

## Minutes

### **Redvale Landfill Community Liaison Committee Meeting Held at the Redvale Landfill Office - Monday 22/02/2016 at 6.30pm**

Site Tour: 6.30pm

Welcome: Deborah de Witte

Present: D.Hardy, B.Gibbs, B.Earwaker, M.Kunzli, N.Donovan, J.McLean, D.Marshall, K.Storie, R.Bailey, A.Vosper, M.Kennedy.

Apologies: R.Crocker, M.Drury, R.Leinwand, S.Walker, C.Wills, M.Bradshaw

Absent: nil

Minutes of previous meeting circulated.

Matters arising:

- Generation noise monitoring report attached. – A.Vosper to send to AC-Tim Ongley.
- King Plantation cycling tracks – Five tracks from beginners' to advanced are completed. The final stage is underway with signage, fencing and gates for security from the landfill and car parks to be marked. Community members will have access off HB Rd following along the Paper Rd by the beginning of the winter months. A club will be formed over the coming months, with the overall maintenance of the tracks being provided by WM. J.McLean noted that this project was a very generous one for WM to provide to the local community and to be able to cycle amongst the trees is of big value to all.
- Leachate Evaporator – review of timing for replacement evaporator – currently undergoing technical reviews to treat leachate. Process is underway with the next stage of design to move forward.
- Website is up and running with an electronic form available for complaints. B.Gibbs commented that it was difficult to get to the Redvale Community section and did not see the relevance of going thru the Sustainability section to get there and it should not be so difficult to have to follow a list of directions to get to the right location. A.Vosper to check to see on the possibility of a quicker/easier access to the Community page.

#### **Standard Website location**

<https://www.wastemanagement.co.nz/>

Click on Sustainability

Scroll down click on Sites

Scroll down click on the red tab Visit our Community Page

## Quick Link to Minutes & Complaints Form

<https://www.wastemanagement.co.nz/site/redvale-energy-park-community/>

Click on Liaison Committee

“click here” to download minutes

ID: RCLG

Password: RCLG

Complaints – click on the red Feed Back tab

### Correspondence In:

20/02/16 - Letter of resignation from Roger Sorensen.

**Correspondence Out: nil.**

### Operations report:

- Disposal

Filling commenced in PH19 in November and will continue until full up to RL 85. Fluff layer placement proceeded quickly and uneventful, as we brought the second lift across almost simultaneously. This was a significant change in operation, aimed at minimising odour.

An area will be left for ease of entry into Ph20a which should be ready in May.

The annual de-silting program has started with the first three sediment ponds completed. Will continue on next run of dry weather.

- Managed Fill was opened back up at the end of last year with volumes steady. Approximate 10 year life up to 450m<sup>3</sup> and currently sits at approximately 16%.
- Site Development - The second wheel wash is fully operational.

Second section of paved roading has been laid between the two wheel washes and also 50 meters up the landfill haul road, as well as the section of road adjacent to the SE end of the Trotting track.

Clay and top soil are coming in and being used to cover eastern and northern batters to finish design, including thickening cover for planting.

- Odour Management – Equipment and personnel dedicated to the systems: normal tee bar, high tee bar and odour cannons. One hired and one owned; hired unit will be replaced when the new unit arrives from overseas in the second quarter. Experienced a few problems in the early part of the new year with a defective pump on the high tee bar line, but this has since been resolved.
- Energy – The acoustic wall adjacent to the generators was completed before Christmas. Generator services coming up which will be a good test on lifting the barrier wall for generator access.
- Complaints circulated – see attached

Action

- Regulatory Issues: N.Donovan reported site visit two weeks ago, with a small leachate outbreak which was contained quickly and within the boundaries, so environmentally is up to standard.  
B.Gibbs reported there is noticeable amount of noise reduction with the new generator acoustic walls installed and does not require further monitoring, however, Richards Rd monitoring is required.

**N.Donovan**  
**A.Vosper**

**Current issues:**

- Property – 125 HB Rd house is to be demolished and area to go to grazing. Part of the garage will remain for storage of hay bales.
- Generation noise update – covered earlier.
- Time extension consent renewal update – to 2028 with no further appeal from WM final conditions to come from the Environment Court. WM has already started working on new consent requirements prior to the final decision being issued. Website to be updated with new consent date.
- Other developments – B.Gibbs reported media info that Puketutu Island has an Anaerobic Digester and wanted to know the implication to Redvale.

