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Horowhenua District Council C/i Catalyst Group Level 3, 31 George Street Palmerston North 4440

Attention: Greg Carlyon

Dear Greg

Levin Landfill Closure Review - Financial Considerations

#### 1 Introduction

Horowhenua District Council (HDC) has engaged Tonkin & Taylor Ltd (T+T) to undertake a review of issues related to early closure of Levin Landfill. This report provides a summary of our review of the financial implications associated with closure of Levin Landfill.

This letter report is complemented by a separate report that provides a summary of our review of technical and engineering challenges associated with closure of Levin Landfill. We have also completed analysis of best practicable options (BPO) for the closed landfill on the same site.

The discussion presented here focuses on financial aspects of the existing Levin Landfill operation and potential future arrangements. The report provides:

- Discussion on the approach to developing scenarios
- A summary of the outcome of the analysis.

This review has been completed in accordance with our Letter of Engagement dated 25 July 2019 and consistent with the Agreement in Relation to the Levin Landfill (Landfill Agreement) dated 13 March 2019<sup>1</sup>.

## 2 Approach

The focus of the analysis presented in the report is aid understanding of the financial implications of closure of Levin Landfill. In considering financial impacts we have looked at the Council's position after income and expenses are considered. We have also considered likely costs to current users of the Levin Landfill including households and businesses. In many cases an intermediary is involved, for example a waste collection company, commercial cleaner or Council contractor.

<sup>&</sup>lt;sup>1</sup> Environment Court, 2019, "Agreement in Relation to the Levin Landfill" Horowhenua District Council, Hokio Environmental Kaitaiki Alliance Incorporated, Horowhenua District Ratepayers and Residents Association Incorporated, s274 Parties" 13 March.

It is important to note that considering future costs requires forecast of waste quantity, future pricing and the cost impact of policy and market movements. This means it is more helpful to present potential ranges for costs and prices than identify specific costs.

It is also useful to note that new arrangements will be required once the current contract is completed (mid 2021). The current arrangement includes the contractor taking waste from Kapiti District. This is unlikely to continue with both the contractor and Kapiti Coast District Council looking for alternative options for disposal of that waste. The cost of disposal of the Council 'controlled' waste (Council kerbside collection, Foxton/Shannon transfer station and wastewater solids) is included in the landfill operations contract.

#### 2.1 Cost to Council

The Levin Landfill has a significant impact on Council finances through both costs and revenue. Key cost or revenue items include:

- Contribution to Council general overheads from the landfill activity<sup>2</sup>.
- Monitoring and maintenance costs.
- Landfill operation costs.
- Aftercare provision (during landfill operations).
- Depreciation, rates and consent fees.
- Disposal revenue or costs.

Some of these items will apply whether the Levin Landfill is accepting waste or not. Others will change depending on the future scenario.

### 2.2 Scenarios

We have considered two scenarios. For each scenario we have made a series of assumptions that have an impact on the outcome of the analysis. These assumptions are noted below.

Scenario 1 - Close Levin Landfill in 2021.

This scenario involves Levin Landfill ceasing operation from mid 2021 when the current operations contract expires. Key points to note in this scenario include:

- Most waste from the Horowhenua Region will continue to pass through a transfer station at Levin³, Foxton⁴ or Shannon⁴.
- Waste controlled by Council will be disposed of at a commercial landfill<sup>5</sup>.
  - Costs reflects transport distance and gate rate.
  - We have modelled a range of gate rates range from standard rates to a significant discount (\$100 \$177 per tonne including transport).
  - Waste from Council's wastewater treatment plants is treated as special waste, requiring immediately burial on receipt at landfill. This will attract a higher disposal cost than general waste as a result of this special handling requirement.

<sup>&</sup>lt;sup>2</sup> The cost of Council overheads (Councillor salary, meeting costs, general administration, Council building) are shared across all Council activities. This means the Landfill activity currently contributes to cost of these general activities.

<sup>&</sup>lt;sup>3</sup> Owned and operated by MidWest Disposals Limited

<sup>&</sup>lt;sup>4</sup> Owned by Council and operated by a Council contractor (Low Cost bins Limited)

<sup>&</sup>lt;sup>5</sup> This will be a new cost for Council, currently these disposal costs are covered by income from the Levin Landfill operations. The existing landfill operations agreement includes the cost of disposing Council controlled waste material, offset by payment for the disposal of other tonnes (not controlled by Council).

