Piling Work for Government Projects			✓						
04/1997	Guidelines for Implementing the Policy on Off-site Ecological Mitigation Measures				✓					
02/1997	Use of PFA in Concrete Pile Caps and Substructures						✓			
16/1996	Wet Soil in Public Dumps						✓			
18/1995	Drainage Impact Assessment Process for Public Sector Project					✓				
03/1995	Control of Wave Reflection in Victoria Harbour					✓				
14/1994	Use of PFA as General Fill in Reclamations						✓			
25/1993	Control of Visual Impact of Slopes				✓			✓		
02/1993B	Public Filling Facilities						✓			

## APPENDIX D – ENVIRONMENTAL REQUIREMENTS EMBRACED BY HONG KONG GOVERNMENT TECHNICAL CIRCULARS RELATING TO CONSTRUCTION

Technical Circular Reference and Title (The full list of Technical Circulars and their downloads is available at the Environment, Transport and Works Bureau website <a href="http://www.etwb.gov.hk">www.etwb.gov.hk</a> )		Contract Payment / Evaluation	Site Cleanliness / Hygiene	Air / Noise Pollution	Ecology	Water Pollution / Harbour Protection	Waste Management	Visual Impacts	EIA Ordinance	Environmental Offences
02/1993	Public Dumps						✓			
32/1992	The Use of Tropical Hardwood on Construction Sites						✓			
28/1992	Damage of Crops and Property on Agricultural Lands				✓					
25/1992	Allocation of Space for Urban Street Trees				✓			✓		
10/1992	Provision of Refuse Containment Booms in Reclamation Contracts Involving Public Dumping						✓			
03/1992	Abatement of Sanitary Nuisance from Defective Drains and Sewers in Private Streets and Service Lanes		✓			✓				
14/1990	The Use of PFA in Structural Concrete						✓			
10/1988	Maintenance of stormwater drainage systems and natural stream courses					✓				
Frequency		5	4	2	7	7	18	5	3	1

## APPENDIX E – SURVEY RESPONSES ON ENVIRONMENTAL SUPPLY CHAIN PRESSURE

### GOVERNMENT WORKS AND BUILDINGS DEPARTMENTS

Tender specifications and guidelines require fulfilment of quality and environmental policies, objectives and targets, and are measured in the tender evaluation process.

<b>Architectural Services Department (ArchSD)</b>	<ul style="list-style-type: none"> <li>• During project design, ArchSD requires holistic consideration of environmental aspects. A “Project Environmental Design Submission” submitted by the consultant must be approved by the Department’s Design Vetting Committee before the proceeding to the next project workstage.</li> <li>• In selected projects, ArchSD requires an environmental assessment such a recognised scheme such as HKBEAM.</li> <li>• ArchSD contract documents and specifications require contractors and suppliers to use environmentally friendly building materials and energy efficient building services installations. Environmental construction technologies such as prefabrications, left-in formworks, slip form construction etc. are also encouraged.</li> <li>• During construction, ArchSD requires contractors to minimize adverse impacts. Apart from compliance with legislation and bylaws, other environmental control measures such as “trip ticket system”, “waste management plan”, “pay for site cleanliness” scheme are required to be implemented by contractors.</li> <li>• The environmental performance of ArchSD contractors will be assessed in their quarterly contractor’s performance report. An adverse report in the “environmental” section would automatically imply an adverse overall report, which would have a negative effect in their tender for public works contracts.</li> </ul>
<b>Buildings Department (BD)</b>	<ul style="list-style-type: none"> <li>• BD requires tenderers to have satisfactory environmental performance records in the past 12 months as from the tender closing date. Besides, the environmental performance of BD Contractors (e.g. adequacy of avoidance measures against noise, water, air and waste pollution, compliance with environmental enactments, etc.) is evaluated in the quarterly performance review.</li> <li>• BD aims to enhance the built environment by formulating policies and green initiatives to encourage sustainable building developments. Major initiatives are: <ul style="list-style-type: none"> <li>- Modernizing the Buildings Ordinance and allied regulations with a performance-based approach that would facilitate the improvement of environmental performance of buildings and achieve a more rational and economical design;</li> <li>- Promoting environmentally friendly buildings by introducing green initiatives and benchmarking the green buildings.</li> <li>- Joint Practice Notes issued in 2001 and 2002 to provide more incentives in the form of exemption from Gross Floor Area and/or Site Coverage calculations for the provision of green features such as utility platforms, balconies, non-structural prefabricated external walls, communal sky gardens, etc.</li> <li>- A green labelling system applicable to all types of new and existing buildings is under preparation. It is anticipated that such system will entice the industry and building owners to upgrade the environmental performance of their buildings.</li> </ul> </li> <li>• Promulgating technical guidelines on building and construction practices in terms of efficiency and waste control. Codes of Practice and Practice Notes have been issued on the use of recycled aggregates in concrete, Precast Concrete Construction and lighting and ventilation requirements for buildings in February, November and December 2003 respectively.</li> </ul>
<b>Environmental Protection Department</b>	<ul style="list-style-type: none"> <li>• The Contractor would be required to submit a Detailed Environmental Assessment for the Facility covering the construction and operation phases.</li> <li>• The Contractor would be required to carry out environmental monitoring and comply with Environmental Performance Requirements.</li> <li>• A portion of the Contract Sum would be allotted for compliance with the Environmental Performance Requirements.</li> <li>• The Contractor would be required to implement, from the date for commencement of the Works, an EMS compliant with ISO14001 starting from 2000 and to accredit this within a period specified in the Contract.</li> </ul>

