



ZEROWASTE
NEW ZEALAND TRUST

JP

Encouraging and motivating all sectors of New Zealand society to work towards a target of **Zero Waste**.

Up-date July, 2006

Welcome to our latest newsletter.

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1. How well is your Council doing? Bench-marking on waste-minimisation announced.

The Zero Waste NZ Trust announces "**Milestones on the Zero Waste Journey**", a bench-marking scheme designed for New Zealand Local Authorities. This programme was launched at the Local Government NZ Conference, held this week in Wellington. By joining up to the programme, Councils get the chance to see how their waste minimisation compares with other Councils across New Zealand. "How much progress are we really making in our Zero Waste journey?" "Have we attained 60% recycling of our greenwastes?" "Are we actually doing as well, or even better than those Councils that make such a grand song and dance about their achievements?"

Using many of the goals of the 2002 New Zealand Waste Strategy, the programme allows Councils to check off their achievements, and score their place on a staged journey from ZW5 (Zero Waste 5), through ZW1, to the Zero Waste Supreme Award for the top achievers! "This is a great new way to check on our Zero Waste progress, and to compare ourselves with the achievements of other Councils throughout New Zealand", says Parul Sood, Waste Minimisation Officer for the Rodney District Council.

We urge all Councils to join up to "Zero Waste Benchmarking for Councils".

Contact Jo Knight, CEO, Zero Waste NZ Trust. Ph: 09 4860736, or see www.zerowaste.co.nz

2. Waste Minimisation (Solids) Bill

N.B. Submissions now close Friday, 1st September, 2006.

This Bill proposes a series of measures for New Zealanders to get to grips with the growing mountains of rubbish we create every year. Amongst other things, it proposes a Waste Authority - a body with overall responsibility for waste control; it proposes a Waste Levy - to discourage indiscriminate disposal of waste to landfill; it proposes the use of the waste levies to build up the recycling/reuse infrastructure; and it proposes Extended Producer Responsibility.

Details of the Bill can be found at www.greens.org.nz/

NZ needs to do better with its wastes. We urge you to make a submission based on your own experiences, expressing your wishes and your vision, and to give your written support to the Bill. Submissions can be made by any individual or organisation. The basic requirements for a submission are detailed below.

For a more detailed guideline, you can go to: www.clerk.parliament.govt.nz/

WHY SUBMIT?

It is really important that you put in a submission. We have been told that the Select Committee is expecting only about 30-40 submissions. Let's make that 500 and get the message through! We also understand that a number of Councils and industries will be doing their best to kill this Bill, on the grounds that it is "unfair", "too costly", "too bureaucratic" etc. Yes, there will be a price to pay: currently, the price being paid is evidenced in environmental degradation; under this new Bill, we will all have to pay a little more to ensure that we have a sustainable environment. There really is no option: we are all dependent on a "Clean, Green New Zealand"!

If we don't get this Bill through now in some form, then it is most unlikely that we will get anything else in its place for quite some time. This is a chance to make some progress in the NZ waste scene.

SUBMISSION REQUIREMENTS

1. Address your submission to the Local Government and Environment Committee, on the Waste Management (Solids) Bill.
2. Provide your or your organisation's name and address. State if you wish to be heard, in which case you will need to provide the name and contact details for that person(s).
3. Send 2 copies of your submission to:

Local Government and Environment Committee Secretariat
Bowen House
Parliament Buildings
Wellington
Attn: Ms Julie Jordan

For enquiries, Julie can be contacted on Ph; 04 471 9687, or julie.jordan@parliament.govt.nz

Here is a summary of our submission; please feel free to use any or all of the suggestions when writing your submission.

