

5. REGIONAL HAZARDOUS WASTE UPDATE

Officer responsible City Water and Waste Manager	Author Don Young (Waimakariri District Council), DDI: 03 313 6136
--	---

The purpose of this report is to provide feedback on two pilots for the collection of agricultural hazardous waste and to recommend that each territorial local authority develop a programme to contribute to a regionally co-ordinated domestic and rural hazardous waste collection.

BACKGROUND

On 20 February 2003, the Canterbury Hazardous Waste Working Party received a report produced by Tonkin and Taylor Ltd outlining a Regional Hazardous Waste Collection Strategy. The report contains data on two pilot hazardous waste collection trials, one agrichemical (Waimate), the other domestic (Waimakariri), that were undertaken at the request of the Working Party. A copy of the report is attached.

The Working Party recommended the following:

- (a) *That the Tonkin and Taylor report on the Regional Collection of Hazardous Waste be received.*
- (b) *That the Working Party recommend to Environment Canterbury that it allocate up to \$83,000 to contribute towards the implementation of a regionally co-ordinated domestic and rural hazardous waste disposal programme commencing in July 2003 for a period of 10 years, and that subject to annual review, a similar level of funding be allocated for each year of the 10 year programme.*
- (c) *That the Working Party recommend to the Canterbury Waste Subcommittee that each participating Council develop a programme to contribute to a regionally co-ordinated domestic and rural hazardous waste collection for the financial year commencing July 2003.*
- (d) *That the Working Party recommend to the Canterbury Waste Subcommittee that the Tonkin and Taylor report on the Regional Collection of Hazardous Waste and the reports from Waimate and Waimakariri District Councils be received and referred on to all constituent councils.*

The two pilot trials indicated that there is a need and a desire within the community for the collection of domestic and rural hazardous wastes. The high response rates (3.4% and 30.0%, Waimakariri (Rangiora) and Waimate respectively) relative to collections undertaken elsewhere¹ within New Zealand are good indications of this. Copies of the collection reports are attached.

The Waimate agrichemical collection indicated that there are substantial volumes of agrichemicals stored on rural properties. The chemicals were shown to be stored in various conditions some being very poor and potentially posing a risk to the environment and the health of the farm occupants.

The domestic collections undertaken within the Waimakariri District indicated that, as with the Waimate collection, the urban community has also been storing hazardous wastes on individual properties for significant periods. Again, over time the containers in which the chemicals are stored are degrading until they no longer prevent the hazardous waste from contaminating the storage areas. In domestic situations, these storage areas are typically, laundries, garages and garden sheds. The occupants often frequent these areas and therefore there is a significant risk of exposure to the hazardous waste.

The Canterbury public has been prepared to store hazardous wastes for long periods as there have been limited or no available disposal options provided by Canterbury councils. However, as time passes the quality of the storage deteriorates. Containers will corrode and the chemicals contained will be exposed to the environment. Such a situation could lead to the contamination of property, groundwater and surface water and potentially affect the health of the occupiers. A co-ordinated regional collection of hazardous wastes would provide the community with access to an appropriate disposal route.

¹ Domestic collections - 0.7% Auckland (Hazmobile) and 2% Taranaki
Rural collection - 6% Wellington

Some of the key advantages and disadvantages of a regionally co-ordinated local authority funded domestic and agricultural hazardous waste collection and management programme are summarised below:

Advantages	
1.	Would achieve integrated management and is consistent with functions and the vision and objectives of the Canterbury Hazardous Waste Management Strategy.
2.	Would implements Environment Canterbury's Regional Policy Statement's Chapter 17.2 Objective 1 ² and Policy 2 ³ .
3.	A regionally co-ordinated programme would achieve economies of scale that would not be available if undertaken on an individual district basis.
4.	A programme undertaken throughout the region would reduce the risk of the cross boundary movement of hazardous waste - a guiding principal of the CHWMS (2.3.1).
5.	The councils would receive positive public feedback for providing a service which the pilots have indicated, is in great demand.
6.	The risks to the environment from the inappropriate storage and/or disposal of hazardous wastes would be significantly reduced.
7.	The number and size of stockpiles of hazardous wastes within the community would be reduced and therefore the likelihood of creating newly contaminated properties is also reduced - an objective of the CHWMS (2.2)
8.	Would assist the councils to meet their obligations under landfill waste acceptance criteria to facilitate options to aid the separation of hazardous waste from the municipal waste stream.
9.	Would reduce the risks of uncontrolled exposure to hazardous wastes to council staff through the kerbside "black bag" collection system (MWS).
10.	Would reduce the risks to council's infrastructure such as sewage treatment plants and landfills from inappropriate disposal
11.	The New Zealand Waste Strategy has a target that by December 2010 New Zealand will have met their obligations under the Stockholm Convention to collect and destroy PCBs and organochlorine pesticide wastes. The proposed programme would enable Canterbury to meet this target.

