Development of a Recovery Park in Tuen Mun Area 38

Background

1. The Government announced on 11 September last year, a package of measures to promote the separation and recycling of domestic waste. One of these measures was to set up a 20 hectare Recovery Park in Tuen Mun Area 38. We plan to develop the Recovery Park in two phases, with Phase I (10 ha) targeted for occupation in 2004 and Phase II (10 ha) in 2006. The location plan of the proposed Recovery Park is shown at Annex A.

Preliminary Study

2. On 30 November 2001, the Environmental Protection Department (EPD) commissioned Scott Wilson (Hong Kong) Limited to carry out a preliminary study on the development of the Recovery Park. The scope of the study is as follows:

Task A:	Identify potential users and propose an initial composition of recycling operations in the Recovery Park.
Task B:	Study the planning, development, institutional and management arrangements of the Recovery Park.
Task C:	Carry out preliminary assessment on environmental and traffic (road and marine) issues related to the development of the Recovery Park.
Task D:	Prepare a conceptual design and a layout plan for the Recovery Park, work out a plan on infrastructural facilities and an implementation programme, and estimate the capital and future operation costs.

Progress

3. The progress of the study is as follows: :

Task A:

The Consultants have assessed the current state of the local recycling industry, international trends in waste recycling, waste volume forecasts and the Government's waste reduction targets. They have proposed an initial composition of recycling operations in the Recovery Park with an estimated total throughput of around 650,000 tonnes per year. If we could achieve this throughput, it would not only improve our environment but would also save space in the existing landfills and reduce the demand of land for new landfills. Details of the initial composition, the materials to be processed and the associated recycling operations are summarised in Annex B. This task has been completed.

Task B –

The consultants have examined different options for the development and management of the Recovery Park, including operation by either the Government or commercial corporations, joint operation by the two or operation by statutory corporations. Preliminary analysis of manpower and capital requirements, and the associated regulatory framework for each option has been made on the basis of local and overseas experiences. This task has largely been completed. Further analysis will be made to identify the most preferred option.

Task C –

The consultants have conducted preliminary environmental and traffic (road and marine) impact assessments on the proposed initial composition of recycling activities. Initial findings indicate that since Tuen Mun Area 38 has originally been designated as special industrial land, the development and operation of the Recovery Park in the area would not encounter insurmountable environmental and traffic problems. This task has largely been completed and further analysis will be carried out subsequently in a detailed impact assessment study.

Task D –

The consultants are preparing a conceptual design and a layout plan for the Recovery Park, planning ancillary infrastructures, drawing up a detailed implementation programme, and estimating the capital and operation costs. This task is still in progress.

Detailed Environmental and Traffic Impact Assessments

4. Under the Environmental Impact Assessment Ordinance, we need to examine in great depth the impacts arising from the development and operation of the Recovery Park on air quality, noise, road and marine traffic, water quality, ecology, waste management and visual aspects of the neighbouring areas. EPD has published in local newspapers on 14 May this year the project profile of the Recovery Park for public comments. The project profile has also been made available on EPD's web page. The scope of the environmental impact assessment study is being prepared by EPD.

5. After finalising the scope of the study, EPD will select the appropriate consultant through open tender to carry out detailed assessments which involve data collection and analysis for the purpose of assessing the actual impacts of the Recovery Park project. If any adverse impacts are identified, the consultant will have to recommend practicable measures to eliminate or mitigate such impacts.

6. The assessment will take about six months. It will start in November this year and will be completed by mid-2003. The environmental and traffic impact assessment report will be made available for public inspection.

Programme

7. Major activities for the development of the Recovery Park in the next few months are as follows:

Major Activities	Target Dates	Remark
Selection, through open tender, of an appropriate consultant to carry out the environmental and traffic impact assessments	July – October 2002	
Detailed environmental and traffic (road and marine) impact assessments	November 2002 – May 2003	The study will examine the impacts of the construction and operation of the Recovery Park on the air quality, noise level , road and marine traffic, water quality, waste management and visual aspects of the neighbouring areas
Completion of the study report for public inspection; consulting the Tuen Mun District Council and the Advisory Council on the Environment	June – August 2003	
Commencement of the design and construction of the Recovery Park's infrastructure.	November 2003	
Invitation of tenders from interested recyclers to operate in the Recovery Park	Early 2004	

Major Activities	Target Dates	Remark
Commencement of Occupation of the Recovery Park, Phase I	2004	
Commencement of Occupation of the Recovery Park, Phase II	2006	

Annexes

A - Location Plan of the Recovery Park

B - Proposed Initial Composition of the Recovery Park

Environment, Transport and Works Bureau
Environmental Protection Department
July 2002

Annex A

Location Plan of the Recovery Park

Annex B - Initial Composition of the Recovery Park

Material	Recovery and Recycling Operations	Phase I	Phase II
Batteries	Lead-acid Battery Processing (e.g. vehicle batteries)	–	✓
	Zinc-carbon/Alkaline Battery Processing (e.g. general household batteries)	–	✓
	Lithium Battery Processing (e.g. batteries in cameras, phones, etc.)	–	✓
	NiCd/NiMH Battery Processing (e.g. batteries in power tools, laptops, camcorders, etc.)	–	✓
	Estimated Throughput (tonnes/year)	0	900
Electronics	Cathode Ray Tube (CRT) Recovery	–	✓
	Computer/Consumer Electronics Recovery	–	✓
	White Goods Dismantling	–	✓
	Fluorescent Lamp Recovery	–	✓
	Estimated Throughput (tonnes/year)	0	10,000
Glass	Sorting	✓	✓
	Processing	✓	✓
	Re-manufacturing	–	✓
	Estimated Throughput (tonnes/year)	400	20,800
Organic Food Waste	In-vessel composting	–	✓
	Estimated Throughput (tonnes/year)	0	12,700
Ferrous Metals	Sorting	✓	✓
	Baling	✓	✓
	Processing	✓	✓
	Estimated Throughput (tonnes/year)	103,200	52,100
Non-ferrous Metals	Sorting	✓	✓
	Baling	✓	✓
	Processing	✓	✓
	Estimated Throughput (tonnes/year)	23,100	9,700

Material	**Recovery and Recycling Operations**	**Phase I**	**Phase II**
Paper	Sorting	✓	✓
	Baling	✓	✓
	Estimated Throughput (tonnes/year)	136,000	170,700
Plastics	Plastics Recovery for PET, HDPE, LDPE, etc	–	✓
	Crushing/Bailing	✓	✓
	Shredding/Cutting	✓	✓
	Melting/Pellet production	✓	✓
	Moulding/Extrusion	–	✓
	Estimated Throughput (tonnes/year)	1,700	65,100
Textiles	Sorting	–	✓
	Baling	–	✓
	Estimated Throughput (tonnes/year)	0	4,600
Rubber Tyres	Debeading	✓	✓
	Shredding	✓	✓
	Crumbing	✓	✓
	Extruding/Re-manufacturing	–	✓
	Estimated Throughput (tonnes/year)	9,600	1,900
Wood	Dismantling/Sorting	✓	✓
	Pallet Refurbishment	✓	✓
	Chipping/Bleaching	–	✓
	Plastics Wood Composite Re-manufacturing	–	✓
	Estimated Throughput (tonnes/year)	2,000	24,300
Estimated Total Throughput (tonnes/year)		276,000	372,800

Overall Estimated Total: 648,800 tonnes/year