**A.Vosper**

“Living Earth, a division of Waste Management, received consent last year to expand our composting facility on Puketutu, enabling us to incorporate food waste into the compost we produce by using in-vessel processing. Attached is a brochure which provides further details.

The Living Earth consent is not related to the OIO requirement for an AD facility at Redvale, which has not changed. Should there be any change to that requirement, we will provide an update to the committee.

**A.Vosper**

**General Business:**

Letter of resignation acceptance and thanks for service to R.Sorensen.

**M Kunzli**

Managed Fills – B.Gibbs requested monitoring quality of water from King Property. J.McLean reported he is working on the issue of managed fills and wants to push for managing them better as Council currently does not have the many resources required.

**A.Vosper**

H&S Act 1<sup>st</sup> April will have considerable impact on Redvale but it is business as usual as WM is well placed with the new rules.

B.Gibbs – Gorse near his property at Richards Road to be cleared.  
Starting to experience short intermittent bursts of odour in the last 3 weeks. Generator noise is considerably reduced but more operational noise can be heard.

**A.Vosper**

D.deWitte – Odours at Tender Rd property are starting to come back. Today Monday 22/02/16 odour intermittent and said it was not practical to keep a journal of all odours as could be some distance from house at any time around the property.

A.Vosper confirmed humidity does tend to bring out the odour.

Council Complaints – Not all Council complaints are being recorded with the WM register. Air discharge council person to co-ordinate consistent records. N.Donovan to check with council complaints to arrange co-ordination of a report to come thru to WM and also to be included in the Peer Review reports.

**N.Donovan**

Next meeting: Monday 23<sup>rd</sup> May 6.30pm.

2016 remaining meeting dates:

- 15 Aug
- 17 Oct (6.30pm starting with site tour)

Meeting Closed: 9.05pm

16 February 2016

Waste Management NZ Ltd  
Landfill Access Road  
Dairy Flat  
Auckland 0794

**Attention: Rob MacFarlane**

Dear Rob

**REDVALE ENERGY PARK NOISE BARRIER**

Marshall Day Acoustics has been involved with the Redvale Landfill re-consenting project since 2013. Condition 52 (iii) of the granted resource consent (subsequently appealed by WMNZ) required the construction of a 4.5 metre high noise barrier to mitigate noise from the existing bank of electricity generators located in the Energy Park.

On 11 February 2016 we visited the site and inspected the Energy Park noise barrier. It stands at 4.8 metres high, is located at the southern end of the compound, and runs the length of the generators but also with some overlap at either end.

Noise level measurements at various locations and distances before and after installation of the barrier indicate that it is performing as predicted by noise modelling. Combined with the acoustic enclosure around the blowers (refer to Condition 52 (i)) we consider that WMNZ has implemented BPO (best practicable option) for reducing noise to a reasonable level, thereby satisfying consent condition requirements and more broadly, Sections 16 and 17 of the Resource Management Act (1991).

We trust this information is satisfactory. If you have any further questions please do not hesitate to contact us.

Yours faithfully

**MARSHALL DAY ACOUSTICS LTD**



**Mathew Cottle**

**Consultant**

<b>Project:</b>	Redvale Landfill	<b>Document No.:</b>	Mm 006
<b>To:</b>	WMNZ	<b>Date:</b>	16 February 2016
<b>Attention:</b>	Rob McFarlane	<b>Cross Reference:</b>	
<b>Delivery:</b>		<b>Project No.:</b>	2014412A
<b>From:</b>	Mathew Cottle	<b>No. Pages:</b>	3
<b>CC:</b>		<b>Attachments:</b>	Yes
<b>Subject</b>	Richards Road Night-time Measurements		

MDA carried out a series of night-time noise level measurements along Richards Road on 11 February 2016. The purpose of the measurements was to assess the change in noise level at intermediate positions as a result of the installation of the 4.8 metre high noise barrier in the Energy Park. Attachment 1 shows the measurement positions.