## APPENDIX E – SURVEY RESPONSES ON ENVIRONMENTAL SUPPLY CHAIN PRESSURE

### UTILITY COMPANIES

The two public utilities surveyed request their building contractors (including for transfer station, transformer station and piping network construction projects) to follow and comply with their environmental requirements. More stringent requirements, such as the implementation of Environmental Management Plan (EMP), are imposed in certain situations such as designated projects (e.g. as marine cable works contractors).

<b>CLP Power Hong Kong Ltd</b>	<ul style="list-style-type: none"> <li>Require contractors to comply all relevant environmental legislation of Hong Kong;</li> <li>Specify specific environmental requirements on tender specification on certain contracts, such as asbestos abatement contract, etc;</li> <li>Issue environmental guidelines/handbook/CD-Rom to all contractors (including sub-station building, cable laying works and other civil projects), mainly focusing on statutory requirements for air, water, noise and waste management;</li> <li>Some sub-station building project require contractor to comply with local environmental legislation and try to comply with HK-BEAM standards; and</li> <li>EMP is required for some designated projects.</li> </ul>
<b>Hong Kong &amp; China Gas Company Ltd</b>	<ul style="list-style-type: none"> <li>Stipulate all the environmental requirements in their tender specifications;</li> <li>Require sub-contractors to comply with relevant environmental legislation of HK;</li> <li>Advise sub-contractors and suppliers to use more environmentally friendly materials; and</li> <li>Require sub-contractors to minimize the production of waste and to collect reusable waste materials for recycling.</li> </ul>

### PRIVATE DEVELOPERS

The private developers surveyed issue environmental guidelines to their contractors to illustrate the environmental best practices should be adopted at their premises and construction sites. These requirements mainly focused on the legislative requirements on air, water, noise and waste management. Some private developers also require their construction projects certified to some green building assessment scheme such as HK-BEAM.

<b>HongKong Land Ltd</b>	<ul style="list-style-type: none"> <li>Require building contractors to comply with all relevant environmental legislation of Hong Kong, include an “Environmental Clause” in tender documentation</li> <li>Some environmental requirements in fitting our guidelines and management regulations.</li> <li>Currently, there are a total of 7 buildings and 3 new building construction projects undergoing HK-BEAM Assessment.</li> </ul>
<b>Swire Properties Ltd</b>	<ul style="list-style-type: none"> <li>Project team must follow the SPL design guidelines which include stringent environmental requirements</li> <li>The construction contractor appointed to be the main contractor on SPL owned development sites is provided with a list of environmental requirements which includes conformance with all relevant environmental legislation, and is required to prepared an environmental management plan, waste management plan and to overtake regular audits.</li> <li>Currently, there are a total of 8 existing buildings and 6 new building construction projects undergoing HK-BEAM Assessment.</li> </ul>

### MAIN CONTRACTORS

Main contractors are mostly certified to ISO14001 and providing best practices environmental guidelines to their sub-contractors that focus mainly on legal compliance.

