

Chairperson and Committee Members
STRATEGY AND POLICY COMMITTEE

6 SEPTEMBER 2018

Meeting Status: **Public**

Purpose of Report: For Information

SOLID WASTE UPDATE

PURPOSE OF REPORT

- 1 To provide an overview of the current solid waste situation and identify future issues for solid waste management.

DELEGATION

- 2 The Committee has the delegation to consider this matter under Section B.1 of the Governance Structure and Delegations: *This Committee will deal with all strategy and policy decision-making that is not the responsibility of the Council.*

BACKGROUND

- 3 The District's landfill at Otaihanga was closed in 2008 for general waste disposal. Limited quantities of clean fill are accepted to assist with the landfill capping process.
- 4 When the Otaihanga Landfill was closed, a 15-year lease agreement for the Otaihanga Resource Recovery Facility was entered into with Midwest Disposals¹. This lease runs until 2023. This facility accepts general waste and recycling.
- 5 Council also has a Resource Recovery Facility in Waikanae. This facility accepts green waste and recycling, but not general waste. This facility is operated by Composting New Zealand (CNZ) under an agreement that expires in 2019.
- 6 Council also has a Resource Recovery Facility in Ōtaki. This facility is leased to EnviroWaste/MidWest until 2023 and accepts green waste, general waste and recycling.
- 7 Under the agreements for both the Otaihanga and Ōtaki facilities the operators determine the final landfill disposal destinations for waste materials subject to the Resource Management Act (RMA), which precludes disposal to non-consented landfills.

¹ Midwest Disposals is owned 50% by Waste Management NZ Ltd and 50% by Envirowaste Ltd. Waste Management is ultimately owned by the Beijing Capital Group Co. Ltd, (a state-owned enterprise), and Envirowaste is ultimately owned by CK Hutchinson Holdings Ltd., a multinational conglomerate headquartered in Hong Kong.

- 8 Reasons the facility operators may elect to use specific landfill destinations will include transport distances, difference in landfill charges, commercial relationships and temporary closures typically due to adverse weather conditions.
- 9 For the year to June 2017, approximately 28,000 tons of waste was generated in the District. Around 60% of this went to Hokio Landfill (Levin), 20% to Bonny Glen Landfill (Marton) and 20% to Spicer Landfill (Porirua). In the year to June 2018, the waste levels were similar to that of 2017. Approximately 60% of this went to Hokio Landfill, 10% to Bonny Glen Landfill and 30% to Spicer Landfill.
- 10 Midwest also operates the Horowhenua District Council owned Levin Landfill at Hokio, and owns and operates the Bonny Glen landfill near Marton. Bonny Glen accepts waste from all of the lower North Island, including Whanganui, Taranaki, Palmerston North, and Wairarapa.

Solid Waste Bylaw and Kerbside Collection

- 11 Council's 2010 Solid Waste Bylaw creates a licensing regime for waste collectors and operators. There are currently four licensed operators for kerbside collection² and three licenced facility operators.
- 12 In 2012-13 after community consultation, Council made the decision to exit from providing kerbside collection services - at that time, there were three other contractors also providing the service across the District. The reason for this change was that alternative providers could provide more cost effective services, at a much lower rate than Council could match. This introduced a full user pays system for rubbish and recycling on the Kāpiti Coast. Under the current system, instead of every household having to pay a set portion of rates for a set of rubbish and recycling services, each household can choose the service they would like to use.
- 13 In a national context, Kapiti residents enjoy comparatively low kerbside collection costs.

Green waste

- 14 Greenwaste that is accepted at Otaihanga, Waikanae and Ōtaki is mulched and consolidated at Otaihanga for composting. This operation run by Composting New Zealand (CNZ) at a site on the Otaihanga Landfill leased from Council until 2022. CNZ sets the gate fees for greenwaste disposal at Otaihanga and Waikanae and Envirowaste sets the gate fees for Ōtaki.

Class 1 landfill sites

- 15 The Wellington region has three Class 1 landfills (landfills that accept general waste), Southern Landfill in Wellington, Spicers in Porirua, and Silverstream in Lower Hutt. There are also class 1 landfills in Hokio and Bonny Glen.