Summary of Zero Waste New Zealand Submission (see this online at www.zerowaste.co.nz)

- i. The Zero Waste N Z Trust strongly supports the intent of the Waste Minimisation (Solids) Bill.
- ii. The Trust strongly supports the creation of a Waste Minimisation Authority.
- iii. The Trust strongly supports the introduction of a Waste Levy.
- iv. The Trust recommends that for those Councils that operate their own landfills, consideration is given to special arrangements while equity is established. Councils who have achieved high recycling rates and control their residual waste stream must not be disadvantaged by the levy.
- v. The Trust does not see the need to create an additional 'Waste Control Authority'; all the functions can rest with the Territorial Authorities.
- vi. It is unnecessary to have a general requirement for organisational Waste Minimisation Plans. We recommend instead that the provision of a waste plan be a condition of all applications for grants from the contestable funds.
- vii. After the commencement of the Act, there will be many new procedures in relation to waste disposal, which will result in a requirement for monitoring. In addition, with the levy adding to the cost of disposal, it is likely that there will be an increase in illegal dumping. As a consequence there will be a need for more enforcement, and adequate provision must be made for this.
- viii. This Trust believes that it is time to consider a new body, an Environmental Protection

- Agency, whose role would be environmental enforcement at national and local levels.
- ix. We recommend that the levy funds be apportioned 30% to Local Authorities, and 70% to the Waste Authority most of which should be for contestable funding. This funding should be available for waste minimisation activities carried out by community groups, NGOs, private companies and Councils. It is important that grants are available for capital works.
 - x. The Trust recommends the Waste Minimisation Authority be set up as soon as possible, with permanent direct government funding to guarantee it the base-line funding necessary.
 - xi. The Trust also recommends that provision for the "prohibition on disposal of materials" proceeds and is enforced. This could selectively and sequentially ban the disposal to landfill of products which are recyclable and/ or toxic.
 - xii. The Trust recommends the staged introduction of EPR, with a strong recommendation that provision for the management of "E-waste" be given a high priority.
 - xiii. The Trust recommends that specific provision be made for CDL (Container Deposit Legislation), and that the introduction of a modern CDL system (including use of reverse vending machines) be given a high priority. This is one provision which moves the responsibility to the user.
 - xiv. The Trust observes that the Bill is generally too detailed, and much of the detail should be within Regulations for easier amendment and up-dating. Accordingly, the Trust requests an urgent re-write of this Bill.

3. Zero Waste National Week October 2006.

For eight years, this Trust has promoted the possibilities for Zero Waste. We have seen the Government adopt the New Zealand Waste Strategy 2002, 71% of local Councils adopt 'Zero Waste', and dozens of local community groups have become involved in waste minimisation through their Resource Recycling Centres. There is much to celebrate! Well known examples include Innovative Waste Kaikoura (60% reduction in waste to landfill) and the Opotiki District Council (in excess of 90% waste reduction), along with many other groups doing waste minimisation throughout New Zealand, from Kaitaia in the far North, to Raglan, to Wanaka and Southland.

To celebrate and mark this achievement, Zero Waste Trust has announced that October 9 -15th is to be "National Zero Waste Week". Prizes and Awards will be made to mark the occasion. We hope you will celebrate the occasion in your local community, at your work-place, where-ever you are. How about organising a local event to mark the achievements of your activities? We already know of some announcements planned for the week - let us know what you can do, and if we could help!

Let's get it together, and enjoy and celebrate our achievements.

4. Become a Zero Waste Supporter!

Did you know that we now have a great new scheme for Zero Waste supporters?

In recent months, we've had numerous requests from our web-site visitors and newsletter readers, wanting to join in with the cool Zero Waste crowd! So we've decided to announce the Zero Waste Supporters Scheme.

We need your support!!!

For only \$50 you can become a Zero Waste Supporter. Support the Trust, and we'll give you:

- 1 x dollop of "mana" - a warm fuzzy for supporting the environment
- 1 x Zero Waste 'Staple-less stapler' - to use fewer of the earth's resources!
- 1 x Zero Waste long-lasting, stylish black, reuseable shopping bag, and
- 1 x Zero Waste lapel badge - a sign to promote recycling!

Roll up! Join up! The first 100 Supporters will go into the draw for a Violetta solar-powered battery charger package!