<b>China State Construction Co. Ltd</b>	<ul style="list-style-type: none"> <li>Issue environmental guidelines to all contractors working in their construction sites and stipulates the requirements on air, water, noise and waste management within their premises.</li> </ul>
<b>Gammon Construction Ltd</b>	<ul style="list-style-type: none"> <li>Issue environmental guidelines to all contractors working in their construction sites and stipulates the requirements on air, water, noise and waste management within their premises.</li> </ul>

## APPENDIX F – ORGANISATIONS OFFERING SUPPORT TO CONSTRUCTION SMEs

Government Related Organisations	Contact Details
<b>Construction Industry Council</b> CIC Secretariat, Room 2001, 20/F, Alliance Building, 130-136 Connaught Road Central, Hong Kong	<a href="http://www.hkcic.org/">http://www.hkcic.org/</a> Tel: (852) 3571 8716 Fax: (852) 3571 9848 Email: <a href="mailto:enquiry@hkcic.org">enquiry@hkcic.org</a>
<b>Construction Waste</b> Waste Reduction & Ecopark Group, Environmental Protection Department, 2/F, East Wing, 88 Victoria Road, Kennedy Town, Hong Kong	<a href="http://www.epd.gov.hk/epd/misc/cdm/index.htm">http://www.epd.gov.hk/epd/misc/cdm/index.htm</a> Tel: (852) 2838 3111 Email: <a href="mailto:enquiry@epd.gov.hk">enquiry@epd.gov.hk</a>
<b>Environmental Protection Department</b> 28/F, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong	<a href="http://www.epd.gov.hk">http://www.epd.gov.hk</a> Tel: (852) 2838 3111 Fax: (852) 2114 0139 Email: <a href="mailto:enquiry@epd.gov.hk">enquiry@epd.gov.hk</a>
<b>Development Bureau (Works Branch)</b> <b>(Ex-Environment, Transport and Works Bureau</b> <b>(Work Matters) )</b> 10/F, Murray Building, 3 Garden Road, Central, Hong Kong	<a href="http://www.devb-wb.gov.hk">http://www.devb-wb.gov.hk</a> Tel: (852) 2848 2111 Fax: (852) 2523 5327 Email: <a href="mailto:wbenq@devb.gov.hk">wbenq@devb.gov.hk</a>
<b>Hong Kong Productivity Council</b> HKPC Building, 78 Tat Chee Avenue, Yau Yat Chuen, Kowloon Tong, Hong Kong	<a href="http://www.hkpc.org">http://www.hkpc.org</a> Tel: (852) 2788 5678 Fax: (852) 2788 5900
<b>Provisional Construction Industry Co-ordination Board</b> Room 2100, 21/F, Murray Building, 3 Garden Road, Central, Hong Kong	<a href="http://www.pcicb.gov.hk/">http://www.pcicb.gov.hk/</a> Tel: (852) 2848 2294 Fax: (852) 2189 7990 Email: <a href="mailto:enquiry@pcicb.gov.hk">enquiry@pcicb.gov.hk</a>
<b>Trade and Industry Department</b> Room 908, Trade and Industry Department Tower, 700 Nathan Road, Kowloon, Hong Kong	<a href="http://www.tid.gov.hk">http://www.tid.gov.hk</a> Tel: (852) 2392 2922 Fax: (852) 2787 7422 Email: <a href="mailto:enquiry@tid.gov.hk">enquiry@tid.gov.hk</a>
NGOs & Trade Associations	Contact Details
<b>Business Environment Council</b> Room 201, 2/F, Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong, Hong Kong	<a href="http://www.bec.org.hk">http://www.bec.org.hk</a> Tel: (852) 2784 3900 Fax: (852) 2784 6699
<b>Chartered Institute of Water and Environmental Management (CIWEM) Hong Kong Branch</b> P.O. Box 4258, General Post Office, Hong Kong	<a href="http://www.ciwem.com/branches/hong_kong/">http://www.ciwem.com/branches/hong_kong/</a> Tel: (852) 3406 4534 Fax: (852) 2482 5721 Email: <a href="mailto:norman.cheng@veoliawater.com.hk">norman.cheng@veoliawater.com.hk</a>
<b>Civic Exchange</b> Room 701, Hoseinee House, 69 Wyndham Street, Central, Hong Kong	<a href="http://www.civic-exchange.org">http://www.civic-exchange.org</a> Tel: (852) 2893 0213 Fax: (852) 3105 9713 Email: <a href="mailto:cloh@civic-exchange.org">cloh@civic-exchange.org</a>
<b>Construction Industry Institute, Hong Kong</b> 2/F, Dragon Centre, 23 Wun Sha Street, Tai Hang, Hong Kong	<a href="http://www.ciihk.org.hk">http://www.ciihk.org.hk</a> Tel: (852) 2839 7866 Fax: (852) 2839 7326 Email: <a href="mailto:inquiry@ciihk.org.hk">inquiry@ciihk.org.hk</a>