Table 1 sets out the measured noise levels at the measurement positions with and without the noise barrier in place. The prevailing meteorological conditions during each survey were considered generally equivalent – calm conditions with little wind - which we consider favourable to the propagation of sound from source to receiver.

**Table 1: Environmental Sound Level Measurements**

Measurement Position and Location		Measured Noise Level (dB L <sub>A90</sub> )		Change In Level (dB)
		22 Jun 14	11 Feb 16	
MP1	63 Richards Rd	37	DNM	-
MP2	87 Richards Rd	43	38	-5dB
MP3	115 Richards Rd	38	34	-4dB
MP4	Top of Richards Rd Hill	38	35	-3dB

As site noise from the Energy Park is steady-state i.e. with little variation in level over time, as with previous surveys we consider the contribution from the site equivalent to the background noise descriptor (L<sub>A90</sub>). This removes most of the contribution from extraneous noise sources such as traffic on Dairy Flat Highway and birds.

Cricket noise can also be problematic during night-time environmental noise surveys during the warmer months of the year and this was evident at MP3; affecting the measurement result by over 10dB. To remove the contribution of cricket noise from the result we have filtered the 3kHz to 5kHz frequency band (the primary frequency range for crickets) of the average (L<sub>Aeq</sub>) level and deducted -1dB for correcting to the reported L<sub>A90</sub> index i.e. the measured difference between L<sub>Aeq</sub> and L<sub>A90</sub> for steady-state site noise emission.

### *Discussion*

No measurement was carried out at MP1 during the 11 February survey, however the subjective impression of the ambient noise level at this location was that it was very similar to the background noise level i.e. noise from the Energy Park was only faintly audible.

Comparing the results for measurement positions MP2 to MP4 indicates that with the noise barrier in place, site noise emissions have reduced by between 3 to 5 decibels at these intermediate measurement positions

on Richards Road. It is expected that noise levels will be similarly or slightly less reduced at the notional boundary assessment locations i.e. 20 metres from the façade of dwellings.

It is therefore concluded that the noise barrier is performing as predicted. This is corroborated by anecdotal comments from some residents on Richards Road that they consider the level of noise coming from the site to have reduced.

ATTACHMENT 1: MEASUREMENT POSITIONS







## PROPOSAL TO EXTEND PUKETUTU ISLAND COMPOSTING OPERATION

RECYCLING AUCKLAND'S ORGANICS  
SEPTEMBER 2015

## EXECUTIVE SUMMARY

This document provides background to the resource consent application by Living Earth Limited to extend the term of its consent to make compost on Puketutu Island to 2037 and to include foodwaste as part of the organic waste stream that is beneficially recycled to make its range of compost products. It has been produced to facilitate dialogue with key stakeholders in the community about the activity and to ensure that community views are reflected in the final resource consent application.



The proposal builds on the success of the Living Earth greenwaste composting operation on Puketutu Island that was established in 2007 and has now been operating in full compliance with its existing resource consent for over eight years. The proposed new facility is similar in design and scale to Living Earth's Christchurch composting operation situated in the suburb of Bromley, where the company has been composting foodwaste since 2009.

Since arriving in the Mangere Bridge area in 2007, Living Earth has been vigilant over its responsibilities to its neighbours. It looks forward to working with the community to ensure that its resource consent application will be robust, properly assess relevant resource management issues, and that its composting operations on the Island will continue to be carried out in a sustainable way.

The proposal provides background on the following matters:

- **Introducing Living Earth**
- **Puketutu Island Composting Operation**
- **Community Engagement** and **Being A Good Neighbour**
- **Markets**
- **The Proposed Composting Process**
- **Living Earth—Our Future** and **Resource Consent Process**
- **Frequently Asked Questions**

## INTRODUCING LIVING EARTH

Living Earth was established over 20 years ago to recycle organic waste into rich, high quality compost and since 2007 the Auckland business has been based on Puketutu Island. Living Earth is passionate about recycling, composting and gardening. In fact we've composted over 1.2 million tonnes of organic waste which would otherwise have been disposed of to landfills.

Living Earth's values align to modern social expectations of living sustainably and with minimal environmental footprint. We support Auckland Council's Waste Minimisation goals which target waste streams, including organic waste, being diverted from landfills.

