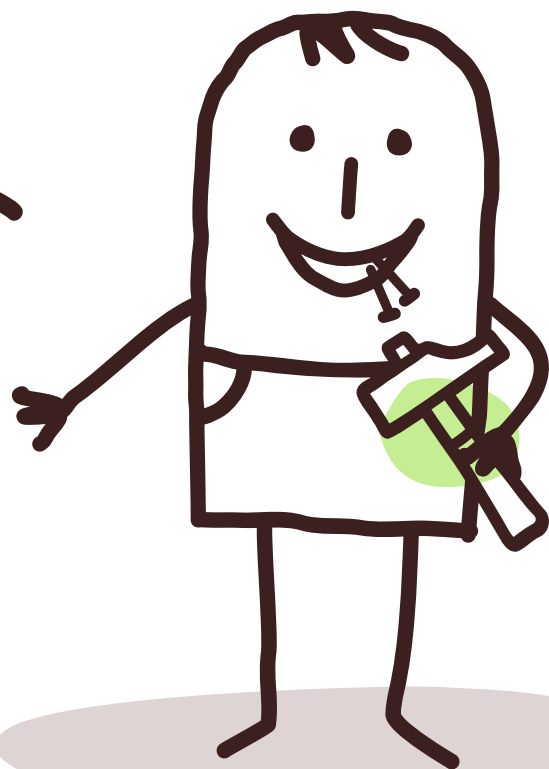


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ON THE COVER : This edition is dedicated to the people of Canterbury and their remarkable resilience.

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WasteMINZ is the authoritative voice on waste and resource recovery in New Zealand, and seeks to achieve ongoing and positive development of our industry.

WasteMINZ publishes Revolve magazine five times a year, it plays a vital role in ensuring our members are up-to-date with the latest in industry news, policy and legislative changes as well as innovations and advances.

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features

12 SHAKE, RATTLE & RECYCLE

Jeff Matthews outlines the site waste management plans for residential red zone demolitions in Canterbury.

16 THE WHOLE HOUSE REUSE PROJECT

Rekindle's Whole House Reuse Project aims to inspire the creative industry to apply innovative thinking to the diversion of reusable materials from waste.

20 TREATED TIMBER WASTE

The search for a sustainable and saleable solution for a difficult and high volume waste product.

22 BUILDING COMMUNITY SECTOR CAPACITY

Sue Coutts explains how community recyclers can deliver long term social, environmental and economic benefits for communities.

24 WASTE CHALLENGES OF A PACIFIC NATION

The island of Kiribati has challenging waste and pollution problems. Brett Way shares some of the achievements of the recent technical assistance program.

regulars

4 FROM PAUL'S DESK

5 YOUR BOARD

7 NEWS BITES

10 MINISTRY FOR THE ENVIRONMENT

27 COUNCIL NEWS

28 SECTOR GROUPS

30 EVENTS

31 GOLD + SILVER MEMBERS



FROM PAUL'S DESK

Talk to me
+64 9 476 7172

Paul Evans, CEO, WasteMINZ
paul@wasteminz.org.nz

Hi everyone and welcome to our first edition of revolve for the year. Here at WasteMINZ we've been 'head down tail up' since early January working on a number of exciting initiatives that we anticipate announcing shortly, so watch this space!

A question I'm often asked is where do we get our content ideas? In short, the stories in revolve come from your fellow WasteMINZ members – passionate peers who have got an important story to share.

Over the past two years, we have focused on increasing the editorial quality of the magazine, to ensure that it's relevant, topical and thought provoking. Of course, we can only continue to be successful with this if you keep the good stories flowing – which to your credit you have! In fact, lately we've had so many amazing articles that, as from our next edition of revolve in late April, we will have an extra four pages per issue – giving you even more content to get you thinking.

The good news with more pages is that we might now be able to include your story. So if you've got a story you'd like to share, whether it's designed to inform, inspire or challenge the status quo, then I'd like to hear from you. Please email me your ideas anytime at paul@wasteminz.org.nz.

I can't promise that we will publish every article, but we will certainly give it our full attention and factor it into our content planning. Revolve is the ideal platform to showcase your work whilst enhancing the collective knowledge of our industry. So get your thinking cap on and I look forward to hearing your thoughts.

On another note, you'll notice that this edition of revolve has a distinct Canterbury focus, with 22 February 2014 marking the third anniversary of the devastating 6.3 magnitude earthquake which so tragically killed 185 people. The Canterbury earthquakes and related aftershocks have had a fundamental impact on the region, both in the short and long term. A natural disaster such as this throws up challenges of a scale not often seen or appreciated and this is very much the case when it comes to waste. For example, more than 8,000 residential properties were earmarked for demolition with some 3,000 completed to date.

However, it's not just the sheer volume of waste which is daunting. The complexity of the waste streams and the ever present hazardous components make this an even more challenging task. As is often the case in adverse situations like this,

the people involved are required to think innovatively, to explore new options, along with forging new partnerships to better find solutions to the myriad challenges. This has most certainly been the case in Canterbury with local government, central government, industry and the community working together to find a way and to build a better Canterbury in the process. From finding viable options for treated timber to better planning around residential demolitions to allow enhanced recovery, this month's revolve showcases just a few of the tremendous projects underway.

This edition of revolve is very much dedicated to the people of Canterbury and their remarkable resilience as well as those in our industry who are leading the way in finding viable solutions to these most complex of problems.

P.S. Don't forget to book your spot at the WasteMINZ Roundup in Queenstown on 3 and 4 April. It's going to be a brilliant event!



3-4 April 2014 | WASTEMINZ ROUNDUP

Heritage Hotel, Queenstown



YOUR BOARD

Paul Bishop
paul.bishop@envirowaste.co.nz

In October 2013 we celebrated the 25th Annual WasteMINZ Conference — quite a momentous occasion for our organisation. Indeed over the past quarter century the waste and resource recovery industries have changed dramatically to meet the ever evolving needs of our communities. Whilst we still have a long way to go, we have made remarkable progress in many areas. WasteMINZ, as the leading body representing our industry, has also had to adapt and move with the times to meet the changing wants and needs of our members.

I've been lucky to have been on the WasteMINZ board since 2007. In these seven years the organisation has grown in its size, scope and credibility. In recent years the board has placed a very strong focus on

enhancing the level of resourcing within the organisation and upping its outputs, whilst still offering exceptional value for money. I can proudly say that the breadth and quality of what WasteMINZ now delivers is well above what it was when I first became involved. Our conference is now truly world class and the work of our sector groups continues to grow.

My fellow board members and I have discussed at great length how WasteMINZ can better serve you and how we as a board can better represent your interests. As part of this dialogue we have decided that it is timely that the organisation undertakes a representation review to determine if our current governance arrangements are still appropriate and if any changes are

required to put us in the best stead for the future.

In this regard we have requested that WasteMINZ's Chief Executive, Paul Evans, engage with our membership and undertake this representation review by mid-2014, so we can then determine the most appropriate path forwards.

Amongst a range of things the review will look at the board size, board member terms and sector representation. I strongly encourage you to play an active part in the review. Having your say is the very best way to ensure that WasteMINZ will remain relevant and deliver value for another 25 years.

So please keep your eye out for information relating to the review and once again I encourage you all to get involved.

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Love NZ

use the right bin

Over summer many of us are out at the beach, enjoying festivals or just relaxing with our families and friends.