- Some costs associated with Levin Landfill will remain, namely:
  - Site maintenance and monitoring.
  - Depreciation of the landfill asset (required under local government accounting rules)
  - Rates on the landfill property.
  - Internal charges within Council a contribution from the landfill activity revenue to cover Council general overheads. If these costs are not covered by the landfill activity revenue they will need to be covered from elsewhere.

The costs are modelled with an increase each year to account for increases in the cost of labour, fuel and other operational costs.

The cost of disposal for households or businesses will reflect the cost of transport and disposal. While large waste generators may be able to negotiate special rates, most businesses and all householders will be paying market rates. These are likely to be similar to existing rates<sup>6</sup> with allowance for cost escalation over time. With a single commercial landfill servicing the lower North Island there is a risk that gate rates will increase significantly over time.

Scenario 2 - Levin Landfill continuing operation.

This scenario involves Levin Landfill continuing operation after mid 2021 when the current operations contract expires. Key points to note in this scenario include:

- Most waste from the Horowhenua Region will continue to pass through a transfer station at Levin, Foxton or Shannon.
  - Waste from the Council controlled transfer stations (Foxton and Shannon) will continue to be disposed of at Levin Landfill.
  - Waste from Council refuse collections (refuse bags) will be transported directly to Levin Landfill.
  - Waste from Council wastewater treatment plants will continue to be disposed of at Levin Landfill with appropriate special handling.
  - Waste accepted at Levin Transfer Station<sup>7</sup> is likely to be transported out of Horowhenua for disposal.
  - Some other waste is disposed of at Levin Landfill with both the quantity of waste and landfill gate rate uncertain.
- We have assumed operational costs will be similar to the current contract despite a significant drop in the quantity of waste accepted i.e. the cost per tonne will increase.
- Costs associated with the landfill operation will remain, including:
  - Landfill management and operation.
  - Site maintenance and monitoring.
  - Depreciation of the landfill asset (required under local government accounting rules)
  - Rates on the landfill property.
  - Internal charges within Council a contribution from the landfill activity to cover Council general overheads.

<sup>&</sup>lt;sup>6</sup> Based on published rates for out-of-district disposal in Kapiti and Palmerston North, similar to current rates in Horowhenua.

<sup>&</sup>lt;sup>7</sup> Owned and operated by MidWest Disposals Limited who also own and operate Bonny Glen Landfill in Marton. They have indicated a preference to use this landfill once the current waste disposal agreement has expired.

- Charges for disposal of additional waste at landfill will provide revenue to Council. This disposal rate is uncertain, we have modelled \$90 \$110 per tonne. Pricing will need to be low enough to attract enough waste but high enough to provide a return to Council.
- The quantity of 'other' waste is uncertain, we have modelled 5,000 10,000 tonne per year. The quantity of 'other' waste will be related to disposal charges including any significant transport component.
- Some material currently disposed of at Levin Landfill is likely to be transported out of the area for disposal, for example from Levin Transfer Station and Kapiti District.

The costs are modelled with an increase each year to account for increases in the cost of labour, fuel and other operational costs.

Council will also receive revenue for waste disposed at Levin Landfill. This revenue is modelled with a small escalation each year. There is significant uncertainty in the quantity of waste accepted and disposal charges. In this scenario It is possible that Levin Landfill will complete with Levin Transfer Station<sup>8</sup> with a lower cost of disposal likely to result in more waste accepted. For this scenario a range of waste quantity and revenue assumptions have been sued to reflect this uncertainty.

The cost of disposal for households or businesses will reflect the cost of transport and disposal. While large waste generators may be able to negotiate special rates, most businesses and all householders will be paying market rates. These are likely to be similar to existing rates<sup>5</sup> with allowance for cost escalation over time. With a single commercial landfill servicing the lower North Island there is a risk that gate rates will increase significantly.

# 3 Analysis

The two scenarios were subjected to analysis considering costs and revenue accruing to Council. Consideration was also given to likely impact on disposal rates charged to households and businesses in the Horowhenua District. Figure 3.1 presents a summary of annual costs for the two scenarios with a range for each scenario. The outcome of the analysis for each scenario is discussed below.

