



Whangarei District Council

Uretiti Green waste Facility

Assessment of Environmental Effects





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Prepared By

Elisha Oldridge
Environmental Planner

Opus International Consultants Ltd

Whangarei Office
Mansfield Terrace Service Lane, 125A Bank
Street
PO Box 553, Whangarei 0140
New Zealand

Reviewed By

Mark Farrey
Team Leader Planning

Telephone: +64 9 430 1700

Facsimile: +64 9 430 1701

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Mark Farrey
Team Leader Planning

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1 Introduction

The Uretiti Green Waste Facility and associated refuse transfer station and landfill have existed for a number of decades, with the landfill closing several years ago. The Transfer Station and its associated green waste disposal area are still operational.

The Green waste Facility is currently on land that is leased by Whangarei District Council (WDC) from the Department of Conservation (DOC). This concession is due to expire and in order to renew the concession DOC require an updated assessment of environmental effects (AEE).

1.1 Scope and Objectives

DOC do not provide guidance on AEE requirements. Therefore the AEE structure is dictated by the general information requirements of Section 88 and the fourth schedule of the *Resource Management Act 1991 (RMA)*.

Information required includes:

- A description of the proposed activity;
- Identification of relevant rules;
- An assessment of existing environmental values and potential effects on these values; and
- Assessment of the activity against Part 2 of the RMA all relevant Regional Council Policies.

2 Proposed Activity

2.1 Location

The Uretiti Refuse Transfer Station site is located on Tip Road, Uretiti, 36km South of Whangarei. The Transfer Station services Uretiti and surrounding areas, including Ruakaka, Bream Bay and Waipu.

The green waste area is located east of the refuse control area and north of the old landfill site (**Figure 1**). The area proposed to be leased from DOC for the green waste is displayed in **Figure 2**. This area is 1.4ha.



Figure 1: Uretiti Refuse Transfer Station Site



Figure 2: Proposed Lease Plan

2.2 Activity Description

2.2.1 Operation and Supervision

At present the Green Waste Facility is operated as part of the Transfer Station. Green waste is off-loaded by the public to the designated green waste facility, east of the main transfer station. Entry into the facility is controlled by an on-site attendant. The onsite attendant ensures that only appropriate green waste is left on this site.

Accepted green waste **only includes**:

- General domestic and some commercial garden plant waste (i.e. trunks, branches, leaves, lawn clippings)

Green waste **should not include** waste from other sources. Some examples include:

- Putrescible waste (i.e. - food scraps)
- Plant waste from farm and horticultural activities (i.e. activities such as orchards where large scale use of pesticides/ herbicides is likely)

Whangarei District Council voted on new transfer station hours in February 2016. For Uretiti Transfer Station, including the green waste area, these are as follows:

Table 1: Uretiti Transfer Station and Green Waste Disposal Area Hours

<i>Winter Hours</i>		<i>Summer Hours</i>	
<i>Monday- Friday</i>	<i>8:00am -1:00pm</i>	<i>Monday- Friday</i>	<i>8:00am- 1:00pm</i>
<i>Saturday- Sunday</i>	<i>8:00am- 1:00pm</i>	<i>Saturday- Sunday</i>	<i>8:00am- 5:00pm</i>

The Green Waste dumping area is accessible via a maintained track at all times – this ensures that the public do not need to venture into dumped green waste.

2.2.2 Management and Maintenance

The green waste facility is managed and maintained in the following manner:

- As the green waste is deposited, it is compacted on a weekly basis or as required to ensure the pile does not spread to the neighbouring areas.
- The surrounding grassed areas are bulldozed to keep them clear and/or mulched, slashed and sprayed. This assists in reducing fire hazard along with controlling the spread of weeds.
- During the summer dry months (December to February) the green waste is inspected for fire safety risk:
 - » Water will be sprayed on green waste if dry tinder conditions become present;
 - » Mulch piles will be monitored for heat and steam. Mulch to be dissipated or water to be sprayed if a large amount of heat is generated.