There are lots of Love NZ recycling bins all over New Zealand where you can recycle your cans, bottles and paper when you are away from home. They are on high streets, in shopping malls, at airports and ferry terminals. BP's Wild Bean Cafés and AJ Hackett have them and so do the Skyline Luges. You will also find them at sports events and festivals all over the country.

If it can't be recycled then put it in the rubbish bin. None of us want to see litter on our beaches, streets or tourist spots.

Did you know...

- New Zealanders generate an estimated 30% more waste over the summer holidays and in seaside areas it's an additional 400% and most of it can be recycled if people put it into the recycling bin rather than the rubbish bin.
- New Zealanders consume over 700,000 tonnes of packaging every year but we only recycle just over half of it.
- Using packaging made from recycled materials uses less energy and emits fewer greenhouse gas emissions.
- The amount of glass recycled actually doubles in January but sales of glass and cans go up 3 times our normal levels over the holiday period.

Challenges

- Look for the Love NZ recycling bins in your area, take a photo and send it to donna@lovenz.org.nz to be in to win a Love NZ prize.
- Or see if you can find one of the glass bottle banks and take a photo of one of your family or friends separating their glass bottles or jars into different colours – green, brown and clear.
- Use a reusable shopping bag, keep cup or reusable drinks bottle and reduce your waste even further.

Look for the Love NZ recycling bins in your area.



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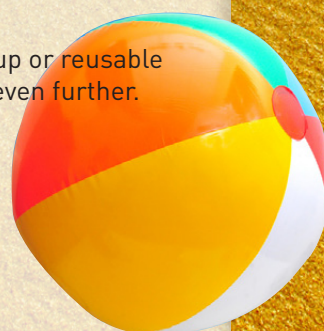


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News Bites

LOVE NZ & PUBLIC PLACE RECYCLING

Product Stewardship Schemes encourage people to use the right bin

New Zealanders generate an estimated 30 percent more waste over the summer holidays and in tourist areas it's an additional 400 percent, most of which can be recycled if people use the recycling bin rather than the rubbish bin.

The Glass Packaging Forum's two accredited product stewardship schemes for glass packaging and multi product public place recycling have helped increase and publicise recycling at some of the summer's major events.

The industry funded schemes supported waste minimisation at Auckland's Diwali Festival; Christmas in the Hutt; Tauranga's Boat Show and Iron Man competition; and introduced recycling at the NZ

Festival of Tennis. Recycling is also a major feature at The Classic Hits Winery Tour for the fourth year in succession. These events will divert over 60 tonnes of packaging or organic waste from landfill, and promote the Love NZ brand to 200,000 people.

Spectators at the Heineken Open and ASB Classic were actively encouraged to recycle glass bottles and other drinks containers resulting in the recycling of 14.5 tonnes of mixed recyclables; 7.9 tonnes of glass bottles and 3.8 tonnes of cardboard. This resulted in a 57 percent recycling rate for the two week tournament. Heineken produced a video featuring Sky



Sports presenter Denis Katsanos, encouraging people to use the Love NZ recycling bins. The video was shown on the big screen between matches each day. View the Heineken Open LOVENZ big screen video www.lovenz.org.nz/news/post/heineken-tennis-recycling.

Applicants for funding should apply to donna.glassforum@xtra.co.nz.

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SMALL BUSINESS

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INDIVIDUAL

Linda Wright

WasteMINZ ROUNDUP

The 2014 WasteMINZ Roundup is shaping up to be a fantastic event. The Roundup theme is 'Council, Community and Commercial Sectors Collaborating', where we will explore the vital role that each of these sectors play in achieving better waste and resource recovery outcomes.

Held in Queenstown on 3-4 April 2014, the Roundup will feature two

days of excellent speakers including Demography Professor Natalie Jackson, Behaviour Change expert Liz Ampt and Mark Daniels of Social Traders.

Book by 21 March 2014 to get the early bird rate, spaces are strictly limited so don't delay.

For more information and to book your spot visit www.wasteminz.org.nz.



MOVERS & SHAKERS



ZAC JORDAN

Having enjoyed his last four years working across the Local Authority sector in his role as Wellington City Council's Waste Operations Manager, Zac now brings his operational grit to his new role at the Ministry for the Environment as the Manager, Funds Management (replacing Steve Long). Zac will focus on ensuring the Waste Minimisation Fund, Community Environment Fund and Environmental Legal Assistance Fund remain fit for purpose and most importantly, enable Kiwis to continue to work with the Ministry on improved environmental outcomes.



ELENA WRELTON

Following her work in the Ministry's Funds team and more recently on TV TakeBack programme, Elena Wrelton has moved into the Ministry's Waste and Resources Team taking on the role of Waste Portfolio Lead. In her role Elena will be working across the Ministry's waste work programme to ensure the work in the area is connected, strategic and that the Ministry are engaging with the right people in the industry to ensure the best possible waste outcomes



FIONA NEWLOVE

After a year of parental leave, Fiona Newlove has re-joined the Waste and Resources Team at the Ministry for the Environment. Fiona is currently working part-time on the Review of the Waste Levy. With a background in resource management planning, Fiona brings over 10 years' experience of working in local government. In 2011, Fiona returned from eight years in London and Scotland where she worked for the London Borough of Newham, the Olympic Delivery Authority and Loch Lomond and the Trossachs National Park.



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New Testing Facility

Scion has designed and built a test facility for measuring the aerobic composting of materials like bioplastics, paper and wood.

This facility is designed to quantify the biodegradation timeframe of biomaterials. Scion uses the facility to tailor the composting of newly developed biomaterials. The facility is also available commercially with clients from packaging, plastics and export industries. The equipment is designed to test up to 17 different samples (in triplicate) under

controlled temperature, moisture and airflow conditions modelled on industrial composting.

The facility was constructed in line with international standard ISO 14855-1. It is designed to quantify the aerobic biodegradability of plastic materials by measuring the evolved carbon dioxide for up to six months.

Although the facility was developed to measure composting of bioplastic formulations, it can be easily modified to examine the degradation of plastic, paper or wood in media such as soil or aquatic environments.

For more information about the testing facility, contact Dr Martin Markotsis, martin.markotsis@scionresearch.com



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Waste Minimisation Fund

The Government's Waste Minimisation Fund (WMF) supports waste minimisation projects that reduce harm to the environment and provide economic, environmental, social and cultural benefits for New Zealand. Within the Funds Management team at the Ministry, Emma Bonner, Heather Penny and Kees Hyink work on the WMF and are happy to answer any questions you might have and discuss potential waste minimisation projects. You can contact the Funds management team at wmf@mfe.govt.nz or on 0800 499 700. The next WMF funding round opens for applications on 1 May 2014. Information about three projects supported by the WMF follows, but to find out more about what projects have been previously supported please see the Ministry for the Environment's website.

Nationwide PCB Amnesty

The WMF is currently supporting Transpacific Technical Services to operate the nationwide PCB Amnesty. The programme contributes to the elimination of PCBs (polychlorinated biphenyls) from old electrical equipment and light fittings in New Zealand and the diversion of PCBs from wastes that are sent to landfill.

This project strongly aligns with one of the Government's waste priorities of reducing risk of harm to human health and the environment, and supports New Zealand's international obligations under the Stockholm Convention. As there are no facilities suitable for the safe destruction of PCB-containing material in New Zealand, materials collected through the programme will be processed at Tredi International's hazardous waste incineration facility in France.