Disadvantages	
1.	There are significant cost implications in providing such a service. These include disposal costs and for some councils the provision of new infrastructure. There would be a resource cost for co-ordination. However, that would be less with a regionally co-ordinated programme than if councils proceeded independently.
2.	The agrichemical collection may be seen as unfairly benefiting the farming community over other hazardous waste producing industries.
3.	There may be conflict with some council's user pays policies if funding is provided through the General Rate. The funding options for the collections could be left to individual councils. However, it would be beneficial if the same funding mechanism was applied throughout the region to minimise intra-regional issues.
4.	There are some environmental risks associated with the collection, transportation and centralised storage of materials previously stored on individual properties. The liabilities for these materials would once received lie with the councils.
5.	The New Zealand Waste Strategy contains a target that by 2003 local authorities will address their funding policy to ensure that full cost recovery can be achieved for all waste treatment and disposal processes.

² Prevent or mitigate the adverse effects on the environment from the storage, use, disposal and transportation of hazardous substances.

³ Promote hazardous substances management practices that prevent or mitigate adverse effects on the environment, including practices that reduce the use of hazardous substances.

WHY SHOULD THE CANTERBURY COUNCILS BE INVOLVED IN HAZARDOUS WASTE COLLECTIONS?

- There is a commitment by all councils through the Canterbury Hazardous Waste Management Strategy that councils should “Ensure, as far as reasonable, that suitable disposal facilities are available in appropriate locations, for the disposal of hazardous waste” (CHWMS 9.3).
- There is a significant risk posed to human health and the environment due to the stockpiles of hazardous wastes within the community.
- There is a need to provide a non-regulatory solution to the threat created by these stockpiles that is cost effective, positive and achieves a quantifiable improvement in the environment.
- A regionally co-ordinated programme will achieve economies of scale that would not be obtained if disposal options were provided on an individual council basis.
- If hazardous waste disposal options are not provided to the public they will consider their options are limited to either long-term storage or inappropriate disposal. Indefinite storage poses inherent risks to people and property if the containment is inadequate or degrades.
- Inappropriate disposal for domestic hazardous wastes could either be through the municipal waste system (MSW), the sewerage system or directly to the environment. Disposal to the MWS can pose health and safety issues for council staff or contractors operating transfer stations and /or landfills. Councils have a responsibility under the Health and Safety in Employment Act 1992 to take all practicable steps to provide a safe working environment and ensure staff and/or contractors are not exposed to hazards.
- Disposal of hazardous waste to a sewage treatment plant or landfill could affect the quality of their discharges and may lead to non-compliance with resource consent conditions.
- Inappropriate disposal of rural hazardous waste could contaminate groundwater through disposal to farm and/or offal pits or rivers and streams through surface water runoff.
- The pilot trials have raised awareness of hazardous waste issues within the region. It is important to utilise the momentum established by the pilots to maximise the effectiveness of any future collection programme.

WHAT ARE THE FUNCTIONS OF TERRITORIAL AUTHORITIES THAT ARE RELEVANT TO HAZARDOUS WASTE COLLECTIONS?