Go to www.violetta.com/ - and look for Violetta 'solargear' to see this product.

Please forward your name and contact details, together with your cheque for \$50, payable

to the "Zero Waste NZ Trust", PO Box 33 1695, Takapuna, Auckland, NZ.



Violetta recharger



Stapleless Stapler



Zero Waste re-useable Shopping Bag

5. More on mercury

Since our last write-up on the hazards of mercury, I have been reminded that mercury use is even more widespread in its use than I had imagined. Here's a new list of mercury-containing items:

- fluorescent light bulbs - the regular 5' and 6' tubes often used in shops and offices
- the new, energy-saving compact light bulb - great, but still a fluorescent bulb with mercury
- FL and HID lamps, used in high powered projectors (for screening your DVDs, perhaps)
- mercury switches for boot lighting (when the boot lid door opens)
- antilock braking systems
- air bag switches
- active-ride control switches
- some thermometers
- amalgam for tooth fillings
- alkaline and button batteries - the single largest source of mercury in our household rubbish

Exposure to mercury compounds can cause serious human health and ecological effects. When mercury-containing products become broken and are exposed to moisture from rain or groundwater, they leak mercury into the environment. Once deposited, micro-organisms can change the mercury into methylmercury, a highly toxic and volatile compound that can move through the air, soil and water. It builds up in seafood, and in the animals and people that eat the seafood. Even in remote areas, animals and people are being found to have elevated mercury levels. Here in New Zealand, we are doing very little to address this issue of mercury pollution, apart from warning pregnant women that they should avoid eating some species of fish. The problem is much greater than this, as very few of the items on the above list are properly handled for disposal. The vast majority of these items are indiscriminately handled and casually disposed of into landfill, with breakages and contamination prevalent during all stages of the pathway from the home, shop or factory, to the landfill.

Officially, the dangers of mercury are acknowledged, but actual practice seems to be variable.

Waste Acceptance Criteria for Class A Land Fills - MfE

Lamps and other mercury-containing wastes are defined as hazardous wastes (NZ Waste List) and the disposal of mercury to landfill is tightly regulated in terms of current Landfill Waste Acceptance Criteria (LWAC).

Spent mercury-containing lamps are considered hazardous when the concentration of mercury exceeds 0.2mg/l (in a prescribed solubility test known as the TCLP). Most lamps (weighing 200-300 g) contain

between 0.3 - 20 mg mercury, which means that every 4 - 10 lamps that are landfilled should be carefully monitored.

New Zealand Regulations

'Fluorescent lights contain mercury and cadmium. The contents of the tubes should be removed by an approved operator, prior to disposal.'

Here in New Zealand, a number of institutions take this matter seriously and dispose of their mercury wastes correctly, but the majority of used, mercury-containing products in New Zealand are disposed of in an environmentally unsound manner direct into landfill; e.g., mercury switches in motor vehicles are not removed prior to crushing.

Some Councils provide an annual or periodic hazardous waste collection. In many areas, Medichem Ltd services are available for the collection of hazardous wastes, including these mercury products. If you are uncertain as to what you should be doing, approach your local Council, and ask them how you can recycle your fluorescent tubes, your batteries etc. It is a serious issue, and more attention needs to be given to this environmentally hazardous material.

6. New glass markets

Trials are soon to begin to evaluate the costs and logistics of the opportunity to ship high quality, clear glass cullet to South Australia. For information on this, go to the Forum on our web-site: www.zerowaste.co.nz/forum
Interested parties will need to sign on to the Forum, then separately sign on to the Glass Forum after obtaining the password from our Office.