## APPENDIX F – ORGANISATIONS OFFERING SUPPORT TO CONSTRUCTION SMEs

<b>Hong Kong Construction Association</b> 3/F, 180-182 Hennessy Road, Wanchai, Hong Kong	<a href="http://www.hkca.com.hk">http://www.hkca.com.hk</a> Tel : (852) 2572 4414 Fax: (852) 2572 7104 Email: <a href="mailto:admin@hkca.com.hk">admin@hkca.com.hk</a>
<b>Hong Kong Institution of Engineers</b> 9/F, Island Beverley, No 1 Great George Street, Causeway Bay, Hong Kong	<a href="http://www.hkie.org.hk">http://www.hkie.org.hk</a> Tel : (852) 2895 4446 Fax: (852) 2577 7791 Email: <a href="mailto:hkie-sec@hkie.org.hk">hkie-sec@hkie.org.hk</a>
<b>Hong Kong Institute of Environmental Impact Assessment</b> P.O. Box 28756, Gloucester Road Post Office, Hong Kong	<a href="http://www.hkieia.org.hk">http://www.hkieia.org.hk</a> Tel : (852) 2993 3543 Fax: (852) 2993 7577 Email: <a href="mailto:webmaster@hkieia.org.hk">webmaster@hkieia.org.hk</a>