² EnviroWaste (also trading as Clean Green and Budget Waste), Low Cost Bins (also trading as Skip-E-Bins), Lucy's Bins (backdoor collection service), and Waste Management (previously trading as Transpacific).

16 Table 1 - Class 1 landfills near Kāpiti

Name	Owner	Operator	Distance from Kāpiti km
Levin	Horowhenua District Council	Midwest Disposals	42
Bonny Glen	Midwest Disposals	Midwest Disposals	111
Spicers	Porirua City Council / Wellington City Council	Porirua City Council / Wellington City Council	42
Silverstream	Hutt City Council	Hutt City Council	52
Southern	Wellington City Council	Wellington City Council	64

- 17 The Levin landfill at Hokio is owned by Horowhenua District Council, who is responsible for management of the site. There has been publicity about the Levin landfill's compliance with its consent conditions, particularly relating to odour discharges. Horowhenua District Council has confirmed the landfill is currently compliant with its resource consent conditions and Horizons Regional Council are responsible for addressing any future non-compliance issues.

Economics of recycling

- 18 Relatively little waste is completely non-recyclable, but the economics of recycling different waste streams vary considerably³. Generally speaking, metals and paper/cardboard have reasonably good markets but the economics for glass and plastics can be challenging, especially if they have any degree of contamination. Where there are no economic markets this can lead to stockpiling in the short term, and in a worst-case scenario, the need to landfill recyclables or limit the range of materials collectors will accept.
- 19 Over the past few months there has been media reporting of the decision by China to stop accepting recyclable waste streams from other countries. Hong Kong, Indonesia, Thailand, Malaysia, and Vietnam are also significant purchasers of New Zealand recycled materials especially plastics⁴. This is significant because of the marginal economics of some types of recycling, ie. the economics are supported by access to markets where the processing can be done in low-wage countries.

Waste Minimisation Fund

- 20 The Waste Minimisation Act 2008 introduced a Waste Disposal Levy (Levy) of \$10 per tonne of waste to landfills that accept general waste. The funds resulting from this Levy go into a Waste Minimisation Fund to support waste minimisation activities at national and local levels, 50% being returned to local authorities based on population. The Levy currently generates approximately \$35 million per

³MoE, 2007. *Recycling: Cost Benefit Analysis*. Ministry for the Environment. Retrieved from: <https://www.mfe.govt.nz/sites/default/files/recycling-cost-benefit-analysis-apr07.pdf>.

⁴ of the 41,000 t of grade 3 to 7 plastic exported in 2017, the volumes were: China 7,000 t Hong Kong 13,500 t, Indonesia/Thailand/Malaysia/Vietnam 19,000 t.

year. Waste levies are common in developed countries and typically range from between \$50 to \$150 per tonne of waste.

- 21 Criteria for Levy funding at a national level include requirements that projects must promote or achieve minimisation of waste, but funds are not for ongoing financial support of existing activities with an expectation that after three years activities will be self-funding. The Levy has also been used to respond to waste issues resulting from the Christchurch and Kaikoura earthquakes. In 2017 \$19m from the Levy was directed specifically at programmes to recycle tyres and reduce stockpiles of them, including being used as fuel for cement production, crumb rubber products, and used on roads, etc. However, in general the Levy is not of sufficient scale to subsidise recycling on an industry wide basis.
- 22 Council gain approximately \$200K per year from this Levy, which must be used to minimise waste in accordance with the action listed in the Waste Management and Minimisation Plan (WMMP).
- 23 The WMMP is the key Council policy document for solid waste management. This plan highlights issues including:
 - a steady increase in waste volumes per capita
 - poor quality data, especially relating to the composition of waste volumes at landfills
 - relatively poor recycling performance compared to the rest of New Zealand
 - scope for greater consistency in Council solid waste management.
- 24 The WMMP sets out a range of options to address these issues with the primary regional target of a reduction in the total quantity of waste sent to Class 1 landfills from 600 to 400 kg per person per annum by 2026. It also addresses:
 - developing and implementing regionally consistent solid waste bylaws
 - more consistent and effective communications and education around waste services and waste minimisation
 - determining and where feasible optimising collection services so they maximise diversion and are cost effective to communities
 - investigating and, if feasible, developing a region-wide resource recovery network
 - collaborating with key stakeholders on issues such as product stewardship, electronic waste, tyres, and plastic bags.