7. Zero Waste bus tour, 2006

A 4 day South Island tour, October 2006

**Are you needing to see some good, practical examples?
Want to know what others are doing?**

Then register TODAY for the Zero Waste Bus Tour 2006, which will feature:

- various means of dealing with green and putrescible wastes
- what's important for a successful Resource Recovery Centre
- what's happening with Construction & Demolition wastes
- differing kerbside collection systems
- innovative recycling initiatives

Whatever your interest - Councillor, RRC manager or waste activist, you will be fascinated to see the huge variety of waste minimisation projects that are in place right now. Each evening, tour members will mix and mingle with local Mayors, Councillors and Waste Minimisation Officers, and talk through the local issues in a relaxed social atmosphere.

Register your interest NOW!

Date: 4 days 3 nights tour in October (exact dates to be announced)

Detail: Tour starts and finishes at Christchurch. Includes 3 nights' accommodation, 4 lunches, 4 morning and afternoon teas, 3 dinners. Will visit Kaikoura, Selwyn, Ashburton, Oamaru, McKenzie and others. Cost to be available shortly.

For Registration and further information, visit our website: www.zerowaste.co.nz

8. Churchill Memorial Scholar - Lois Prior. Contacts wanted.

Lois Prior is an environmental business advisor working in the Isle of Wight, located off the south coast of the UK. She has been awarded a travelling fellowship grant from the Winston Churchill Memorial Fund, which is financing her to travel to New Zealand and Japan later this year. The aim of her trip is to gain insight and knowledge into 'environmental sustainability - motivation and practises' in other countries. From this, Lois is hoping to develop inspirational and effective training and written material for small businesses back in the UK. Lois is keen to meet practitioners in New Zealand, and would love to hear from any business or organisation, large or small, which would be prepared to show her their environmental management systems, or their process of implementation. She says she would also like to hear from any business organisation offering environmental management support. Further details are on her web site on <http://mysite.wanadoo-members.co.uk/loisiow/main.html#>, or email her at: loisprior@wight365.net

9. Churchill Memorial Scholar - Caroline Turner. Contacts wanted.

Caroline has also been awarded a Winstone Churchill Fellowship, and is planning to visit New Zealand and Australia in October this year. She wants to tour NZ and visit community organisations who are making a real difference on environmental and social agendas. She is particularly interested in community sector organisations who are working with their local authority as part of a wider zero waste strategy. In return, Caroline is happy to pass on her knowledge of the community sector and local authority waste management in the UK.

Caroline has spent the last five years working in the community waste sector in the UK. After a Masters in European Environmental Legislation and Regulation, she began working for the Leicester based charity Environ, soon leading projects such as civic amenity site management, commercial waste recycling, Community Re<Repaint, and home composting education. She is currently employed by CRNUK (Community Recycling Network UK), but seconded to Lancashire County Council, which supports a wide range of local community and voluntary organisations and social enterprises that are involved in reduce, reuse and recycling activities.

If you feel you could welcome and/or host Caroline for a few days while she is here, then it would be great if you could contact her, and help her with her arrangements and her itinerary.

Contact Caroline at: info@lancashirecrn.org.uk

10. Furniture foam recycling success

There has been real progress in recycling polystyrene foam, with the successful introduction of a used foam collection programme throughout much of New Zealand. Vita NZ, the company reprocessing this foam, advise us that there is now a steady and increasing flow of foam arriving at their Auckland and Christchurch factories, and from the interest shown, they are anticipating a considerable and helpful volume will soon be displacing a significant part of their imports. We now have a good number of depots receiving foam, but as you can see from the map on our web-site, we do need more depots, especially in the North Island. Are you collecting foam? Does your RRC accept foam? Check out our web-site for more information.

www.zerowaste.co.nz/

11. Steam sterilisation replaces incineration at the Auckland Airport

At Auckland International Airport, Medi-Chem operates a quarantined facility, where all wastes from international air flights are taken for sterilisation prior to land disposal. The complex features a brand new, computerised, 6 - pot steam sterilisation unit. Inside each pot, 2 large plastic bags, each containing about 70kgs of wastes, are exposed for a minimum of 30 minutes to a temperature exceeding 131oC - at a pressure of 2.5 bars. Imagine your pressure-cooker at home, and you'll start to get the general idea!