The programme has 6 drop-off sites located around New Zealand (in Auckland, Tauranga, Whakatane, Rotorua, Wellington and Christchurch) and any individual or organisation interested in the service must register with Transpacific Technical Services. Transpacific can provide information on identifying PCBs and on requirements for PCB storage, handling, registration, transport and disposal. Applicants who are currently on the Environmental Protection Authority's (EPA) PCB register must disclose this status.

If you would like further information or if you wish to register for the programme, contact Carolyn Armstrong at Transpacific Technical Services by phoning 09 265 6162.

OCS - FACILITIES WASTE MINIMISATION BEST PRACTICE TOOL KIT

OCS Limited has recently developed a toolkit for facility and operations managers responsible for waste management and minimisation. It provides guidance and tools so that large, high-use facilities (such as supermarkets and airports) can implement systems to achieve improved waste minimisation and reduce waste disposal costs.

The toolkit provides core information under three sections — The Why, The How and The What Else — and comes with a memory stick containing tools, document templates, case studies and additional information resources. OCS Limited has partnered with a number of facilities to implement trials of the toolkit and these have achieved an increase in diversion from landfill of between 20 percent and 45 percent.

To date, the Facilities Waste Minimisation Best Practice Tool Kit has been distributed via a series of roadshows across New Zealand. This has been well received and three councils have shown interest in partnering with local businesses to road-test the toolkit. Financial support for the toolkit was provided by the WMF.

If you would like to find out more, or if you'd like a copy of the Toolkit, contact Richard Forward, Sustainable Solutions Manager at OCS Limited by email richard.forward@ocs.co.nz.

Wanaka Wastebusters - Unpackit Best and Worst Packaging Awards

Wanaka Wastebusters received funding through the WMF to contribute to the delivery of the 2013 Unpackit Best and Worst Packaging Awards. These annual awards engage New Zealanders in a conversation about packaging waste, and help householders and businesses to choose smarter packaging. The level of engagement from New Zealanders has been very positive, with 424 nominations received and over 15,600 votes from the public.

Online resources such as the website www.smartpackaging.org.nz have been created to help businesses make better packaging choices and provide them with information about packaging materials.

Several channels were used to advertise the awards throughout the year, including social media, print, media releases, posters, emails and newsletters. Wanaka Wastebusters successfully partnered with Sustainability Trust in Wellington and CBEC EcoSolutions in the Far North to deliver Unpackit Awards promotions to seven events across the country.

The winners of the 2013 Unpackit Awards were announced on 9 November by media release and a special feature in the Dominion Post.

For more information on the awards please see the Unpackit website www.unpackit.org.nz.



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SHAKE RATTLE & RECYCLE

Christchurch's other recovery story

By Jeff Matthews, Project Manager, GHD

SITE WASTE MANAGEMENT PLANS FOR RESIDENTIAL RED ZONE DEMOLITIONS IN CANTERBURY

The creation of the Waste and Environmental Management Team (WEMT), led by Carl Diamond, was to provide monitoring of the movement and disposal of earthquake demolition waste. The

aim is to make sure that waste disposal is efficiently managed and monitored, thereby protecting the natural environment in both the short and longer term.

The programme represents collaboration between Environment Canterbury, Christchurch City Council, Canterbury Earthquake Recovery Authority (CERA), Ngai Tahu and the Selwyn and Waimakariri district councils. The Ministry for the Environment (MfE)

has also provided funding for the collection of hazardous waste prior to demolition.

Key to the development of this programme has been the establishment of site waste management plan templates which set minimum expectations for demolition companies. However it has been acknowledged by CERA, WEMT and the demolition companies that this initial set of templates is not yet ideal and

has not yielded the benefits and data hoped for. This led to WEMT contracting engineering, architecture and environmental consulting firm GHD, to review and prepare guidance and develop enhanced templates that are both easier to use, and which focus on setting waste management and environmental management expectations for companies during demolitions.

THE CHALLENGES

Following the earthquake series that hit the city in 2010-11, more than 8,000 residential houses were earmarked for demolition. A large number of commercial properties were similarly affected. To date, fewer than 3,000 residential demolitions have taken place and large numbers of empty, derelict properties still stand waiting deconstruction or demolition.

The emphasis is now on increasing the rate of demolition of these properties. This will place demands on the monitoring and evaluation capabilities of WEMT and the demolition companies' ability to maintain standards as the pace increases. Further, with the large number of demolition companies now engaged in this work, it has become apparent there is a need for consistency in the way demolitions are addressed and the way waste is managed. With no common policy or process for hazard management or recycling recovery, each company is operating as an isolated unit within a sea of shared issues.

Some of the waste streams encountered during demolitions are hazardous in nature and often require pre-demolition clearance before main demolition activities can begin. Support from the Waste Minimisation Fund allows the collection and disposal of hazardous waste from properties awaiting demolition.

In some of the worst affected areas, in particular the Port Hills

area, the safety, practicality and technical challenges of demolishing properties in geotechnically unstable locations (such as cliff tops) are calling for innovative and new demolition approaches such as remote management of plant, and the use of robotics.

In flatland areas to the east of the city, the earthquakes have produced newly created springs and in many older properties unidentified wells are encountered, further complicating demolition activities. These often unpredictable sources of water can cause sudden contaminant transport pathways to other properties and to environmentally sensitive and vulnerable receptors.

The demolition market backdrop is very competitive, with contractors and demolition companies competing on price to secure demolition contracts. As in all price-sensitive markets, there are cost disincentives that mean contractors may do only what is essential, or do nothing about environmental management unless it is economically viable.

In addition to commercial imperatives, there are considerable social and political drivers to complete the demolition programme without compromising process or attention to detail.

Finally, although the vast majority of demolitions are professionally managed, there have been reports in the media of illegal disposal and fly tipping of demolition wastes that could lead to an unwanted environmental legacy and for which city rate payers and property owners have to foot the bill.

WHAT HAS BEEN DEVELOPED?

The response to the challenges has been the development of a stepped approach consisting of three connected guidance notes that set minimum expectations for



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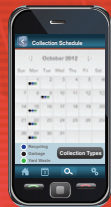
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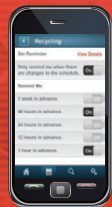
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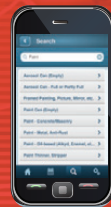
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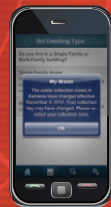
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assessment, site waste management and wider environmental management at each site.

The first guidance note is an advisory of what is expected and outlines the process to complete the related second and third guidance notes.

The second guidance note focusses on environmental protection and the management of demolition wastes. The third guidance note focusses on environmental protection and sets expectations for the development of Pollution Prevention Plans.

This staged process was first canvassed with CERA. It was completed after a workshop with the demolition companies to listen to and understand their perspective on meeting the many challenges. This workshop also provided an opportunity to introduce the approach and obtain feedback on what already works, what could work, and what won't work.

Key features of the common staged approach include:

1. Pre-inspection of building to remove residual materials (paints, chemicals, wastes) left by occupants.
2. Classification of a building by the decade of its construction to better identify likelihood of potentially contaminating materials. The greater likelihood of the presence of asbestos, polystyrene and treated timber and the like is often indicated by the decade of construction,

although subsequent renovation can play a role.