Waste minimisation activities

- 25 Council seeks applications annually for waste reduction activities funded through the Levy and runs several other programmes to promote and support waste minimisation.
- 26 However, the overall economic incentives for waste management and minimisation are largely driven by factors out of Council's area of responsibility and control, such as the cost of landfill disposal, economics of recyclables and the setting of the Levy.

Mayoral Task Force

- 27 As part of the 2018 Long Term Plan Process it was agreed to establish a Mayoral Taskforce on Solid Waste Management and Minimisation. The purpose of the Taskforce is to review the actions listed in the WMMP, and report back to Council on how these actions can be implemented to reduce the volume of waste materials in the District.
- 28 Terms of reference are currently being developed for the Mayoral Taskforce with a view to establishing the taskforce later this calendar year.

ISSUES AND OPTIONS

Potential changes to national waste policies

- 29 Over the past few years New Zealand's waste volumes have been increasing. There are several reasons for this including increased economic activity, weak economic incentives to recycle or reuse materials, greater housing construction waste, time-poor consumers who are not prepared to separate out recyclables and lack of education about the benefits of recycling.
- 30 The Levy is currently a relatively weak incentive to reduce waste volumes. If a class one landfill is charging \$150 per tonne, an additional \$10 per tonne is a 7% cost increase. Potential downsides cited to a higher Levy have included increases in illegal dumping, distortion of recycling markets, the impact on product stewardship schemes, and creating greater incentives to divert to non-levied Class 2 to 4 (construction and demolition and/or monofill) landfills.
- 31 Economic instruments that could be used to create greater incentives to minimise waste and encourage recycling include:
- unit-based pricing measures for waste collections, e.g. pay per bin empty
 - deposit-refund schemes for containers such as bottles and cans
 - producer responsibility schemes (product stewardship) to take back and recycle goods at the end of their life
 - waste levies including charges on specific products to govern their disposal.
- 32 Recently the Government has announced it intends to consult on waste minimisation policies in several key areas including:
- banning single use plastic bags
 - increases in the Levy and extending the levy to Class 2 landfills
 - enhanced product stewardship schemes
 - mandating more comprehensive data gathering of waste volumes.
- 33 Because of the complexity of some of these areas and the need to consult, the policy development may take some time. For example, a ban on single use plastic bags may not be introduced until the beginning of 2019 and Levy increases until early 2020.

Landfill standards

- 34 Higher standards for solid waste management, the difficulties of finding suitable landfill sites along with maintaining economic and environmental viability are leading to a consolidation of landfills, ie. larger, purpose-built, best practice landfills. In the last 25 years the number of general waste landfills in New Zealand has decreased from around 400 to 50. There have also been some significant changes in terms of landfill ownership over this period with a shift from Local Authority ownership of landfills to where corporate interests now own around 50% of New Zealand's landfill capacity.

'Cross-border' disposal

- 35 Disposing of waste from one community in another geographically separate community may create issues including the possibility that Iwi may regard this as culturally offensive. As noted earlier in this report, the move to fewer and larger landfills following the introduction of the RMA means that cross border disposal of waste is a national issue.

Responses to national policy changes

- 36 If the national policy settings around waste management and minimisation change significantly, it may impact on the Council in several areas.
- 37 Reduced use of single use plastic bags is mainly an issue between suppliers of goods and consumers, and will reduce the amount of litter in the environment.
- 38 Increases in the Levy, particularly significant increases, along with product stewardship schemes should reduce waste volumes. An increased Levy should also increase the volumes of materials recycled as waste generators or collectors look to avoid paying increased Levy charges by recycling or diverting more material away from landfill.
- 39 Any increase in the cost of landfill disposal has the potential to increase fly tipping, although in the past, increases in landfill charges have tended to result in a short duration spike in this activity, and then a return to background levels.

