

Hakaru Closed Landfill leachate treatment improvements

Meeting: Kaipara District Council
Date of meeting: 30 Sept 2020
Reporting officer: Donna Powell, Waste Minimisation Leader

Purpose/Ngā whāinga

The purpose of this report is to gain approval from Council for the allocation of \$550,000.00 to complete the Leachate treatment improvements at the Hakaru Closed Landfill and to gain approval to complete the tendering and contract award process.

Executive summary/Whakarāpopototanga

Council has been striving for some time to find a viable and long-term solution for leachate treatment and disposal at the Hakaru closed landfill. The current situation of offsite disposal is not cost-effective for ratepayers and with the effects of climate change there is high risk of overflows and pollution to the surrounding area.

The physical works were originally programmed for Year one of the 2018/28 LTP (a budget of \$800,000 was approved during the LTP process), however this was deferred after the original design came in too expensive at \$862,000 plus \$56,000 per annum ongoing costs, so a more economical solution was sought. In order to do this a trial had to be run over a 3-month period and reliable flow data had to be gathered over all seasons of the year. Pattle Delamore and Partners (PDP), the consultant hired to carry out the investigation, has completed the trial and designed a new option. They completed the design and Engineer's Estimate a Resource Consent for the works has been granted by the Northland Regional Council (NRC).

For some years now Council has been provisioning for this project, originally provisioning for up to \$5 million as it was then deemed that we may need to remove all the refuse from this site and dispose to another landfill, however this is no longer considered an option, meaning that the solution will come in considerably cheaper than first anticipated.

The requested \$550,000.00 is broken down as follows:

\$ 294,163.06	Separable Portion 1 (Trickling Filter)
\$ 125,880	Separable Portion 2 (Wood chip Bed if required)
\$ 62,600	Management Surveillance and Quality Assurance (MSQA) requirements including Council Contract Admin
\$ 67,356.94	Contingency
\$ 550,000.00	TOTAL

Recommendation/Ngā tūtohunga

That the Kaipara District Council

- Approves the allocation of \$550,000.00 from the Hakaru Leachate Provisioning Reserve and approves the tender and contract award process to complete the physical works for the Hakaru Closed Landfill Leachate Treatment.
- Approves the attached Business Case/Procurement Plan
- Delegates the Chief Executive to approve the contract for award once the tender process is completed.

Context/Horopaki

Due to the unviability of the current leachate removal at the Hakaru Closed Landfill Council through its then professional services MWH consultants began to explore what options and solutions were available. In 2015 five options were identified for Council to pursue, the commissioners were presented with a report outlining the five identified options with Council staff recommending a combination of option 3 & 4. The options explored by MWH were:

- Option 1:* Offsite treatment and disposal
- Option 2:* Offsite land application of leachate
- Option 3:* Discharge to surface water via a planted area, planted drain, and constructed wetland
- Option 4:* Discharge to surface water via a constructed wetland
- Option 5:* Removal of the Landfill

In 2016 Pattle Delamore Partners Ltd (PDP) were engaged to complete a design and identify & remedy any other requirements prior to installation, Resource Consent was granted in 2019 with the intention of starting the physical works in Year 1 of the 2018/28 LTP, however the first design presented by PDP was excessive and too expensive, this had partly occurred due to the lack of data from the site, so a decision was made to complete a trial that would identify if a lower cost option would be suitable for the treatment required and upgrade the telemetry so that accurate data could be gathered about the quantity of leachate. This has paved the way for a considerably cheaper option to be designed, this design has been approved and Council is now ready to commence the tendering process and complete the physical works.

Discussion/Ngā kōrerorero

Options

Option 1: Council approves the allocation of up to \$550,000.00 and approve the tender process and contract award.

Option 2: Council does not approve the allocation of up to \$550,000.00 and approve the tender process and contract award.

The recommended option is **option 1**.

Policy and planning implications N/A

Financial implications

Council has been provisioning for the Hakaru Closed Landfill Leachate Treatment Improvements for some time now, there would be no unexpected implications. The budget was approved in the LTP but was removed from the Annual Plan as there was still work to complete with the trial and there was no certainty as to how long the trial would need to run before satisfactory results would be obtained.

On completion of this project there will be an expected operational budget savings of \$150K – 180K per year.

Risks and mitigations

The continued use of the current system of trucking leachate offsite will become unsustainable, there is also the chance of accidental discharge of untreated leachate to land and surrounding waterways. It should be noted that this was never meant to be a permanent solution.

Significance and engagement/Hirahira me ngā whakapāpā

Due to expenditure being more than \$300,000 of unbudgeted expenditure in the Annual Plan, this project triggers the significant and engagement policy, however this project has also been previously consulted on as part of the LTP 2018/28 process. We recommend that the Council does not consult again on this project.

Next steps/E whaiake nei

If approved the tendering and contract award process is completed with physical works completed in the 2020/21 financial year.

Attachments/Ngā tapiritanga

A	Business Case and Procurement Plan