The steam steriliser replaces an incineration unit, which was much-criticised for discharging wastes into the air. Site Manager, Don Jordan, says it is a much better operation: "The old fired-up incinerator was better for some specialty wastes, such as for destroying anti-biotics, but we are absolutely stoked to have moved to a non-polluting steamer."

Still undergoing 'refurbishment', the unit centres on a dual-fuel boiler, usually fired-up on natural

gas but with a diesel back-up option, and an emergency diesel generator on site for use in the event of a power cut. On average, about 20 tonnes of waste are delivered each day, but Don says that the volume of waste is markedly over the summer, when the airport is busy with tourist traffic. Summer is also the time for cruise ships, and as with planes, if any food or other suspect material is to come off the ship, it will likely be quarantined and transported here to the steriliser for treatment before disposal. Also accepted here are medical and laboratory wastes, agricultural wastes such as sweepings from shipping containers, and regular shipments of locally made experimental cheeses!

In terms of their legal obligations, the permit for the old incinerator did not expire until 2009, but both the Airport Company and Medi-Chem are pleased to have the new plant. As Medi-Chem director Lincoln Falconer says, "the public are demanding higher standards, and it was time to move up a step and get this thing running .."

In Lincoln's experience, the Airport Company and the airlines, particularly Air New Zealand, are putting a lot of effort into doing the right thing environmentally, and Medi-Chem are pleased to be able to help them achieve their objectives. After some initial trials, it is planned that in the future, some of the sterilised wastes will be sorted for recycling. Sorting a mess of wet, sterilised newspapers, napkins, serviettes, seat covers and food scraps will be a real challenge! A great day at the foggy international airport! Our thanks to Lincoln and Don for kindly hosting our visit.

12. Selwyn District Council's new household waste collection service

Recognising that garden waste and food scraps made up nearly half the rubbish that was being carted to the landfill each week, Selwyn District Council, a fast-growing district of 34,200 just south of Christchurch, has come up with an innovative new system to address this issue.

Dave Hock, Solid Waste Manager for the Council, thinks this collection is the first of its type to be offered by a New Zealand Council. It shows how far this Council has come since it adopted a Zero Waste Strategy in 1999.

Back then, the District had four rubbish dumps and one "anything goes" rubbish collection. Today it has a state-of-the-art Resource Recovery Park, with composting plant, recycling depot and transfer station, and a matching three-stream waste collection system. Residual waste now goes to the high standard Kate Valley Landfill.

The latest element to be added to this system is the organic waste collection, which uses 240-L wheelie bins, collected and transferred to the Resource Recovery Park, where it is processed in a HotRot, in-vessel composting plant. The new organic collection is being introduced progressively, starting with the larger townships, including Rolleston and Lincoln, where it is being offered as a user-pays collection option. The 240-L bin costs \$195 per year.

The organic collection complements the existing rubbish collections to give Selwyn's townships a three-stream waste collection system with separate containers and collections for (1) recyclables, (2) compostables, and (3) residual waste.

This system is not funded from the general rate, but through an innovative combination of user charges that are designed to give residents flexibility and choice while encouraging them to minimise waste. The only compulsory charges are a \$20 uniform annual charge and a \$52 annual recycling charge. These are levied on all dwellings that are on collection routes (i.e. about 80% of the District's households).

The other charges are for wheelie bins (3 options available) and rubbish bag purchases (\$1 each), which are entirely optional. The three 'wheelie bin' options are the 240-L organic bin (\$195 per annum), the 240-L residual rubbish bin (\$320 per annum), and the smaller 80-L residual rubbish bin (\$95 per annum).

The widely different charges for the two different 240-L bins are to encourage households to change from the "anything goes" residual waste wheelie bin to the organic wheelie bin, and to put their residual waste into rubbish bags or the smaller 80-L waste bin. This allows householders to select the most suitable bin combination and reduce their rubbish disposal costs through recycling and composting.