3. The use of Source – Pathway – Receptor models to help companies self-risk assess the sites they are working on.
4. Using the self-risk assessment process to identify the environmental issues that need to be managed and to provide guidance on the types of controls and measures that could be adopted during demolition activities.
5. A requirement to provide data, information and report to WEMT on any issues that are encountered, thereby enabling refinement of understanding of more common risks, and distribution of that information to the demolition companies.
6. An agreed dressed condition of the site after the completion of works.

THE BENEFITS OF THIS APPROACH

- Ease of use.
- Approachability.
- Levelling of the commercial playing field (no cowboys, common approach, common standards).
- Common approach to works with common documentation trail which, in turn, facilitates improved data gathering. Learnings from previous demolition works can be distributed for general advice for demolition companies.
- Incentive for performance (using the templates will be viewed favourably in evaluation of performance hence future contract award).
- Environmental protection improvement (understanding site base risks, avoidance of legacies for Canterbury, reduced

costs for contractors as they can use their own approaches provided that compatibility and expectations of the process are met, reduced costs as the templates can be used at more than one site with the emphasis on contractors identifying deviations from the process, contractors sign declarations on completion).


- Agreed dressed condition of site after completion of works results in uniformity of outcome, management of and avoidance of legacy issues and assurance and confidence regarding the final condition of the site.

NEXT STEPS

The next step is to roll out the plans. The proof of this initiative will be its successful implementation.

The aim is to collaborate across the industry and share learned lessons which should lead to improved practices and fewer issues.

WEMT will audit a percentage of sites against the reports and data received to confirm its veracity. That data can then be used to better plan hazard management, waste control and recycling activities.

For more information contact Jeff Matthews or Carl Diamond. 



Jeff Matthews is GHD Project Manager. He can be contacted at jeff.matthews@ghd.com or 09 370 8000.



Carl Diamond is Project Manager Earthquake Waste Management and can be contacted at carl.diamond@ecan.govt.nz.

THE WHOLE HOUSE REUSE PROJECT



Waste generation through demolition is not a new issue, but in Christchurch following the earthquakes it's one that is harder to ignore.

By Kate McIntyre, Project Manager, Whole House Reuse
and Darren Patterson, Chair of the Sustainable Initiatives Fund Trust.

LOOKING SMALL, THINKING BIG

Whole House Reuse, a project facilitated by Rekindle and supported by the Sustainable Initiatives Fund (SIFT) has been created to make explicit the scale and breadth of materials that make up one modest home. By doing so, the project hopes to deliver a broader understanding of the waste occurring as a result of demolition in Christchurch, and to a lesser yet significant extent across New Zealand. Extending from this, Whole House Reuse aims to provoke

problem solving and innovation around future uses of materials that currently have little or no perceivable monetary value and are not seen as being reusable.

Over seven days in August 2013 a professional salvage crew from Silvan Salvage, led by Graham Thompson, fully deconstructed a three-bedroom Red Zone home at 19 Admirals Way, in the Christchurch suburb of New Brighton. The entire home, aside from the concrete ring foundation was dismantled by hand, and then transported into storage by a team of volunteers.

From there, 480 materials listings have been recorded in the Whole House Reuse catalogue of resources which will be distributed to the design community of New Zealand during the project's design stage. The outcome is the entire reuse of the whole house in innovative, purposeful and beautiful works.

The project also exists to show a mark of respect to the many homes that have come down in Christchurch, and as a farewell to the social history ingrained within them that is simultaneously lost. Stories from families who lived at 19 Admirals Way, as well as



their experience of having to say goodbye have been captured in the first stage of the project.

SOCIAL ENTERPRISE & SALVAGE

Rekindle's founder and director, Juliet Arnott, sees Whole House Reuse as playing a similar but extended role to the work that Rekindle is undertaking with demolition timber. As a social enterprise Rekindle harnesses the value within reusable timber by transforming this into a range of marketable products. The sale of these products enables a sustainable business model, with the revenue paying for salvagers' work, and enabling this as a true alternative to straight demolition. The model of social enterprise is suitably aligned to this type of work with the large network of wood recycling social enterprises in the UK being testament to this, and is consciously

driven by the environmental and social returns.

Rekindle purports that reusable materials being wasted are in fact creative opportunities that designers and others in creative industry are more than aptly skilled to respond to. Whole House Reuse is Rekindle's way of prompting creative industry to apply innovative thinking to divert reusable materials from waste. The aim is that some of the outcomes from the Whole House Project will lead to viable marketable products that create an increased demand for salvage.

THE CURRENT REALITIES

There are many factors contributing to the large amount of demolition waste currently being created in Christchurch.

- An increasingly competitive tendering process has reduced the average price of residential



LOOKING FOR A GLASS GRANT?

The Forum is committed to ensuring that as much waste container glass as possible is diverted from landfill and put to an effective use.

It recognises that this can only be achieved if there is input into the critical areas of infrastructure, education of the community and co-operation with local commercial recyclers and local authorities.

In some locations it may be necessary to utilise recovered glass locally or upgrade infrastructure to improve glass quality and/or the tonnages recycled.

Councils and community groups are invited to apply for funding to assist glass recycling projects. Refer to the Forum's website for the application form and the criteria for grants.

Funding projects to date include:

- Infrastructure to collect quality glass for remanufacture into new containers
- Support infrastructure to collect glass at community events
- Trials of glass as a substitute for sand in golf courses/sports fields
- Engineering report on glass in building slab construction
- The separation at source bin for single collections with glass separate
- Modification of MD4 specifications to allow glass in road construction

Funding project guide: *Making a Difference in the Community* is available on request



GET IN TOUCH WITH

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CREATING OPPORTUNITIES



demolition and created a need for speed with each job.

- The cheapest demolition is usually the quickest, and digger use is a cheaper option than physical labour.
- The alternative where buildings are deconstructed and salvaged requires an immediate labour cost that raises the overall price of the demolition, and then there are additional costs related to transportation, storage and the on-sale of the salvaged resources.

The Burwood Resource Recovery Park have processed 70,000 of the over 450,000 tonnes of material that have been sent there since opening in March 2011, and they estimate their current recovery rate at 40-50 percent. They are recovering metals from steel framing and roofing, electrical cables and rubble. The rest — mainly textiles, paper, cardboard, plastics and currently timber (until they devise a strategy for its reuse) — becomes residual waste.

DIVERSION BEFORE DISPOSAL


The ideal action is to salvage as many resources as possible to avoid the degeneration of reusable materials via an intensive and costly recovery process.

The Sustainable Initiatives Fund Trust (SIFT) saw the potential for Rekindle's Whole House Reuse project to inspire others to reconsider demolition. It came on board as the project's primary sponsor in 2013, and with their support Whole House Reuse was able to begin. SIFT provides vital financial assistance to innovative Canterbury-based waste minimisation projects. It supports projects that look to divert waste from disposal into the environment and is always on the lookout for new projects to help.

In Whole House Reuse already, the ideas are beginning to surface. The first work — a series of raised garden beds from the borered flooring of the house — is now underway. These beds will be utilised by Agropolis, an urban farm in central Christchurch, to grow vegetables. Because of possible contamination, the borered timber from the house can't make it into the final exhibition apart from in the form of documentation, however is still being treated as a valid resource with undiscovered potential.

What the rest of the resulting works will be is yet unknown, with possibilities ranging from wooden spoons, to sub-consent structures — and everything in between.

Both a short documentary and a book have been created telling the story of the project to date. To find out more about the project, view the film or order a copy of the book, visit www.wholehousereuse.co.nz.