We have worked to build a reputation based on principles of environmental and community responsibility.



With large scale composting operations in Christchurch and Auckland, Living Earth have developed proven expertise in composting garden waste and foodwaste. It is a leader in municipal 'closed loop' organics recycling and the Living Earth brand has become a by-word for high quality compost.

Nothing is added to Living Earth's composting process – Mother Nature does it all. The resulting compost enjoys strong customer demand and annual production is fully sold.

Living Earth was established by private investors - environmentalist Rob Fenwick (recently honoured for his environmental and community services), and businessmen Roger Wark and John Tapper. Living Earth is now 100% owned by Waste Management NZ Ltd, a well resourced corporate which has widespread collection businesses, including greenwaste and foodwaste collection.

## PUKETUTU ISLAND COMPOSTING OPERATION

The Living Earth site on the south west side of Puketutu Island covers 12ha. It receives waste in special garden waste collection trucks which is shredded and laid in 100m long windrows where the material decomposes into compost over 90 to 120 days in a natural process. Large excavators are used to turn and blend the compost, before it is loaded for distribution to markets. To control temperature and moisture levels, recycled water is sometimes added from the stormwater storage pond having been pre-treated through a wetland at the site.

Our Technical staff are responsible for testing and monitoring the compost and ensuring the process does not produce any odours. They also oversee Health & Safety procedures. Heavy machinery is operating throughout the work day and the site is not open for public access. However, it is visited by community groups and interested industry contacts by prior arrangement. About 10 staff are employed at the site most of whom live in the surrounding community.



## COMMUNITY ENGAGEMENT

Living Earth supports many local community projects and community gardening initiatives. In the Mangere Community we support:

- Mangere Education Centre
- Mangere Central School
- Mangere East School
- Mountain View School
- Makaurau Marae
- Altus Enterprises
- Te Whare Marama o Mangere (Women's Refuge)
- Te Kainga Young Mum's Home

Living Earth is a long time supporter of the restoration of Motutapu Island in Hauraki Gulf; it's a partner of Garden to Table, a program teaching kids to grow healthy food and it supports Gardens4Health, who assist in the establishment of community gardens Aucklandwide.



A new vegetable garden for the pupils of Mangere Central School

## BEING A GOOD NEIGHBOUR

Living Earth works hard at being a good neighbour, particularly to ensure the operation does not produce unpleasant odours. Auckland Council regularly audits the operation for environmental standards, for which the site has an excellent record of compliance. Since 2007 the company has never received a formal complaint from a council authority.

Senior management representatives attend Puketutu Island Community Liaison Group meetings hosted by Watercare Services Ltd who are the island's principal leaseholders. Watercare's Wastewater Treatment Plant is at the entrance of the island and treated biosolids are now trucked to the disused quarry as part of the process to rehabilitate the island.

Neighbours on the island include The Kelliher Estate restaurant where Dawson's stage upmarket functions and weddings in the historic house and gardens, and several residents. Our neighbours extend to the residents of Mangere Bridge, Ihumatao and Makaurau Marae.

## MARKETS

Living Earth compost based products are used in home gardens and commercial developments, on farms and Council projects – everywhere, we work to grow great gardens.



### BAGS

Over 300,000 bags of growing media are sold to the Auckland market annually at local garden centres. Some Living Earth products have Biogro NZ organic certification requiring rigorous audit requirements.

### BULK PRODUCTS

Landscape supply yards such as Central Landscapes and NZ Landscapes Supplies retail our bulk mixes.

### PROJECTS

Living Earth supplies custom made mixes to many large scale projects around Auckland including gardens around iconic Eden Park and the bus change interchange hubs being developed under AMETI.

### RAIN GARDENS

A specially formulated planting mix which filters and cleans stormwater was developed for the Wynyard Quarter gardens and is now widely used in stormwater containment projects in Auckland.

## CONTACT US

If you have any queries, please get in touch.