"If householders take full advantage of the new options, and get into the habit of separating their recyclables and organic wastes, they will have very little residual waste to send to the landfill," said Mr Hock. "With great support from contractors Waste Management Ltd, all systems are in place, and residents are saying that it is a great scheme."

Zero Waste NZ congratulates the Mayor and Councillors of Selwyn District Council for this great, waste initiative.

13. MISCELLANEOUS

i) Aorere College - "How to make your own diesel"

Aorere College, Papatoetoe, is running a three-session night class 7-9 pm on Mondays 14, 21, 28 August, on making your own diesel. Fee \$100. Ph. the school for more information: 09 278 0347.

ii) Wastebusters Zero Waste Workshop – Ashburton

Wastebusters Canterbury will be running a Zero Waste Workshop in Ashburton on Friday 8th September, as part of their Winter Waste Fest 2006. Diary this now - a detailed programme will be available shortly. Their popular Wearable Arts Awards function will be held that evening, at the Hotel Ashburton. Contact mcwastebusters@clear.net.nz

iii) Overseas measurement of energy and resource efficiency.

Many of our electrical appliances now have an energy efficiency rating label. This is a small progressive step, and gives us the opportunity to compare appliances when shopping for a new appliance. In the UK, a radically new rating system is being introduced for homes – it's called an Energy Performance Certificate, and all homes being put up for sale will be required to have one available to potential purchasers. Houses will be rated A – G for energy efficiency and carbon emissions.

Meanwhile, in the USA, a new voluntary programme is being introduced, called WaterSense. This programme will certify products and services that meet specified water-efficiency and performance criteria. It is hoped that this will encourage the purchase of water-efficient products. There is some progress ...

iv) EPA, UPS Unveil Unique Hydraulic Hybrid Diesel Delivery Truck

Source GreenBiz.com

WASHINGTON, June 22, 2006 - The U.S. Environmental Protection Agency (EPA) has unveiled the first-ever series hydraulic hybrid diesel urban delivery vehicle, the result of a partnership between the EPA, UPS, U.S.Army, International Truck and Engine Corporation, and Eaton Corporation.

In this vehicle, a high-efficiency diesel engine is combined with a unique hydraulic propulsion system, replacing the conventional drive-train and transmission. The vehicle uses hydraulic pumps and hydraulic storage tanks to store energy, similar to what is done with electric motors and batteries in hybrid electric vehicles. Fuel economy is increased in three ways: vehicle braking energy is recovered that normally is wasted; the engine is operated more efficiently; and the engine can be shut off when stopped or decelerating.

In laboratory testing, the hydraulic hybrid diesel technology achieved a 60 - to 70% improvement in fuel economy, and more than a 40% reduction in carbon dioxide emissions, compared to a conventional UPS vehicle.

"The hydraulic hybrid technology is quite promising and we're eager to see how the vehicle performs in a real-world setting," said John Beystehner, chief operating officer of UPS. UPS will test the hydraulic hybrid for the next several months. It will be used on a city route in Detroit, making daily deliveries to homes and businesses.

The EPA estimated that when manufactured in high volume, the added costs of the hybrid components could be recouped in less than three years through lower fuel and brake maintenance costs. "The diesel hydraulic hybrid concept has the potential to offer something very special - performance and near-zero emissions with dramatic improvements in fuel economy," said Dee Kapur, International president - Truck Group.

These vehicles, used in package delivery, shuttle and transit buses, and refuse pick-up, are typically in a mode of stop-and-go operation, which is the optimal mode of operation for the diesel hydraulic hybrid. "

ZW New Zealand Trust strongly supports initiatives to increase fuel efficiency in motor vehicles and other transport forms, provided it results in less fuel used. We do not enthuse over the hybrid Hummer! A reduction in fuel use through efficiency or reduced use is number one priority, closely followed by the production of fuel from waste!

Registration for this newsletter

Should you wish to register for this newsletter, or if you would like your name to be taken off our address list, please send a message to: the.editor@zerowaste.co.nz

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