It is a long and monumental process to fully reuse one home. But as ever-passionate salvager Graham Thompson says in the final moments of the documentary as the last of the flooring is extracted from 19 Admirals Way, 'It was all put in by hand, it was all made by hand, and it has to come down by hand'. 



Kate McIntyre is the project manager for Whole House Reuse. She has a background in the arts and is also a maker of some of Rekindle's wood products.



Darren Patterson is Chair of the Sustainable Initiatives Fund Trust. If you are interested in applying for funding application forms can be downloaded from their website www.sift.net.nz

A FREE nationwide service to collect and safely dispose of Polychlorinated Biphenyls (PCBs) is offered by Transpacific Technical Services (NZ) Ltd (TTS)

'FREE' PCB DISPOSAL!

Call **0800 PCB WASTE**



There are significant quantities of PCBs still remaining in New Zealand, despite legislation being in place since 2004 prohibiting their use or storage.

This promotion is focused mainly on the disposal of small PCB containing capacitors, typically found in older style fluorescent lighting ballasts.

TTS is offering this service for **FREE**, enabling you to off-set the cost of having your lights checked and upgraded. Further savings can be made with modern energy efficient lighting.

Transformers and other items of electrical equipment containing PCBs are also eligible.

Conditions of this promotion are:

- PCBs must be removed from lighting systems or fittings and rendered safe, prior to TTS accepting possession.
- This promotion is limited to the collection and disposal of 12 tonnes (maximum packaged weight) of PCB waste.
- This PCB elimination and disposal promotion expires March 2015.
- All applicants under this promotion must register with TTS. To register phone Carolyn Armstrong on 0800 PCB WASTE.
- Acceptance approvals will be issued by TTS prior to pick-up.
- Any applicant currently on EPA's PCB register must disclose this status.
- Free collection and disposal will be applied on a first come first served basis.
- TTS will assist applicants with information on identifying PCBs and on any requirements concerning PCB storage, handling, registration, transport and disposal.
- TTS retains sole discretion as to whether or not to accept PCB waste and is not obligated to accept waste it considers outside the promotion's objectives.

TTS is able to provide more information to help identify suspect capacitors and ballasts in PCBs. Further information on PCBs is available on the websites below;

1. Safe Management of PCBs Code of Practice publication is on the MOH website: <http://www.moh.govt.nz>
2. Phasing out Small PCB Holdings is on ERMA website: <http://www.ermanz.govt.nz>

This promotion is made possible by a grant from the Government's Waste Minimisation Fund, managed by the Ministry for the Environment.

TTS also acknowledges Tredi NZ Ltd as its PCB offshore disposal agent and promotion partner.

TREATED TIMBER WASTE

The Search for a Sustainable Solution

By Fraser Scott, True North Consulting

Treated timber is a tough waste stream for which to find a productive outlet. Unlike some other waste streams that can be recycled or re-used with the application of a creative eye and an entrepreneurial mind, the treatment chemicals present in treated timber grind many potential applications to a halt.

CCA treated timber waste — which contains copper, chromium and arsenic — poses a potentially serious risk to humans and the environment. Any activity that seeks to utilise this waste faces significant challenges in terms of safety. Such an enterprise must also deal with the financial and commercial barriers of trying to turn a difficult waste stream into something useful and saleable.

Faced with an unprecedented volume of treated timber waste from the Canterbury earthquakes and rebuild, Environment Canterbury formed a project team that included Christchurch City Council, BRANZ and Scion to conduct a feasibility study aimed at identifying a sustainable business model for the productive use of this waste. True North Consulting was contracted to undertake the project and funding was secured from the Ministry for the Environment's Waste Minimisation Fund, Environment Canterbury, the Canterbury Waste Joint Committee, BRANZ and Scion.

The project, which ran from March to December 2013, worked closely with the construction,

waste and demolition sectors to understand the sources and flows of treated timber waste and to identify operators that had a potential solution for processing treated timber waste into marketable products.

Volume analyses indicated that 24,000 tonnes of treated timber had or would be produced by earthquake-related demolition. In addition, and perhaps surprisingly, it was estimated that a slightly higher volume — 26,250 tonnes — would be produced as construction waste from the rebuild over the next 15 years.

Yet both of these figures pale in comparison to the baseline figure relating to non-earthquake-related treated timber waste being sent to landfills in Christchurch of 13,500 tonnes per annum, or 202,500 tonnes over a 15 year period. This figure serves as a reminder that the issue of treated timber waste is far from being confined to the context of a major natural disaster clean-up and rebuild.

As the project progressed it became evident that there were a number of factors that made the project's goals even more challenging than first thought.

The first of these was the absence of a centralised demand for heat in Christchurch for the short to medium term. A natural path of enquiry for utilising treated timber waste is waste to energy systems. The majority of these systems, which produce both

electrical energy and heat, need a market for the heat output in order to be economically viable at scale. Without a tight geographical cluster of demand in the CBD, the economics of such systems suffer. Likewise, large-scale industrial applications for heat are not currently in abundance in Christchurch.

A further challenge for the project became evident in considering all the potential technologies as a whole. In general, those technologies that had a strong and proven technical track record offered limited revenue potential. Those technologies that appeared to offer strong revenue potential were novel and riskier, at least in terms of application of the technology to treated timber waste. Preference was generally given to those with strong revenue potential, but the need to prove the effectiveness and efficiency of the technology, and the viability and sustainability of market demand, became a key focus for the project as it progressed.

Processing technologies considered included incineration, gasification, pyrolysis, torrefaction, hydrothermal processing, wet oxidation and chemical extraction of treatment chemicals.

These processes were not considered in isolation, but rather in connection with potential end uses or end of life options to provide a complete model. These end uses included landfilling, incineration,

boiler fuel, cogeneration, cement kiln fuel, biofuels and recycling into new products. Connecting processes with potential end uses allowed the creation of an overall options map that helped guide evaluation of potential business models in terms of feasibility and sustainability.

For primarily economic or safety reasons it was determined that most of the potential models were not feasible or desirable. Many of those that had the potential to do something useful with treated timber waste presented an unsustainable business model; either costs were too high or revenue potential too low.

Initially it was felt that use of treated timber waste as a cement kiln fuel would emerge as the preferred option. This application already occurs throughout the world and, to a degree, in Golden Bay's plant in Whangarei. However, Holcim Cement's mid-2013 announcement of its intention to close its Westport cement plant quickly removed this as an option.

Ultimately, four options were determined as offering the highest potential as a sustainable business model for the productive use of treated timber in Christchurch.

These were:

1. Using slow pyrolysis to create carbon-based products (Waste Transformationz Limited)

2. Using fast pyrolysis to create biofuels (AES Bioenergy Limited)
3. Using hydrothermal processing to create lignin and biofuels (Solvent Rescue Limited)
4. Using wet oxidation to create methane gas (Scion)

Each of these organisations and their options were assessed in terms of their financial sustainability, supply chain strength, deployment timeframe acceptability, projected processing volume and technical feasibility. Potential customers were consulted to validate demand and pricing projections and a feasibility profile built for each of the options to determine which potential solution or solutions presented business models likely to materially contribute to the productive use of treated timber waste in Christchurch.

At the conclusion of the project it was determined that Waste Transformationz Limited's slow pyrolysis solution offered the most compelling business model.

