For information **PWSCI(2000-01)34**

NOTE FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

Supplementary information on
Management of Construction and Demolition Materials

INTRODUCTION

In the light of the comments made by Members at the PWSC meeting on 8 November 2000, the Administration wishes to provide additional information on the nature of Construction and Demolition (C&D) materials.

THE ADMINISTRATION'S RESPONSE

2. Construction and demolition activities give rise to two types of materials -

(a) inert C&D materials – earth, slurry, rock, broken concrete, brick, rubble, glass and other durable materials; and

(b) C&D wastes – timber, bamboo, plastics, paper or cardboard packaging, food scraps and other wastes from the workforce and on-site activities.

3. Inert C&D materials can be reused as public fill in reclamation works and site formation. Some of the hard materials, if properly separated and processed, can be recycled as aggregates for concrete or asphalt production, or as granular materials for road sub-base or drainage pipe bedding.

4. C&D wastes are non-inert materials. As these are often mixed and contaminated, there is no demand from collectors to recover them for recycling. This residue cannot be used for construction or public filling purposes and should be treated in the same way as municipal wastes.

5. Different types of construction and demolition activities give rise to different types and proportions of inert materials and wastes. The major categories are -

(a) Site formation - these generate earth and rock, often in large quantities. Little C&D waste (apart from vegetation cleared in advance of the works) would be produced;

(b) Building construction - large quantities of wastes from materials and equipment packaging are generated. Conventional construction methods also produce large quantities of timber and bamboo wastes;

(c) Building demolition - large volumes of broken concrete, brick, tiling, glass and other inert materials are produced. Steel and aluminium materials are also produced and are already used for recycling. Little waste is produced; and

(d) Refurbishment - a mixture of inert materials and waste is produced. Individual projects produce relatively small volumes, but overall, the large number of such activities contributes to large amounts of both inert materials and waste.

6. Based on today's practices, the composition of all C&D materials produced during construction and demolition activities is as follows -

(a) earth, rock and slurry that can be reused as public fill in reclamation or site formation works - 59%;

(b) hard materials which, with appropriate sorting and processing, could be recycled for use as aggregates in concrete or asphalt production, or as granular materials in road sub-base and drainage pipe bedding - 25%; and

(c) wastes that should be treated as municipal waste - 16%.

7. These figures are a breakdown of the overall total volume of C&D materials created by all construction and demolition activities combined at the present time. They do not represent the types of materials that will be produced at any one particular site. While Government would like to reuse or recycle all inert materials in the most suitable manner, such as recycling all the 25% of hard materials currently produced, the above figures do not represent a static target at which Government is aiming.

8. The Government's strategy for the management of C&D materials is -

(a) to develop practices in the private and public sectors that will avoid and minimize the production of both inert materials and wastes;

(b) to develop systems and facilities that will effectively separate inert materials from wastes so that only the latter is taken into the municipal waste treatment stream;

(c) to develop systems and facilities that will encourage the recycling of all suitable materials, where it is economic to do so;

(d) to ensure that there are sufficient outlets to receive earth and other inert materials that cannot be recycled; and

(e) to introduce landfill charges to provide an economic incentive for waste producers to reduce C&D materials that require disposal at landfills.

Environment and Food Bureau
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