The functions of regional and territorial authorities for the provision of hazardous waste collections are derived from the following legislation and policy documents:

1. The Resource Management Act 1991
2. The Local Government Act 1974 and 2002
3. The Local Government Amendment Act (No 4) 1996
4. The Hazardous Substances and New Organisms Act 1996
5. The Health Act 1956
6. Health and Safety in Employment Act 1992
7. Canterbury Hazardous Waste Management Strategy (May 2001)

TERRITORIAL AUTHORITIES' FUNCTIONS

- Enforcement of the Hazardous Substances and New Organisms Act 1996
- Preparation of Waste Management Plans (LGAA (No 4) 1996)
- Provision of waste disposal services for their communities (LGA and Health Act)
- Control of land use for the prevention or mitigation of adverse effects from the disposal of hazardous substances (including regulatory/non regulatory methods in District Plans)
- Landfill waste acceptance criteria that prohibits the landfilling of hazardous waste
- Where necessary and appropriate ensure the collection and storage of hazardous waste for reuse, recycling, recovery and/or disposal (CHWMS 4.16)
- Ensure, as far as reasonable, that suitable disposal facilities are available in appropriate locations, for the disposal of hazardous waste (CHWMS 9.3)

Given the wide range of responsibilities and the issues surrounding the current lack of disposal options for the public, there is benefit in combining resources throughout the region to provide a hazardous waste disposal option to the community.

COMBINED REGIONALLY CO-ORDINATED DISPOSAL PROGRAMME

Canterbury councils would combine resources to undertake a co-ordinated approach throughout the region.

Continuation of the status quo, where the majority of Canterbury councils would continue to not provide hazardous waste disposal options for their community, would be inconsistent with the Vision, Objectives and Strategies of the Canterbury Hazardous Waste Management Strategy (May 2001).

PREFERRED OPTION

The two pilots have indicated a need and significant support from the community for the provision by the councils of hazardous waste disposal options. Given the potential risks posed to the community and the environment from the inappropriate management of rural and domestic hazardous wastes, there is a strong argument in favour of the councils facilitating a regionally co-ordinated disposal option as outlined within the attached Tonkin and Taylor (T&T) report.

The costs indicated within the T&T report are based on collections undertaken in Canterbury and elsewhere within New Zealand. The collection and disposal costs are based on estimates provided to the Staff Group by Tredi NZ Ltd. The staff consider that the estimates provided within the T&T report are at the upper end of the range and if they are compared to those figures obtained from the trials, as shown below, the actual costs are at the mid to bottom end of the range.

Table 1.0 Comparison of estimated costs to actual costs for Waimakariri domestic hazardous waste collection

District	No. of HazMobile Days	Annual Collection Costs	Annual Disposal Costs	Total Annual Costs
Waimakariri – T&T estimated	2	\$30,700	\$1,380-\$44,640	\$32,080-\$75,340
Waimakariri – actual	2	\$11,394	\$18,346	\$29,740

Table 2.0 Comparison of estimated costs to actual costs for Waimate agricultural waste collection

District	No. of Collection Days	Annual Collection Costs	Annual Disposal Costs	Total Annual Costs
Waimate – T&T estimated	5	\$23,300	\$11,550-\$25,310 (\$16-170-\$35,430)	\$34,850-\$48,610 (\$39,470-\$58,730)
Waimate – actual	5	\$12,354	\$31,996	\$44,350

The pilot collections have shown that there are substantial stockpiles of hazardous wastes present within the community. The costs of attempting to dispose of all the hazardous waste within a single year would be prohibitive. It is for that reason that the staff group propose that the proposed hazardous waste disposal programme be undertaken over a 10 year period, to be formally reviewed after the first three years.

Further to this all councils should contribute an appropriate level of staff resourcing towards the co-ordination of the programme.

The Regional Hazardous Waste Working Party recommends to the Canterbury Waste Subcommittee and Environment Canterbury that each participating council contribute towards a regionally co-ordinated domestic and rural hazardous waste collection for the financial year commencing July 2003.

SUMMARY

The report provides substantial background for consideration of future collection options for hazardous waste and provides feedback on two recent hazardous waste pilots in Canterbury, with a recommendation to Subcommittee members to consider further funding of regionally coordinated hazardous waste collections.

Staff

- Recommendation:**
1. That the Canterbury Waste Subcommittee receive the Tonkin and Taylor report and the reports on the Waimate and Waimakariri pilot collections and refer them on to all constituent councils.
 2. That the Canterbury Waste Subcommittee recommend that each constituent council develop a programme to contribute (according to their means) to a regionally co-ordinated domestic and rural hazardous waste collection for the financial year commencing July 2003.

Chairman's

Recommendation: That the above recommendation be adopted.