Solvent Rescue's hydrothermal processing model was also determined to have strong potential. The other two models may offer feasible solutions, but would likely require considerable additional development before they would be ready to enter the market as a treated timber waste solution in Christchurch.

At the conclusion of the project each of the four potential solution providers were still working through testing processes to objectively confirm the ability of their processes to safely handle CCA treated timber. A project update is planned for late February 2014 to report on testing progress.

While each of the options has genuine potential to turn treated timber waste into useful products, until technical feasibility is proved 'beyond reasonable doubt' feasibility cannot be unequivocally asserted. Yet, should this feasibility be proven, a sustainable solution for transforming a difficult and high volume waste into valuable and in-demand products has real global potential.

To see the project reports go to <http://ecan.govt.nz/advice/your-land/waste/projects/Pages/treated-timber.aspx>.



Fraser Scott is the Managing Director of True North Consulting, based in Christchurch. True North Consulting provides services around business model creation, organisational development and service design. See www.tnc.co.nz



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**SAVE
 MONEY ON
 WASTE**



Building community sector capacity

By Sue Coutts, Wanaka Wastebusters

WORKING TOGETHER TOWARDS A ZERO WASTE AUCKLAND

Collaboration used to be a dirty word. It meant you were working with the occupying forces against the interests of your own people. We all remember what happened to the collaborators in the black and white war movies we watched as kids. Nowadays it's a safer option and everyone wants to jump on the bandwagon.

Community recyclers have always been willing to cooperate and share what we know. We want to leverage every opportunity to shift our communities, and

Aotearoa New Zealand, closer to a zero waste future.

We bought into the zero waste vision early, and we have stuck with it through thick and thin. We have stepped up and used the resources we could draw together, to build, operate and develop resource recovery centres that are delivering some of the highest diversion rates in the country.

The real strength of our approach is that we keep our eye on the ball. We are looking for long term social, environmental and economic benefits for our communities. Other players in the supply chain are finally starting to realise that our approach and our track record have value.

Through grappling with what it means to build communities that don't waste people or stuff, CRN has built intellectual property and a strong resource base that we can share with new entrants and existing operators with complementary skills and capabilities.

AUCKLAND STEPPING UP

The development of the Auckland WMMP and the Auckland Plan generated a lot of interest in the value of a community led approach to resource recovery. Community organisations came out of the woodwork to show their commitment. Auckland Council's

◀ Crosspower's boxing programme shows you don't always have to be the biggest kid on the block to pack a killer punch.

plans join the dots between procurement, community led development, job creation, social benefits and waste reduction. The need for a transformational approach to improve social and economic outcomes for the city's most marginalised people is clearly recognised. Community Recyclers understand how to use resource recovery to deliver these kinds of outcomes. We have a driver now that Auckland Council has drawn a zero waste bottom line in the sand.

Legend has it that community action led to the first recycling collections in the country being established in Devonport way back in 1976. People sparked off when they realised that rubbish was a form of pollution. 38 years later we have come full circle with the collective realisation that rubbish is a mixed bag of resources. All we need to do is separate them into categories and handle them differently to spin off value. It's fitting that Devonport looks likely to become one of the first Community Recovery Centres in Auckland's new Resource Recovery Network.

COMMUNITY CAPACITY

Community recyclers understand that it will take everybody to fully develop the Auckland resource recovery network concept. We are going to need a complex web of organisations working up and down the supply chain to deliver all the necessary services. There is plenty of work for everyone. As always the critical question is how the resources allocated to pay for the work are shared out.

Community organisations across Auckland are keen to engage with one another, council and private organisations to drive this change. CRN wants to support this in every way possible so a key focus for the last 12 months has been building the

capacity of the community sector to engage in resource recovery activities across Auckland. This work has been partially supported by the Auckland Council's waste minimisation and innovation fund.

CRN's focus is on empowering our sector to engage with the opportunities that are on the table. Over the last 18 months we have been actively seeking out Auckland community groups to find out who's interested in getting involved in resource recovery activities and what their current capacity is.

Workshops run last year in Auckland had a huge turnout, building on the interest sparked by the Auckland WMMP. We focused on outlining the nature and value of our social enterprise model and fleshed out the kinds of activities and business opportunities community recyclers from round the country are succeeding with in their current operating environments.

At the CRN Hui in November new groups had the opportunity to meet the old hands, to catch up on what is happening for community recyclers across the Tasman, get the lowdown on job creation and training schemes that really work and to meet and talk with a mix industry and council reps.

THE APPROACH

There are three main threads to our capacity building work;

Firstly, we're sharing what we know so individual organisations have the support they need to succeed in delivering on their missions. This involves sharing plans, systems, strategy, methodology and ideas, as well as connecting them up with specialist help.

Secondly we are building the capacity of CRN as a network by finding new ways we can co-ordinate activities, share resources, co-operate to deliver on projects, and share experience and expertise.

This generally results in knowledge and support flowing in all directions, as we find we all have something to learn from one another. The links we have built up over the last five years with CRN Australia are proving particularly valuable.

Thirdly we are working collectively to develop the market by creating relationships with commercial companies and the public sector. We are looking for complementary ways of integrating with their supply chains so we can fill niches where we have a competitive advantage. Individually CRN members are generally small to medium players but in the aggregate we have significant scope and capacity. Working together under a single umbrella we are able to engage with councils and commercial operators on a more equal footing.

Our next Auckland event is on 27 March. Contact CRN Co-ordinator Dorte Wray admin@communityrecyclers.org.nz for details.

Community recyclers have been committed to zero waste through good times and bad. We know it's the only viable option we have for realising our collective dream of a cyclical economy. As Ghandi said:

'First they ignore you, then they laugh at you, then they fight you, then you win.'



Sue Coutts has managed Wanaka Wastebusters since 2002 and has been actively involved with the development of the Community Recycling Network since 2003.



WASTE CHALLENGES FOR A PACIFIC NATION

By Brett Way, Utilities Manager, Central Hawke's Bay District Council



▲ World War II bunkers

▶ Hepatitis B testing & immunisation



TECHNICAL ASSISTANCE PROGRAM TO KIRIBATI

Local Government New Zealand (LGNZ) and the Ministry of Foreign Affairs and Trade (MFAT) have partnered to offer short term technical assistance to Pacific Island countries. The first area of assistance was solid waste and the first country to be chosen was Kiribati (pronounced Kiribas). Kiribati's capital Tarawa is on the northern side of the equator approximately half way between Papua New Guinea and Hawaii.

Kiribati's vulnerability to climate change is well known, with the highest point on Tarawa being less than 3m above sea level. What is not so well known about Tarawa is the overcrowding and the associated waste and pollution issues. With nearly 55,000 people living on 10km² of habitable land making Tarawa more densely populated than the city of London! Virtually every piece of available land is utilised. With so little land available food production being a real issue, the majority of the food is imported into Tarawa....all wrapped in packaging!

The traditional method of dealing with natural waste is to either feed it to animals or let it decompose where it is left. This practice is still in place, meaning there is rubbish and in particular plastic packaging everywhere.

The technical assistance program had three main objectives.

1. Assist in the technical and financial planning of the three landfills.
2. Enhance the health and safety of the landfill operators and rubbish collectors.
3. Develop a relationship with Betio Town Council and Teinainano Urban Council, on behalf of LGNZ and MFAT.