3 Relevant Planning Rules

3.1 Regional Water and Soil Plan

3.1.1 Discharges from transfer stations and green dumps to land- Rule 19.1.5

Discharge from transfer stations and green dumps into or onto land is a permitted activity, provided that:

- a. There is no direct discharge of contaminants into water
- b. The discharge does not contain hazardous substances.
- c. No contaminant is discharged in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering:
 - i. Groundwater in concentrations that would render it unsuitable for human consumption.
 - ii. Surface water in concentrations that have a more than minor adverse effect on aquatic life.
- d. No offensive odour or other nuisance is discernible from the boundary of the property owned or occupied by the discharger as a result of that discharge.

The green waste disposal site does not adjoin any water ways. No farm or horticultural green waste is accepted therefore the potential for large quantities of pesticides to enter groundwater is low.

Accordingly this is a **permitted activity** under Rule 19.1.5.

3.2 Regional Air Quality Plan

3.2.1 Discharge of Contaminants to air- rules 9.1.7 and 9.1.8

Both of these rules require that air discharge does not result in any noxious, dangerous, offensive or objectionable levels or airborne contaminants, beyond the boundary of the subject property.

The green waste pile does not result in any more than minor air emissions and there have been no records of air and odour complaints. Accordingly this is a **permitted activity** under rules 9.1.7 and 9.1.8.

4 Existing Environment

The purpose of this section is to establish the existing baseline condition of the site and its surrounding environment. Only once the baseline condition is known can potential effects to this condition be assessed.

4.1 Land

The land which the green waste facility is located on is previously cleared land. This land is located within the fixed dune deposits mapped within Bream Bay (Whangarei 1:25000 Geological Map 2009- GNS Science). As a result the location is slightly elevated (**Figure 3**) and consists of a sandy permeable profile (**Figure 4**).



Figure 3: Elevation of Land



Figure 4: Soil Profile

4.2 Water

Given that the site and surrounds consist of fixed dune deposits, the soil profile is sandy and highly permeable. As a result the site is well drained and there are no nearby surface fresh water courses.

4.3 Air

The Uretiti Green Waste Disposal Area is located approximately 3kms from Waipu and 6kms from Ruakaka. The site is situated within less than 1km from the ocean and fully exposed to ocean winds. Given the site's elevation and lack of vegetation it is well exposed to sunlight and fresh air movement, thus the site is not prone to dampness.

4.4 Ecosystem

The green waste facility is located on previously cleared land. The cover of the green waste area is a mixture of dirt and vegetation. The vegetation cover is largely grass and shrubs with a number of weeds amongst the vegetation. Due to the land disturbance that has occurred it is not considered to contain any habitat of ecological significance.

4.4.1 Surrounding site

On the north eastern edge of the green waste facility is a cleared fire break. This acts as a last line of fire containment. Beyond this to the north and north east of the site is a large DOC reserve containing undisturbed natural ecosystems and remnant vegetation. The adjoining old land fill site

has also undergone a high amount of land disturbance and the refuse transfer station is on a concrete surface therefore the green waste disposal site and immediate adjoining area is considered to be of no ecological value.



Figure 5: Current Fire Break

The ecosystems within the reserve are classified by DOC as part of the Ruakaka Dunelands Ecological District (**Figure 6**).

The DOC Protected Natural Areas Programme Report for the Waipu Ecological District states that this vast stretch of dunelands is the largest in the Waipu Ecological District Area. It has eight representative ecological units:

- (b) sandfield habitat on beach and sand dune,
- (c) pohuehue shrubland on sand dune,
- (e) kanuka forest on sand dune,
- (l) pohuehue–*Coprosma acerosa* shrubland on sand dune,
- (o) knobby clubrush–pohuehue sedgeland on sand dune,
- (q) harakeke–gorse flaxland on sand dune,
- (r) glasswort herbfield in estuary, and
- (i) spinifex grassland on sand dune.