<sup>&</sup>lt;sup>8</sup> Levin Transfer Station is owned by MidWest Disposal Limited, it is likely that they will transport waste to their landfill (Bonny Glen Landfill) near Marton.

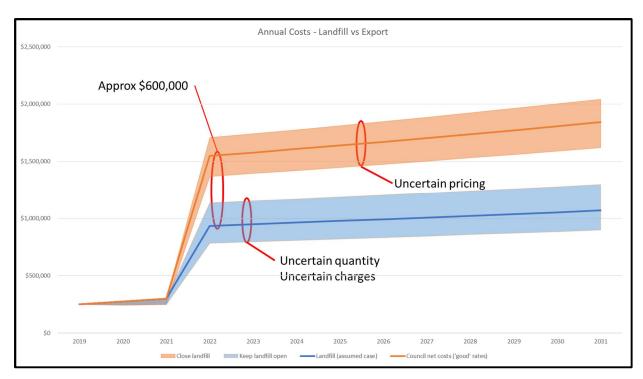


Figure 3.1: Annual Costs to landfill

Scenario 1 - Close Levin Landfill at 2021.

Scenario one involves the closure of Levin Landfill for all waste from mid 2021. Points to note for this scenario include:

- Final capping of the operational landfill will need to be undertaken as a single capital project (approx. \$2M).
- Council should be able to negotiate a long term deal for disposal of the waste they control.
- Households and businesses will be charged market rates, currently \$192.50 per tonne (incl GST) at Levin Transfer Station<sup>9</sup>.
- The additional cost to Council in 2021 compared to current cost was modelled as \$1.2M per year (range \$1.0M to \$1.4M).

Scenario 2 - Levin Landfill continuing operation.

Scenario 2 involves continuing operation of Levin Landfill, accepting Council controlled waste alongside other waste generated by Horowhenua businesses and residents. Points to note for this scenario include:

- Council can set the disposal costs taking into account costs (to Council and to Horowhenua businesses and residents) and revenue. The modelling has assumed rates lower than current market rates
- The additional cost to Council in 2021 compared to current cost is modelled as \$0.6M per year (range \$0.4M to \$0.8M).

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<sup>&</sup>lt;sup>9</sup> The rate at Levin Transfer Station tends to rise in line with MidWest Disposals operating costs. MidWest Disposal currently control transfer stations and disposal from Kapiti to Ruapehu including Whangaui and Taranaki, Tararua and Wairarapa.

Key differences between scenarios

There are a number of key differences between the scenarios considered. In presenting the cost ranges we have highlighted that neither scenario is certain. Key differences include:

- Continuing to operate the Levin Landfill provides income for Council, but with uncertainty. It
  is possible Council would need to adjust pricing to secure 'other' waste in competition with
  alternative disposal options.
- Export of waste provides will provide better cost certainty assuming a long term deal can be negotiated.
- Continuing operation of Levin Landfill enables Council to set their cost of disposal in the District, exporting waste removes Council's ability to influence this.

As noted in Figure 3.1, the difference between the two scenarios is \$0.6M per year (difference in the range \$0.25 to \$0.95M). This reflects the impact of revenue from 'other' waste and the cost to Council for disposal of Council controlled waste. It is important to note that the modelling also predicts a significant shift in costs for Council if Levin Landfill continues to operate after 2021, modelled as \$0.6M in 2022.

To provide an indicator of scale, Council current collects around \$40M in rates each year. \$0.6M represents 1.5% of the annual rates revenue. This means continuing operation of Levin Landfill will involve a 1.5% increase in rates. Export of waste will involve an increase of 3% over the total change in Council costs.

Costs to businesses and household are difficult to predict, the difference between the scenarios is in who is in control of disposal rates.

#### 4 Conclusion

From a Council finances perspective, the analysis presented here indicates that continued operation of Levin Landfill is a preferable option. This reflects likely market rates for disposal of Council controlled waste elsewhere and modelled revenue to Council from ongoing landfill operation.

For businesses and households future pricing is difficult to predict. Continued operation of Levin Landfill enables Council to retain influence of disposal rates in Horowhenua District.

Regardless of the option selected, Council will spend more on solid waste management from 2022.

#### 5 **Applicability**

This report has been prepared for the exclusive use of our client Horowhenua District Council, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

Tonkin & Taylor Ltd

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