My first week in Tarawa was a real eye opener, practices that are unheard of in New Zealand are the norm in Kiribati. There are landfills with no cover; people living on and earning an income from scavenging off the landfill; council workers collecting rubbish in bare feet; children catching a ride to school on the back of a working rubbish truck; blood soaked medical waste collected with domestic waste; and landfills built behind sea walls that filled with sea water when the tide came in.

It quickly became apparent that my thinking needed to get away from what happens in New Zealand and instead consider what would work best for Tarawa, with the resources, budgets and skills available.

Kiribati has already made some good progress, on dealing with waste. This includes:

- A significant tax on importing glass; as a result there is very little glass on the island. This tax was introduced to stop the injuries caused by broken glass. The majority of people do not use any form of footwear or wear jandals.
- A refund system on aluminium and PET packaging.
- User pays private rubbish collection through bags purchased at shops.
- All food waste is fed to the pigs, poultry, dogs and cats.



▲ Landfill in Tarawara
▶ Off to work Kiribati style

- A council rubbish collection.
- Free community access to landfills in three locations.
- Access to compaction machinery.
- Monthly waste management meetings between the key players.

However what Kiribati was sadly lacking was health and safety equipment and procedures for workers, as well as an understanding of the importance of planning landfill waste placement and compaction.

PROGRAM ACHIEVEMENTS

This is what we achieved in six months:

- Introduction of training for the waste workers — including how to handle and lift waste, traffic awareness, customer service, hazardous waste identification and landfill management.
- A simple change in job titles — the local name for a rubbish collector translated to “cabbage worker”, this was changed to solid waste worker. The landfill operator’s title was watchman, so that is what he did from his hammock. He is now a landfill operator and expected to actually operate the landfill.
- Introduction of personal protective equipment — the majority of the workers either

had bare feet or wore flip flops, while gloves were a rarity. Footwear is so uncommon that one of the managers had never worn shoes in her life, and had to borrow some shoes to wear on the landfill.

- Working with councils to budget for and supply their workers with a uniform that included boots, and a high visibility vest. This was not just about safety but also improving their image with the public.
- Hazardous waste and medical waste — the workers commonly picked up blood soaked items, needles and expired drugs from the hospital. We worked with the Ministry of Health to separate the waste into three streams: office waste, green waste from the gardens and other wastes such as medical and drugs; which were then collected separately. We also arranged to clear the 'stockpiled' incinerated waste off the beach where it was stored.
- Developed a separate hazardous waste area to dispose of all of the island’s hazardous waste at one of the landfills where it was difficult for the public to access.
- Working with the Ministry of Health to inform workers about the health issues of working with waste and the care needed around medical wastes and the like. This was incredibly

important as up to 30 percent of Kiribati’s population has Hepatitis B. The workers were tested and immunised for Hepatitis B along with tetanus. Those workers with Hepatitis B, were given information on managing the disease and booked for regular checks. The Ministry also spoke about HIV and how it can be prevented from spreading ... the silence, expressions on the faces and the questions asked were priceless.

There’s still much room for improvement in Kiribati, but in just a short time the technical assistance program has made a real difference to the way they manage their waste. 🌍



Brett Way, is the Utilities Manager at Central Hawke’s Bay District Council.

► Grahame Christian (L), Managing Director of Smart Environmental & Glenn Leach, Thames-Coromandel District Council's Mayor at the MRF in Kopu.

COUNCIL NEWS



PALMERSTON NORTH, HUTT CITY + HAMILTON DISTRICT

Glass recycling services have taken off for three different local councils recently. In December 2012, Palmerston North City Council introduced two specially designed glass sorting trucks that enabled glass to be colour-sorted at the kerb. A year on, the new sorting process has resulted in an increase of more than 40 tonnes of glass per month. This is an impressive 42 percent increase in the volume of recovered cullet, which will be used at O-I NZ's Auckland manufacturing plant to make new jars and bottles.

In Hutt City, residents have proven willing to drop their glass recycling off and colour sort it themselves at the city's five public recycling stations. Transpacific Waste Management is getting ready to install more glass recycling bins around the city as residents get behind a drive to lift recycling figures. Transpacific has bins at the city's five public recycling stations, where bottles and jars can be separated into clear, green and brown glass. Four more bins are under construction.

"Separation at source is the key," says Des Fall, Seaview branch manager of the council's recycling contractor,

Transpacific. "When residents using our stations do the colour sort, our breakages drop right off – and that means we can recycle more product. Just as importantly, the number of cuts suffered by our sorting staff has fallen by 80 to 90 percent because the sorting is less intensive and there's less of it to do. It's a win for employees, the company and the environment."

Hastings District Council has also installed a new glass recycling container at the Martin Place Recycling Depot in Havelock North to meet seasonal demand. Hastings District Council Waste Minimisation Officer Dominic Salmon says "The amount of glass recycled at Martin Place traditionally increases by 60 percent over the festive season and this new, purpose designed 20 foot container will allow the operation to be more efficient by reducing the number of truck movements required to cater for this increase in demand." The new container will allow users to sort their recycling into brown, green and clear glass.

Palmerston North City Council website, Hutt City Council website and Hastings District Council media release

THAMES-COROMANDEL

A new materials recovery facility (MRF) has opened in Kopu, sharing the same site as the Carter Holt Harvey mill on Ngati Maru Highway. The MRF receives all of the recycled materials from the new kerbside wheelie bin recycling collection, which started in October 2013.

The facility is part of the kerbside recycling contract for Thames-Coromandel, Hauraki and Matamata-Piako District Councils, which has been awarded to Smart Environmental for 10 years. Through an automated and manual process, the recyclables are sorted into their types and grades and sent off to local markets. The facility will employ more than 10 people and will gear up to double that number during peak periods. The new collections in wheelie bins has seen a nearly 30 percent increase in volumes of recycling by weight and a commensurate reduction in waste to landfill. "We anticipate that the volume of recyclables will reach 10,000 tonnes per annum," says Grahame Christian, Smart Environmental's Managing Director.

Thames-Coromandel District Council media release

MARLBOROUGH

In one year, Marlborough people are generating more than 50,000 tonnes of waste. However with the kerbside collection service, the compost site run by Greenfingers, and the town's recycling facilities, Marlborough is managing to divert about a quarter of it. The Re-use Shop which is part of the Marlborough Resource Recovery Centre had more than 32,000 customers making small purchases last year. When a member of the public arrives at the shop a staff member assesses the materials they are looking to drop off. The shop only accepts items that can be realistically resold. Marlborough District Council is looking to establish additional re-use shops that will appear at other transfer stations across the region during 2014.

Marlborough District Council website

DO YOU HAVE COUNCIL NEWS TO SHARE?

These are your pages – email Jenny at jenny@wasteminz.org.nz



SECTOR GROUPS

Nic Quilty
Sector Projects Manager
nic@wasteminz.org.nz

BEHAVIOUR CHANGE

Work on the food waste reduction project is continuing. Sunshine Yates, of Waste Not Consulting, has compiled a report on existing information on domestic food waste in New Zealand and the sector group has been given permission from WRAP in the United Kingdom to use its methodology for conducting food waste audits, so that any New Zealand results could be compared to the extensive research carried out in the United Kingdom. Otago University then funded a trial of the methodology in December to enable it to be adapted to the New Zealand context.

A WasteMINZ technical working group has been set up to work on this project. The group met on 19 December to discuss the creation of standardised tools and templates, so that councils across New Zealand can conduct food waste audits using the same methodology and capture key attitudes and behaviours to food waste. At this stage 10 councils have expressed interest and obtained funding to conduct this research in 2014.