The site supports population's three threatened plant species and two significant fauna species. No freshwater wetlands remain in this area.¹



Figure 6: DOC Ruakaka Dunelands Ecological District

4.5 Community

The green waste facility is located well away from any local population centres. The nearest town is Waipu located approximately 3 kilometres away. While the facility is located away from population centres, the local community relies upon the green waste facility (along with the Refuse Transfer Station) to dispose of common household waste.

¹ Lux, J., Martin, T. and Beadel, S. (2007). Natural areas of Waipu Ecological District. Whangarei, N.Z.: Dept. of Conservation, Northland Conservancy.

5 Potential Effects to the Environment

5.1 Positive Effects

The green waste area provides green waste disposal services for Uretiti, Ruakaka, Bream Bay and Waipu. The green waste station provides a safe and convenient facility for green waste to be disposed of that discourages disposal of green waste in other ways such as burning, illegal dumping, rotting and spreading of weeds, all of which have negative effects on the environment and the community.

5.2 Land

The green waste facility will not require land disturbance. The site is already cleared and the underlying soil is intended to be kept intact with no excavation, filling or dewatering required. As a result the existing contours and shape of the land will be retained.

The site has advantageous conditions for the storage of green waste. Given the elevation and permeability of the soil, it is well drained with no standing water bodies or water ways. The site is also open and exposed to ocean winds. Accordingly the site dries readily and does not harbour conditions that would encourage anaerobic decay. Thus, as the green waste decays it is unlikely to do so in stagnant or anaerobic conditions, such conditions can release foul odours and encourage vermin.

The lack of water on the site is also beneficial as this prevents the ability of green waste weeds to spread via water channels into downstream environments. Also, if any pesticides/ herbicides are present in the dumped green waste, these will not be transported downstream via water either.

5.2.1 Land Capacity

The term being applied for in the concession is 9 years and 11 months. The aerial maps in **Figure 7** and **Figure 8** show the size of the green waste area over the last 10 years. The size has stayed relatively static over the 10 years. Whangarei District Council records show that the overall amount of waste being dumped at the Uretiti Refuse Transfer Station is decreasing. If the same amount of waste was received over the concession term of 9 years and 11 months the green waste concession area would have more than enough capacity for this. With regular maintenance and compaction as specified in the Management Plan the vegetation is able to stay within the firebreak area and surrounding vegetation. It is considered that the concession area adequately provides for future green waste and firebreak areas.



Figure 7: Green Waste Pile 2004



Figure 8: Green Waste Pile 2014

Overall the effect on the land is considered to be no more than minor.

5.3 Ecosystem

The site is already cleared, therefore no further clearing will be required during the operation of the green waste facility. Accordingly the green waste only has potential to impact upon the surrounding ecosystems within the adjoining DOC reserve.

As discussed in Section 5.2, impact via surface water transport will be negligible as the green waste facility does not support surface water bodies or water courses. Therefore negligible quantities of surface water runoff will be available to transport hazards such as pesticides/ herbicides or weeds.

Impact to the adjoining DOC reserve is primarily limited to:

- Potential weed spread via physical dispersion or wind driven transport
- Harboursing of vermin.
- Potential fire risk

In order to contain the spread of weeds, active green waste dumping areas will be delineated and contained through bulldozing and/ or mulching, slashing and spraying of the adjacent grassed areas. These areas will be compacted on a weekly basis or as required to maintain the site in an aesthetically tidy condition and keep the green waste level low. This will generally stunt most weeds before they can flower. Weeds will also be sprayed to reduce their chance of survival. These methods will be sufficient to prevent physical spread and wind dispersion of weeds.

Given that the green waste facility will not accept any material other than vegetation, it is unlikely to harbour pests such as rats or flies.

The fire risk will be managed by ensuring regular monitoring of the green waste occurs during the dry summer months. If dry tinder conditions are present within the green waste, it will be sprayed with water to lessen the likelihood of fire breakout. The adjacent grassed areas will also be regularly mowed to lessen the potential fire fuel load. As a last line of defence the existing fire break between the site and the DOC reserve will be maintained.

Overall the impact of the activity to the surrounding ecosystem is considered no more than minor.

