

**The Hong Kong Construction Association
Submission to LegCo Panel on Environmental Affairs
Managing Construction and Demolition Material Disposal**

1 Public Fill Areas and Sorting Plants

- 1.1 The best disposal place of construction and demolition material (C&DM), of which more than 80% is inert, is at public fill areas. This was the main recommendation of HKCA for government in 1993 after it received the research report that it had commissioned the HK Polytechnic University to do. However, this C&DM disposal method is effective only if there are many suitably located public fill areas and there never is. Today, there is still a lacking of public fill areas. The number is, at most of the time, two and they are located at faraway places.
- 1.2 The disposal place for non-inert C&DM is landfill. Public fill and landfill locations must be carefully planned to attract the appropriate materials going into the right filling areas. Today public fill areas or barging points are not close-by landfills to attract public fill materials.
- 1.3 Some C&DM has to be sorted, taking away the decomposable substance, before it is suitable for disposal at public fill areas. However, the sorting operation can not be done at most construction sites of Hong Kong because of space and time limitations. The environmental problems brought about by the operations to the neighbourhood is also huge. The second recommendation of HKCA back in 1993 for government was to set up central C&DM sorting plants. Finer sorting is not recommended by HKCA because the costs would be so great making it financially not justifiable.
- 1.4 The HKCA still believes that central C&DM sorting plants, disposal at public fill and landfill areas are three effective solutions for the C&DM disposal problem. It is glad that government has now accepted the three recommendations. It urges government to implement the solutions effectively.
- 1.5 With these three solutions government and the industry can take further actions to implement the C&DM disposal problem more effectively. HKCA's recommendations are given below:

2 Further Recommendations

- 2.1 Using Marine Transport for Public Fill - Transportation of public fill by marine vessels to public fill areas can reduce heavy lorry traffic on the roads. Barging points set up at more locations where there are no close-by public filling areas will facilitate disposal by this method, diverting C&DM from the landfills and reducing chaotic traffic problems. This would make a big reduction of C&DM waste.
- 2.2 Waste Disposal Plan - Project planning should include a waste disposal plan. Criteria and conditions for C&DM disposal should be provided and clearly stated in the contract for implementation.

- 2.3 **Plan for On-site Sorting** - On-site sorting operation should be planned before a project begins. The developer is to allow working areas and allow time in the contract for the contractor to do the sorting operation.
- 2.4 **Design Professionals to "Design Out" Waste** - Design, choice of building materials and construction method have effects on the amount and characteristic of C&DM generated during the construction process. Changing or improving these processes will facilitate recycling, reusing and reduction of C&DM. Design professionals, who control these three processes, are responsible for making the decisions. They can involve contractors in making the choice of building materials and construction methods. Similarly, dredged mud and oversized blocks and boulders should be carefully planned for disposal.
- 2.5 **Pay for Proper C&DM Disposal** - Similar to the "Pay-for-Safety" Scheme of Works Bureau government contracts, both Public Works Programme and Housing contracts, can pay contractors for implementing C&DM sorting and disposal plan effectively.
- 2.6 **Improve Waste Management System of Contractors** - The "Pay for C&DM Disposal" and "Plan for On-site Sorting" programmes will provide incentives for contractors and allow them to carry out proper waste management on construction sites. The industry is very willing to work with government to promote C&DM management system and issue guidelines for contractors.
- 2.7 **Landfill Charging Scheme as a Part of the Overall C&DM Reduction Plan** - Landfill Charging Scheme alone can not reduce the total C&DM, nor can it divert the waste from landfills. Landfill Charging Scheme is a part of an overall C&DM reduction plan which should include the above recommendations. The charging level should not be too high as the high landfill charge will generate fly tipping and tendency to send C&DM to other fill areas. It should not be levied before an overall C&DM reduction plan is implemented. A sufficient notice period, not shorter than 18 months, should be given to the construction industry before the Landfill Charging Scheme becomes effective.
- 2.8 **Waste Minimisation** - The long term solution is waste minimisation. Waste minimisation is a huge topic as the responsibility for reduction generation of waste lies with the entire community working together in partnership. A waste reduction plan including such aspects as modification of the material specification and avoidance of over provision or over protection should be part of the waste disposal plan in paragraph 2.2. In this paper, we do not intend to explore this topic in depth.