Email: [info@livingearth.co.nz](mailto:info@livingearth.co.nz)

Phone: 0800 COMPOST (0800 2667678)

# THE PROPOSED COMPOSTING PROCESS

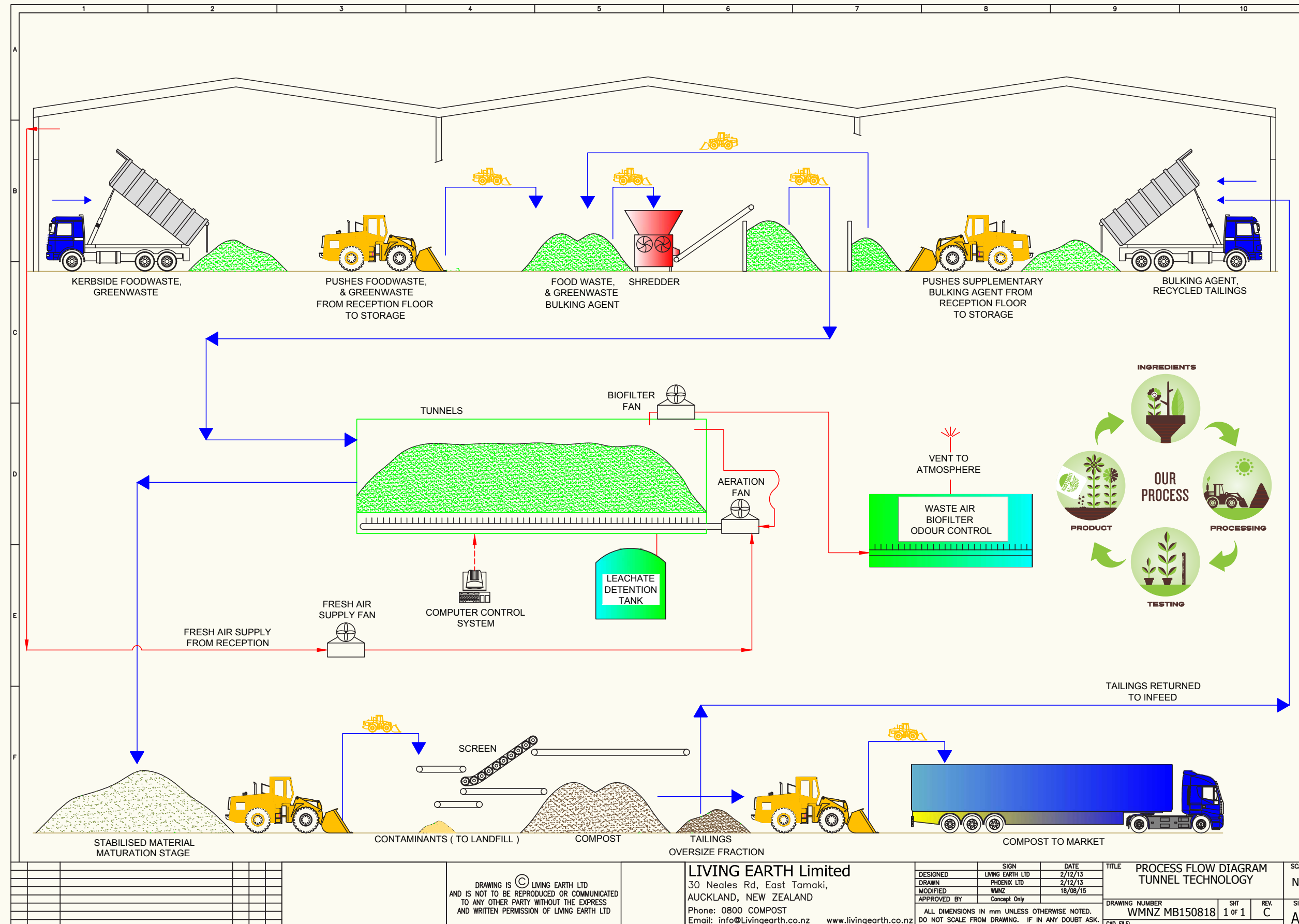
The composting activity starts with delivery to the site of a combination of clean greenwaste and foodwaste collected at the curbside in Council supplied wheelie bins from throughout the region. Vehicles are weighed, and waste is unloaded and checked within the purpose built building to ensure it complies with input quality criteria. The building atmosphere in the building operates under negative pressure to capture and sanitise and odours occurring during vehicles being unloaded.