5.4 Air

As discussed in **Section 4** the green waste site is elevated, well drained and has no adjoining watercourses or drainage lines. As a result and green waste that does accumulate on the site is kept relatively dry, therefore it has less of a tendency to anaerobically decay and release odours or weeds into waterways. It is 3kms away from the town centre and is bordered to the east by the coast. The maintenance of the green waste ensures it is kept relatively dry and has less tendency to generate odours. The effect of this activity is therefore considered no more than minor.

5.5 Community

The facility provides a safe and convenient disposal point that discourages people to dispose of green waste in other ways such as burning or illegal dumping, which has negative environmental and aesthetic effects which impact the community.

The Uretiti green waste facility does not accept farm or horticultural green waste, minimising the risk of large amounts of pesticides/ herbicides entering the facility. The site does not have any adjacent watercourses or drainage lines. As such the effects on the community are considered no more than minor.

6 Statutory Assessment

6.1 Resource Management Act

The sections of the Resource Management Act 1991 (RMA) that are particularly relevant to this application are detailed below:

6.1.1 Section 5- Purpose

Section 5 of Part II identifies the purpose of the RMA as being the sustainable management of natural and physical resources. This means managing the use of natural and physical resources in a way that enables people and their communities to provide for their social, cultural, and economic wellbeing, while avoiding, remedying or mitigating adverse effects on the environment.

The Uretiti Green Waste Facility provides refuse facilities for Uretiti, Ruakaka, Bream Bay and Waipu. It provides a facility for green waste to be disposed of properly and to prevent negative effects on the environment and people's health. It enables communities to provide for their social, cultural and economic wellbeing and for their health and safety.

6.1.2 Section 6- Matters of National Importance

Section 6 of the RMA sets out the matters of national importance that are to be recognised when managing the use, development, and protection of natural and physical resources. Relevant matters to this application are:

- e. the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development.

This is a permitted activity, managed by the Whangarei District Council and confined to a 1.4ha area. The Council ensures the green waste is managed effectively with no impact on the natural character of the coastal environment.

6.1.3 Section 7- Other Matters

Section 7 of the RMA sets out all other matters that are to be recognised when managing the use, development and protection of natural and physical resources. Relevant matters to this application are:

- c. the maintenance and enhancement of amenity values
- f. maintenance and enhancement of the quality of the environment

As discussed in **Section 5.1** the green waste station provides a safe and convenient facility for green waste to be disposed of that discourages disposal of green waste in other ways such as burning, illegal dumping, rotting and spreading of weeds, all of which have negative effects on amenity values and the quality environment.

Council ensures the green waste facility is managed in a way that it remains aesthetically tidy with no impact on the quality of the surrounding environment.

6.2 Regional Water and Soil Plan

The purpose of the Regional Water and Soil Plan is to promote the sustainable management of water and soils resources in Northland, thus giving effect to the purpose of the RMA. This covers the area inland from Mean High Water Springs and the agreed cross river boundaries that are outlined in the Regional Coastal Plan. Transfer Stations and activities associated with these areas are regulated under the Regional Water and Soil Plan. **Table 2** assesses the green waste area against the relevant objectives and policies in the Regional Water and Soil Plan.

