

#### 4. CONSTRUCTION AND DEMOLITION WASTE REDUCTION

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##### PURPOSE OF REPORT

1. This report reviews progress in identifying opportunities to reduce construction and demolition (C & D) waste.

##### EXECUTIVE SUMMARY

2. Through the Sustainable Management Fund the Ministry for the Environment has sponsored a two-year national C & D waste reduction project. The project will be completed at the end of this financial year. The project has focused on three areas within New Zealand: Auckland, Hamilton/Waikato, and Christchurch/Canterbury. The project identified seven industry sectors, including local government, designers, builders, and demolition firms.
3. In addition to the national C & D project, Christchurch City Council has funded a project to champion the concept of 'maximising minimisation' in the C & D sector through a process of partnership between the Council and the C & D industry.

##### BACKGROUND

4. Waste from construction and demolition projects has been identified as a key waste stream in the New Zealand Waste Strategy (Ministry for the Environment, 2002). Nationwide, C & D waste contributes around 17% of waste to landfills and the majority of waste to privately owned cleanfills in the country. The Ministry for the Environment, through its Sustainable Management Fund, has sponsored a national construction and demolition waste minimisation project. Major sponsors of the project include:

- § North Shore City Council
- § Hamilton City Council
- § Christchurch City Council
- § Building Research Association of New Zealand (BRANZ)
- § Recycling Operators of New Zealand

Project support has also been provided by Environment Waikato, Rodney District Council, Auckland City Council, Manukau City Council, Waitakere City Council and Winstone Wallboards.

5. Christchurch City Council (CCC) has undertaken a project called 'maximising minimisation' that seeks to identify opportunities for reuse and recycling of materials taken to cleanfills within the city. As stipulated in the Cleanfill Licensing Bylaw, only natural hardfill (eg uncontaminated soil, rocks, and other inert inorganic natural material) and construction and demolition materials (eg asphalt, concrete, gib board, brick, tiles) are permitted at cleanfills.

##### NATIONAL C & D WASTE REDUCTION PROJECT

6. The national C & D waste reduction project aims to provide clear guidelines, tools and education resources to assist sector groups in achieving the New Zealand Waste Strategy's targets. The project began in December 2003 and will end 30 June 2005 and has targeted the following industry sectors:

- § Architects and designers
- § Engineers
- § Developers and builders
- § Sub-contractors
- § Product suppliers
- § Demolition firms
- § Home renovators
- § C & D recycling operators
- § Local and regional government

7. Elements of the national C & D waste reduction project include:

- § An assessment of existing markets for recycled and reusable materials from construction and demolition waste and the development of regional market development strategies for Auckland, Waikato and Canterbury;
- § Good management practice guidelines for the C & D industry sectors as well as C & D waste materials-based guides (including collection, sorting, handling and storage of construction and demolition materials);
- § A review of current legislative tools available to local and regional government to regulate C & D waste;
- § A verification programme for the chain of custody and processing of construction and demolition materials within the resource recovery industry; and
- § A website as a C & D waste reduction information portal for industry, local government and

12. The project has used an existing “brand” and web site, the Resource Efficiency in the Building and Related Industries (REBRI) web site ([www.rebri.org.nz](http://www.rebri.org.nz)). Draft documents are posted to the web site for public comment and final versions of each project element are available to the public.
13. The project has been funded to conduct workshops for those in local government in the waste management, procurement, project engineering, building consents, and related areas. Workshops will be held in Auckland, Hamilton and Christchurch in June. The workshops will review the results of the market assessment and market development strategy in addition to a review of the regulatory tools for influencing C & D waste minimisation. The Christchurch workshop will be held on 21 June 2005.
14. During the course of the project there has been considerable consultation and outreach to the C & D sectors. A notable shortcoming of the project is the task of promoting the tools developed by the project to the C & D industry sectors, other than local government. Originally scoped as a task to be conducted in year three of the project, the task was largely eliminated when the project was funded as a two-year project. It is suggested that this outreach and education task be undertaken in the Canterbury region. Activities for the task would include communication via articles in C & D sector trade publications, such as “Roof Shout” as well as face-to-face communication through meetings, workshops and conferences held by and for C & D industry sectors. It is recommended that the Subcommittee allocate funding in the 2005/06 financial year for this task using the materials developed by the national C & D waste reduction project.

#### **CCC ‘MAXIMISING MINIMISATION’ PROJECT FOR C & D**

15. Following the successful introduction of New Zealand’s first Cleanfill Licensing Bylaw on 1 March 2004 in Christchurch, the need was identified for the Council to continue playing an active role in facilitating the diversion of materials away from cleanfill disposal and a consultant was employed for the 2004/05 financial year to act as a commercially neutral researcher/adviser/facilitator with the following outcomes:

- § Analyses and monitoring of the cleanfill material data;
- § Outline proposals to minimise waste, where practical, in specific activity areas;
- § Provision of collated data to interested industry sector groups;
- § Provision of outline research/information to interested parties;
- § Facilitated meetings and feedback between CCC and cleanfill operators;
- § Facilitated meetings and feedback between CCC and C & D industry and its associations;
- § Facilitation of potential projects between companies/organisations involved in waste minimisation and recycling;
- § Assistance to CCC infrastructural asset management units with respect to C & D waste minimisation; and
- § Project coordination with Target Zero, Recovered Materials Foundation, national C & D project, ECan, surrounding local authorities and Canterbury Waste Subcommittee.

The achieved outcomes of this project will be evaluated in July 2005 in order to determine whether to continue with the project for an additional year. The cost of this project to Christchurch City Council was \$14,000.

#### **SUMMARY**

16. Local and regional governments play a critical role in reducing the volume of C & D waste disposed to landfills. The national C & D waste reduction project and the CCC Cleanfill Recycling Project have identified, strategies, tools and actions that local and regional councils can take to encourage C & D waste materials reuse and recycling. A crucial next step will be for councils to further develop these strategies, tools and actions.

## **STAFF RECOMMENDATIONS**

It is recommended that the Canterbury Waste Subcommittee:

- (a) Support the 21 June 2005 C & D workshop for local and regional government by encouraging waste management, procurement, project engineering, and building consents staff from member councils to attend.
- (b) Provide funding in the 2005/06 financial year for C & D industry training and outreach using the materials developed by the national C & D waste reduction project. Details of the scope of the project will be provided by staff at the next Subcommittee meeting.
- (c) Note that the additional issues identified in paragraph 9 will be developed further following the workshop in June 2005.