Once the load is accepted, a sorting and pre-processing process occurs to segregate unsuitable material, and the foodwaste material is supplemented with greenwaste (or another bulking agent) prior to shredding and batch mixing before being fed into a 'tunnel' for the initial composting stage. Each tunnel operates independently, and comprises specialised systems, and process control features (temperature, pressure, etc) to manage odour and leachate. Odour control is achieved by discharge air from the tunnels being treated through a biofilter before being released to the atmosphere. Leachate is collected and removed from site.



At completion of the tunnel composting phase, material will be transferred from the building and placed outside in windrows. All material transferred from the tunnel composting phase will be biologically stable, and have an odour similar to greenwaste compost which is currently processed in existing windrows. This material will be pathogen free, and be unattractive to birds or vermin. Following final maturation in windrows, the material will be screened and processed in the same manner as the existing greenwaste, prior to being readied for distribution off the site to bulk distributors, home gardeners and an off-site bagging facility.

# TURNING FOODWASTE INTO COMPOST



# LIVING EARTH – OUR FUTURE

Living Earth seeks to operate on Puketutu until 2037.

The Auckland Council (AC) Waste Minimisation strategy includes a plan to process organic waste including foodwaste from households, rather than sending it to landfill.

Living Earth's long term solution involves an in-vessel tunnel system constructed on its current Puketutu site that will fully enclose the primary composting phase. Foodwaste will be processed in up to 20 tunnels enclosed in a new purpose built state-of-the-art building on the western part of the site. The diagram overleaf shows how the processing of foodwaste would take place, from the arrival of the collection in the composting chamber, through to the finished compost leaving the site. This simple process has been used to compost foodwaste in cities around the world for more than 20 years and is similar to the plant Living Earth operates in Christchurch.



Rendering of site once development has been completed as viewed from Oruarangi Road, directly opposite the proposed building site.

The arrow points to the general location of the building situated behind the existing trees and a planted, earthen bund. The bund will be constructed as part of the proposed development.

# RESOURCE CONSENT PROCESS

It is intended that we will lodge our application for resource consent with Auckland Council at the end of September. Following receipt of the application and depending on the outcomes of consultation with our neighbours during September, the Council may (through a limited notification process) call for submissions on the proposal during October/November. If that is the case, we expect a hearing (if required) to be held in the middle of December.

If a hearing is required, the Council will circulate their report and recommendations 15 working days in advance of the hearing date, and the Living Earth team will circulate their response to the Council report 10 working days in advance of the hearing date, which allows for any experts engaged by submitters to circulate any comments they may have 5 working days in advance of the hearing date.

# FREQUENTLY ASKED QUESTIONS

Here are some answers to questions you may have on our planned composting operation to 2037...