Table 2: Discharge Objectives and Policies

Objective	Response
The effective treatment and/ or disposal of contaminants from new and existing discharges in ways which avoid, remedy or minimise adverse effects on the environment and on cultural values.	Please refer to Section 5 for an assessment of how adverse effects are avoided, remedied or mitigated.
The reduction and minimisation of the quantities of contaminants entering water bodies, particularly those that are potentially toxic, persistent or bio-accumulative.	The green waste disposal site does not adjoin any water ways. No farm or horticultural green waste is accepted therefore the potential for large quantities of pesticides/ herbicides to enter groundwater is low.
Policies	Response
To require all new discharges of sewage or discharges with a high organic content to be: a) By land disposal; or b) To water, if after reasonable mixing: i) it does not cause a discernible adverse change in the physio-chemical and. or microbiological water quality of the receiving water at the time of discharge; and ii) it is the best practicable option (as defined by Section 2 of the Act)	The activity will not involve the discharge of sewage or a discharge with high organic content. <i>Note: The plan defines discharges with high organic content include those from human and effluents, decomposing vegetable matter, animal and food processing and leachates from solid wastes.</i>
To require by the year 2004 or according to an upgrading programme established as part of the conditions on a discharge permit all existing discharges of sewage or discharges with a high organic content to be:) it does not cause a discernible adverse change in the physio-chemical and. or microbiological water quality of the receiving water at the time of discharge; and ii) it is the best practicable option (as defined by Section 2 of the Act)	The activity will not involve the discharge of sewage or a discharge with high organic.
To ensure there are adequate separation distances between water bodies and discharges to land to avoid or mitigate adverse effects on water quality.	There are no waterbodies nearby.

6.3 Regional Air Quality Plan

The purpose of the Regional Air Quality Plan is to promote the sustainable management of Northlands air resources, thus giving effect to the purpose of the RMA. The plan covers all discharges of contaminants to air for the Northland region but does not include discharges to air from the coastal marine area. **Table 3** provides an assessment of the green waste area against the relevant Objectives and Policies of the Regional Air Quality Plan.

Table 3: Objectives and Policies of the Regional Air Quality Plan

Objectives	Response
The sustainable management of Northland's air resources including its physical, amenity and aesthetic qualities by avoiding, remedying or mitigating adverse effects on the environment from the discharge of contaminants to air.	<p>The green waste site is elevated, well drained and has no adjoining watercourses or drainage lines. It is 3kms away from the town centre and is bordered to the east by the coast. The maintenance of the green waste ensures it is kept relatively dry and has less tendency to generate odours.</p> <p>No complaints have been received in regards to discharges to air, such as odour, dust, smoke and poor visibility.</p> <p>Accordingly no air emissions or impacts to air quality are expected.</p>
The maintenance and, where necessary, enhancement of the quality of the environment so that it is free from noxious, dangerous, offensive or objectionable adverse effects associated with discharges to air, such as odour, dust, smoke and poor visibility.	No air emissions or impacts to air quality are expected.
Policies	Response
To maintain the existing high standard of ambient air quality in the Northland region, and to enhance air quality in those instances where it is adversely affected, by avoiding, remedying or mitigating adverse effects of activities discharging contaminants to air.	No air emissions or impacts to air quality are expected.
To avoid, remedy or mitigate the adverse effects generated by discharges of contaminants to air including cumulative or synergistic/ interactive effects.	No air emissions or impacts to air quality are expected.
To recognise that many activities which discharge contaminants to air have a minor effect on the quality of Northland's air environment.	No air emissions or impacts to air quality are expected.

To recognise that discharges of contaminants to air may adversely affect other receiving environments.	No air emissions or impacts to air quality are expected.
To ensure that the discharge of contaminants to air should not result in offensive or objectionable odours that could adversely affect people and communities.	No air emissions or impacts to air quality are expected.

7 Conclusion

The green waste area provides green waste disposal services for Uretiti, Ruakaka, Bream Bay and Waipu. The green waste station provides a safe and convenient facility for green waste to be disposed of that discourages disposal of green waste in other ways such as burning, illegal dumping, rotting and spreading of weeds, all of which have negative effects on the environment and the community.

The facility only accepts general garden plant waste (i.e. trunks, branches, leaves, lawn clippings) and is managed in a way which reduces the risk of fire hazard along with controlling the spread of weeds.

The green waste facility is a permitted activity under the Northland Regional Water and Soil Plan and Northland Regional Air Quality Plan.

In summary the green waste disposal facility is of a quality that is worthy of concession from DOC.



Opus International Consultants Ltd
Mansfield Terrace Service Lane, 125A Bank
Street
PO Box 553, Whangarei 0140
New Zealand

t: +64 9 430 1700
f: +64 9 430 1701
w: www.opus.co.nz