The sector group is also underway with a second project, which will look at aligning the colours of mobile waste containers.

This sector group has published six case studies promoting good practice in behaviour change on the WasteMINZ website.

CONTAMINATED LAND MANAGEMENT

The NES Working Group is preparing a strategy paper on the proposed contaminated land specialist accreditation scheme for the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner board. The strategy paper will outline the criteria and pathway for the scheme. The working group met on 17 February to finalise the paper and it will be tabled at the board's meeting in early March.

Consultation on the factsheets took place in early November and the technical working group will be meeting shortly to review the feedback and update the factsheets as required. Thank you for making the time to put forward your views.

The steering committee last met on 21 November 2013. At this meeting, they gave their feedback on the contaminated land management stream at the conference, discussed the recent NES workshop, finalised their work plan for 2014 and were advised of the timelines for the steering committee's upcoming election. The Call for Nominations closed on 24 February and candidates will be announced on 3 March. If you have an interest in this sector, please make sure you vote.

The committee's first meeting for 2014 was on 13 February and agenda items included progress on the proposed accreditation scheme

and factsheets and work plan priorities.

HEALTH & SAFETY

Consultation on *The Health and Safety Guidelines: for the Solid Waste and Resource Recovery Sector* is complete and the feedback has been reviewed by the technical working groups and consultants and incorporated into the guidelines. The guidelines are receiving their final edit and should be published within the next month. Work will then commence on developing part 5: landfills.

The steering committee's 26 November meeting was postponed until 18 February. Agenda items included the health and safety guidelines, the new workplace health and safety reforms, and the sector group's work plan.

LANDFILL & RESIDUAL WASTE

The project team for the *Technical Guidelines for the Disposal to Land of Residual Waste and Other Material* met on 12 November to continue to review the feedback from the consultation process. Two organisations that had given feedback via this process, also presented at the workshop. The project manager and WasteMINZ are in further discussions with a number of key parties, and WasteMINZ is committed to positively progressing the project.

Agreed feedback is being incorporated into the guidelines. Once this has been completed, the guidelines will be peer reviewed and edited. WasteMINZ is currently refining the on-going process, which will allow further consultation to be undertaken with a number of sectors. This will ensure an extremely robust document that will stand the test of time.

LIQUID & HAZARDOUS WASTE

The Liquid and Hazardous Waste Operators Certification Council's annual general meeting and quarterly meeting were held on 13 December 2013. The Chair's Report, Financial Report and Auditor's Report were presented at the AGM and the results of the recent election for the Certification Council were announced. The Certification Council members are Bruce Bain (Bains Liquid Disposal), Bruce Holland (Parkinson & Holland Ltd), Dave Perkins (Transpacific Industries Group (NZ) Ltd), Ron Salter (Waiheke Septic Tank Services Ltd) and Wayne Plummer (EnviroWaste Services Ltd).

Bruce Holland and Wayne Plummer were elected chair and deputy chair respectively at the Certification Council's quarterly meeting and Darren Patterson

(Patterson Environmental Ltd), Jennifer Leadley (Liquid Systems (2009) Ltd) and Charlie Tomlin were elected as advisors to the council. Other agenda items at this meeting were the Auditor's Report, tracking used oil, the council's work plan for 2014 and the upcoming Trade and Industrial Waste Forum. The next meeting is due to be held in March.


ORGANIC MATERIALS

A technical working group has been set up to undertake an initial investigation into the prevalence of *Legionella Longbeachae* in compost and potting mixes. The sector group's first meeting was held on 17 December. The group's steering committee is also working on a project to determine the appropriate standards and specifications for packaging that is compatible with New Zealand residual organic material processing technologies. An initial meeting of interested parties was held on 12 February 2014.

TA FORUM

The TA Forum's last teleconference for 2013 was held on 5 November. The Ministry for the Environment gave updates on the *Waste Levy Spending: Guidelines for Territorial Authorities*, territorial authority

levy payments, *TV TakeBack*, the waste disposal levy review and the Ministry's *Survey of territorial authorities' waste services and infrastructure*. Agenda items included the WasteMINZ conference, the TA Forum, the forum's 2014 work plan, Timaru District Council's ebook and e-waste.

The forum's first teleconference this year was on 11 February. A key agenda item was the structure of the forums. The decision was made to formally elect a steering committee, of up to eight members, to enable the forum to become more outcome-focused. The committee will be more strategically focused, advancing planning and issues and will meet quarterly. The teleconferencing forum will continue to exist, and will be open to all territorial authorities, enabling TAs to share information and bring issues to the table. This group will also act as a sounding board for the steering committee. The Call for Nominations for the steering committee will go out shortly to all territorial authorities that are WasteMINZ members. 




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EVENTS

5 MARCH

WASTEMINZ WORKSHOP IN PARTNERSHIP WITH SKM

Training Course: Strategic Planning and Alternative Waste Treatment

Novotel Auckland Airport

www.wasteminz.org.nz/news-events/events/training-course-strategic-planning-and-awts/

31 MARCH – 4 APRIL

STEP SOLVING THE E-WASTE PROBLEM

2nd EWAN (e-Waste Academy Managers' Edition)

Basel Convention Regional Centre for Central America and Mexico, El Salvador

www.step-initiative.org/index.php/about

3-4 APRIL

WASTEMINZ MID-YEAR ROUNDUP

Heritage Hotel, Queenstown

www.wasteminz.org.nz/news-events/events

5-9 MAY

IFAT

Trade Fair for Water Sewage Waste & Raw Materials Management

Munich, Germany

www.ifat.de/en/Home

6-8 MAY

WASTE 2014

Opal Cover, Coffs Harbour, New South Wales

www.waste2014.impactenviro.com.au/

8-9 MAY

PLASTICS NEW ZEALAND 70TH ANNUAL CONFERENCE

Queenstown

Contact: kelly@plastics.org.nz

6-11 SEPTEMBER

ISWA WORLD CONGRESS

Sao Paulo, Brazil

<http://iswa2014.org.nz>

17-19 SEPTEMBER

ENVIRO 14

Adelaide Convention Centre

www.enviroconvention.com.au/index2014.html

22-26 SEPTEMBER

ISWA STUDY TOUR

1 day seminar & 3 days of site visits

Austria

www.iswa.org/fileadmin/galleries/Study%20Tours/2014_Study%20Tour%20Collection/ISWA_ST_Collection_Sorting_Recycling_1.pdf

21-23 OCTOBER

WASTEMINZ ANNUAL CONFERENCE & TRADE EXHIBITION

Wellington

www.wasteminz.org.nz/news-events/events

10-14 NOVEMBER

7TH INTERNATIONAL CONGRESS ON ENVIRONMENTAL GEOTECHNICS

Lessons, Learnings & Challenges

Melbourne Convention and Exhibition Centre, Melbourne

www.7iceg2014.com

GOT AN EVENT COMING UP?

Let everyone know, email carole@wasteminz.org.nz

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GOLD MEMBERS



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Plasback
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Rubbish Direct Ltd
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Sims Recycling Solutions
www.apac.simsrecycling.com



SKM
www.globalskm.com



URS New Zealand Ltd
www.urscorp.co.nz



Viking Containment
www.containment.co.nz



Visy Recycling NZ Ltd
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WasteNet Southland
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