- |   |  |
|---|--|
| <p><b>CURRENTLY</b></p> <p>1 Can I see the composting operation from Mangere mainland?</p> <p>The operation is hardly visible in its current location and is largely hidden by trees.</p> <p>2 How many extra vehicles are expected?</p> <p>Limit of 62 per day.</p> <p>3 Is there an odour from the composting process?</p> <p>A natural earthy smell of compost on the island and undetectable beyond. Emissions are not noxious, dangerous, offensive or objectionable beyond the boundary of the contained site.</p> <p>4 Does a lot of dust form at certain times of the year?</p> <p>Dust is fully managed within the site – using water trucks, as required.</p> <p>5 Does water from the composting process leach into stormwater systems?</p> <p>All stormwater collected from site is treated and recycled, or discharged.</p> <p>6 How noisy will it be?</p> <p>Current complies with permitted activity rule.</p> <p>7 Does compost attract insects?</p> <p>Well composted material does not attract many insects and the composting plant is regularly checked for their presence.</p> <p>8 Does compost bring rats to the island?</p> <p>A rodent elimination programme has been in place since we've been on Puketutu, consequently rodent numbers are low.</p> <p>9 Does the operation safeguard cultural heritage?</p> <p>Operation aligns with current on Island activities.</p> <p>10 Will this proposal affect the restoration of the island as a regional park?</p> <p>Operation is currently aligned with on Island activities.</p> | <p><b>PROPOSED</b></p> <p>Living Earth has engaged an experienced landscape architect to ensure visual impacts are minimised as much as possible. Construction of bunds, planted with native trees will screen the building and the building will be clad and coloured to blend with the landscape.</p> <p>Limit of 38 extra vehicles per day.</p> <p>No change. Odour from the initial process stage will be contained within a fully enclosed building and all air discharged will occur via a bio-filter. Once placed in the windrows, the odour will be consistent with the existing situation.</p> <p>No change. Dust will continue to be fully contained within the site, and site access roads will be upgraded.</p> <p>No change. Stormwater will continue to be collected and treated in the same manner. Stormwater from the building roof will be attenuated prior to discharge via the existing soakage arrangements.</p> <p>No change. We will continue to comply with permitted activity rule.</p> <p>No change. Consistent with the current operating processes, and Insect Management Plan (inclusive of a monitoring regime), which is to be implemented will ensure that there is no insect nuisance beyond the boundary of the site.</p> <p>No change. The building will be fully enclosed and rodents cannot survive the in tunnel compost process. The current comprehensive rodent elimination plan for the windrow composting stage will also be expanded to encompass the new building.</p> <p>No change. Operation will continue to align with current on Island activities.</p> <p>Enhanced outcome. Living Earth has entered an agreement with the Island's owners, Te Motu o Hiaroa Trust, to partner in the restoration of the island for the benefit of all Aucklanders. Large volumes of Living Earth compost are an ideal media for achieving this vision.</p> |
|---|--|

**Redvale Landfill**  
**Complaints Register**

19th October 2015 -  
22nd February 2016



Start Date of Incident	End Date of Incident	Time of Incident	Complaint By	Address	Odour - Noise - Litter - Mud -	Complaint detail	Wind Direction	Description and investigation
4/01/2016	4/01/2016	Unknown	AC - Racheal	Unknown	Odour - rubbish	Strong landfill smell	E/SE	AD checked landfill with odour sprayers working. Vacuum on landfill at 65 so raised to 85. Phoned Council and advised of findings.
4/01/2016	5/01/2016	all day	Unknown	194a HB Rd	Odour - rubbish	Strong lanfill odour yesterday & today	E/SE	AD drove around to 194a HB Rd detecting strong landfill (rubbish) odour. Discussed with resident.
4/01/2016	5/01/2016	all day	Loyd Richardson	255 HB Rd	Odour - rubbish	Very strong landfill odour today & yesterday	E	Drove to HB Rd detecting L/fill odour. Promptly increased odour spray. Arranged for cannon to be loaded and running. Pump for high pressure sprayers not working but arranged for waterblaster pump to run them. Increased cover. Phoned resident and advised.
4/01/2016	4/01/2016	all day	Chad Dellow	233 HB Rd	Odour	Landfill smelling badly more reciently	E/SE	Received via email a day later. As per previous complaints additional spraying and cover was administered.
5/01/2016	5/01/2016	Unknown	Rob Leinwand	Tender Rd	Odour & Noise	Landfill odour & noise coming from L/fill over the last 2 days	E/SE	Explained to resident about what we are currently doing to overcome these problems.
31/12/2015	31/12/2015	all day on/off	Marie - AC	99 Tender Rd	Odour	Odour this a.m. since they have been up and also most of yesterday	E/SE/NE	RB checked landfill with all T-bars & cannon operating same as day before. Checked Richards Rd, Tender Rd up to 99 & Paper Rd with no odour detected. At 9.30am 726 was report odorous.
11/01/2016	11/01/2016	8:15	Jackie	188 HB Rd	Odour - rubbish	Terrible rubbish smell	E/SE	Checked property for odour for around 10 min just 15min after call and confirmed with resident there was no odour apparent at the time. All t-bars and cannon working. No site odour reported.
14/01/2016	14/01/2016	7-08:10	Ron Clarke	57 Tender Rd	Odour - rubbish	Landfill odour at proerty from 7ish till now. Starting to fade.	E	Phoned resident and he confirmed odour was now dissipating. Drove to property and confirmed no odour. All t-bars going. Smelly loads reported first thing this morning. Cannon not running due to fault.

