

**INFORMATION PAPER FOR THE
LEGISLATIVE COUNCIL PANEL ON ENVIRONMENTAL AFFAIRS**

**Reduction, Re-use and Management of Waste Material
from Housing Authority's Demolition Contracts**

PURPOSE

This paper informs Members of the actions being taken on the reduction, re-use and management of waste material generated from the Housing Authority's demolition contracts.

BACKGROUND

2. The LegCo Environmental Affairs Panel discussed the disposal and management of construction and demolition (C&D) material at its meeting held on 23 July 1999. Members' concerns about the re-use of C&D material generated from the Authority's demolition projects were noted.

3. The Housing Authority aims to reduce waste, conserve resources, re-use or recycle materials in its demolition activities and to properly dispose of any resulting C&D material. It participates actively in the Waste Reduction Task Force for Construction Industry set up under the Environment and Food Bureau. The Task Force comprises representatives from Government departments, professional and academic fields. A Working Group under the Task Force is examining design methods, specifications and construction practices to reduce and better manage C&D material.

PROGRESS

4. Given that the estimated volume of C&D material to be generated from the Housing Authority's demolition projects will continue to be very large in the next five years as shown at **Annex**, the Housing Authority is improving on its waste management measures. The major measures are as follows:

(a) **On-site Sorting of C&D Material**

Under the Housing Authority's demolition contracts, C&D material becomes the property of the contractor. A requirement has been included in demolition contracts (since October 1993) for the contractor to sort C&D material to salvage useful materials for proper disposal.

(b) **Re-use/Disposal of C&D Material**

Various C&D materials are either re-used or disposed of as below –

Metals	: Sold as scrap for re-use or melt down
Timber	: Disposed of at landfill. Timber was formerly exported to the Mainland of China for re-cycling but facilities are no longer available
Concrete and Masonry Rubble	: Disposed of at public fills or landfill but a portion is broken up and used as hardcore
Reinforcement	: Sold as scrap for re-use or melt down
High Tension Cables	: Sold for re-use or melt down
Low Tension Wiring	: Disposed of at landfill

(c) **Use of Recyclable Material**

Since January 1997, rubble from demolition contracts may be processed for re-use as hardcore and back-filling material in situations where this is cost effective and practical. A factor preventing the wider re-use of this material is the lack of adequate crushing facilities in Hong Kong. Existing specifications are being reviewed to explore the wider use of rubble for road sub-base and mass filling.

(d) **Orderly Disposal of C&D Material**

To avoid illegal dumping, the Housing Authority has followed the Works Bureau's practice under the "trip-ticket system"^(Note) since July 1999. The

^(Note) The trip ticket system aims to effectively control the disposal of inert and non-inert C&D material arising from public works contracts. The trip ticket carries information on the contract and the disposal activity. The site supervisory staff checks the completed ticket before the driver presents it at the disposal facility and obtains a receipt for the contractor to submit to the contract manager to fulfil the contract requirement.

system is to ensure that truck drivers properly dispose of C&D material at the designated public filling facilities (for inert material) and landfills (for non-inert material). Feedback will be obtained from the concerned parties in due course to examine the effectiveness of the system.

CONCLUSION

5. In consultation with the Hong Kong Construction Association, Government departments and local and overseas academic institutions, the Housing Authority will continue to take a proactive approach to further reduce, reuse and recycle waste generated from demolition contracts.

Housing Department
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**WASTE MANAGEMENT -
ESTIMATED AMOUNT OF C&D MATERIAL
FROM DEMOLITION OF HOUSING AUTHORITY'S ESTATES**

	Redevelopment Date					
	1999/2000	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005
Estimated amount of inert C&D material for use at public fill *	66,500 Tonnes	382,300 Tonnes	123,600 Tonnes	146,900 Tonnes	92,400 Tonnes	89,000 Tonnes
Estimated amount of Non-inert C&D material for disposal at land fill	6,000 Tonnes	34,400 Tonnes	11,100 Tonnes	13,200 Tonnes	8,300 Tonnes	8,000 Tonnes

Notes :

1. Figures are derived from quantities estimated from programmed Housing Authority's demolition contracts.
2. * Assuming that public filling sites are available.