Renewals of existing waste management licenses and agreements

- 40 Council is reliant on market competition in terms of commercial and kerbside collection, and management of the resource recovery facilities.
- 41 Barriers to entry for kerbside collection are relatively low, although collectors are still ultimately dependent on the ability to pass the material on to a recycling or landfill operator.
- 42 As noted, the major contracts for the resource recovery facilities expire in 2023. As this date approaches, Council will consider the range of options available.

New within-district landfill sites

- 43 If Council's solid waste objectives were not being met then Council could potentially consider establishing a new landfill within the District. There would be considerable difficulties involved in identifying and purchasing a suitable site (millions of dollars), and very significant consenting costs (millions of dollars), with no certainty of landfill consents being granted.

- 44 Additionally, should Council become a landfill owner it would need to source and secure increased waste volumes, including out of district waste. The economics of landfills are based on economies of scale (gaining increased waste volumes) and there are already five reasonable sized landfills in relatively close proximity that compete for waste.

CONSIDERATIONS

Policy considerations

- 45 Addressed elsewhere in this report.

Legal considerations

Legislation

- 46 Management of Solid Waste in New Zealand is primarily governed by the Waste Minimisation Act 2008, underpinned by the New Zealand Waste Strategy. This Act identifies a number of measures available to government based on the 5R's (reduce, reuse, resource recovery, recycle, and residual disposal).
- 47 The New Zealand Waste Strategy has two goals:
- Reducing the harmful effects of waste
 - Improving the efficiency of resource use.
- 48 The Local Government Act 2002 requires that Council must have particular regard to the contribution that solid waste collection and disposal make to its communities.

Financial considerations

- 49 One primary driver for this report is the current discussion regarding the disposal of waste from the District into the Hokio Landfill in the Horowhenua District. In other words the appropriateness of cross boundary disposal of waste and/or the selection of a preferred disposal site. Two possible alternatives to the current practice of disposing the bulk of Kāpiti's waste to the Hokio Landfill are:
- establishing a new landfill within the District
 - variations to existing agreements (terminating in 2023) at Otaihanga and Otaki to require those operators to dispose of waste at other landfill sites.
- 50 The cost and practicality of establishing a new landfill have been addressed earlier in this report. The cost of varying existing agreements to allow Council to determine the final disposal location of waste is difficult to determine, but likely costs would include:
- additional transport costs incurred by the operators
 - the costs that operators may incur in breaking existing transport and disposal contracts

- possible legal and other costs incurred in attempting to vary existing contracts or should future designated landfill destinations be subject to significant operational cost changes.

While it is difficult to quantify these costs, they are likely to be considerable.

51 The cost of kerbside waste and recycling collections are funded via a user pays system. The remainder of the Solid Waste activity is funded by both user pays charges and by rates. Key Council Solid Waste operating expenditures are:

- kerbside waste and recycling collections (users pays system)
- administration and management of agreement and leases, dealing with complaints and fly tipping (approx. \$200k)
- public place waste receptacles management and waste disposal costs (approx. \$500k)
- post-closure operating costs for the closed Otaihanga, Waikanae and Ōtaki landfills (approx. \$200K per year).

Tāngata whenua considerations

52 Tāngata whenua have consistently expressed their concern over the disposal of the waste generated in our District being deposited into the Hokio Landfill.

53 In response to submissions to the 2017 LTP Council made a commitment to investigate future waste disposal options as part of the resource recovery operation agreements, prior to the expiring of these agreements in 2023.

Significance policy

54 This information only report does not trigger Council's significance policy.

Consultation already undertaken

55 No consultation has been undertaken specific to this information only report.

RECOMMENDATIONS

56 That Council notes this report.

Report prepared by	Approved for submission	Approved for submission
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Adrian Mitchell

**Solid Waste Services
Manager**

Kevin Black

**Acting Group Manager
Strategy & Planning**

Sean Mallon

**Group Manager
Infrastructure Services**