Academic Institutions	Contact Details
<b>Chinese University of Hong Kong</b> Department of Architecture Room 514, 5/F Wong Foo Yuan Building, Shatin, N.T., Hong Kong	<a href="http://www.arch.cuhk.edu.hk">http://www.arch.cuhk.edu.hk</a> Tel: (852) 2609 6517 Fax: (852) 2603 5267 Email: <a href="mailto:architecture@cuhk.edu.hk">architecture@cuhk.edu.hk</a>
<b>City University of Hong Kong</b> CityU Professional Services Limited 83 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong	<a href="http://www.cps.com.hk">http://www.cps.com.hk</a> Tel: (852) 3442 6241 Fax: (852) 2628 2802 Email: <a href="mailto:cps@cityu.edu.hk">cps@cityu.edu.hk</a>
<b>Hong Kong Polytechnic University</b> Department of Civil and Structural Engineering Hung Hom, Kowloon, Hong Kong	<a href="http://www.cse.polyu.edu.hk">http://www.cse.polyu.edu.hk</a> Tel: (852) 2766 6053 Fax: (852) 2334 6389 Email: <a href="mailto:cealice@polyu.edu.hk">cealice@polyu.edu.hk</a>
<b>Hong Kong Polytechnic University</b> Department of Civil and Structural Engineering Low-Waste Building Technologies & Practices Hung Hom, Kowloon, Hong Kong	<a href="http://www.cse.polyu.edu.hk/~cecspoon/lwbt/index.html">http://www.cse.polyu.edu.hk/~cecspoon/lwbt/index.html</a> Tel: (852) 2766 6024 Fax: (852) 2334 6389 Email: <a href="mailto:cecspoon@polyu.edu.hk">cecspoon@polyu.edu.hk</a>
<b>Hong Kong Polytechnic University</b> Department of Building Services Engineering Hung Hom, Kowloon, Hong Kong	<a href="http://www.bse.polyu.edu.hk/">http://www.bse.polyu.edu.hk/</a> Tel: (852) 2766 5850 Fax: (852) 2774 6146 Email: <a href="mailto:becarrie@polyu.edu.hk">becarrie@polyu.edu.hk</a>
<b>Hong Kong Polytechnic University</b> Department of Land Surveying and Geo-Informatics Room HJ702, 1 Yuk Choi Road, Hung Hom, Kowloon, Hong Kong	<a href="http://www.lsgi.polyu.edu.hk/">http://www.lsgi.polyu.edu.hk/</a> Tel: (852) 2766 5968 Fax: (852) 2330 2994 Email: <a href="mailto:lsdept@polyu.edu.hk">lsdept@polyu.edu.hk</a>
<b>Hong Kong Polytechnic University</b> Department of Building and Real Estate TU541, Core T, Hung Hom, Kowloon, Hong Kong	<a href="http://www.bre.polyu.edu.hk/">http://www.bre.polyu.edu.hk/</a> Tel: (852) 2766 5807 Fax: (852) 2764 5131 Email: <a href="mailto:bspromo@inet.polyu.edu.hk">bspromo@inet.polyu.edu.hk</a>
<b>Hong Kong University of Science and Technology</b> Department of Chemical & Biomolecular Engineering Clear Water Bay, Kowloon, Hong Kong	<a href="http://www.ceng.ust.hk">http://www.ceng.ust.hk</a> Tel: (852) 2358 7130 Fax : (852) 2358 0054 E-mail: <a href="mailto:cbme@ust.hk">cbme@ust.hk</a>

## APPENDIX F – ORGANISATIONS OFFERING SUPPORT TO CONSTRUCTION SMEs

<b>Hong Kong University of Science and Technology</b> Department of Civil & Environmental Engineering Room 3575, Main Academic Building, Clear Water Bay, Kowloon, Hong Kong	<a href="http://www.ce.ust.hk/">http://www.ce.ust.hk/</a> Tel: (852) 2358 7154 Fax: (852) 2358 1534 E-mail: <a href="mailto:civilweb@ust.hk">civilweb@ust.hk</a>
<b>University of Hong Kong</b> Department of Architecture 3/F, Knowles Building, Pokfulam Road, Hong Kong	<a href="http://www.arch.hku.hk/">http://www.arch.hku.hk/</a> Tel: (852) 2859 2133 Fax: (852) 2559 6484 E-mail: <a href="mailto:dept@arch.hku.hk">dept@arch.hku.hk</a>
<b>University of Hong Kong</b> Department of Mechanical Engineering 7/F, Haking Wong Building, Pokfulam Road, Hong Kong	<a href="http://www.hku.hk/mech/">http://www.hku.hk/mech/</a> Tel: (852) 2859 2635 Fax: (852) 2858 5415 E-mail: <a href="mailto:mech@hku.hk">mech@hku.hk</a>
<b>University of Hong Kong</b> Department of Real Estate and Construction 5/F, Knowles Building, Pokfulam Road, Hong Kong	<a href="http://rec.hku.hk/">http://rec.hku.hk/</a> Tel: (852) 2859 2128 Fax: (852) 2559 9457 E-mail: <a href="mailto:reco@hku.hk">reco@hku.hk</a>

## **APPENDIX G EPD DIRECTORY OF ENVIRONMENTAL CONSULTANTS (FULL LIST)**

Please visit EPD website at:

[http://www.epd.gov.hk/epd/english/business\\_job/business\\_opp/files/full\\_list.pdf](http://www.epd.gov.hk/epd/english/business_job/business_opp/files/full_list.pdf)