

30 October 2009

File: WGN070230 [26013] [26014] [26015] and SR161775

IN THE MATTER OF           The Resource Management Act 1991

AND                           Application for resource consents made pursuant to  
Section 88 of the Act

TO                             Wellington Regional Council:

                                  WGN070230 [26013] [26014] and [26015]

AND                           Wellington City Council:

                                  SR No. 161775

BY                             Wellington City Council

IN RELATION TO           To discharge contaminants to land and to air associated  
with the processing and disposal of dewatered human  
effluent at Carey's Gully.

AT                             Carey's Gully Sludge Dewatering Facility and the  
Southern Landfill, 201 Happy Valley Road, Brooklyn,  
Wellington.

**Decision of Hearing Panel**

HEARING PANEL:           Chris Laidlaw (Chair)  
                                  Kevin Rolfe  
                                  Nigel Wilson

HEARING DATES:           5 and 8 October 2009 at the Council Chambers, Greater  
Wellington Regional Council, Wakefield Street,  
Wellington.

HEARING CLOSED:         8 October 2009 at 5.30pm

DATE OF DECISIONS       30 October 2009

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## 1. Introduction

Pursuant to Section 88 of the Resource Management Act 1991 (the Act) Wellington City Council (the applicant) applied for resource consents to discharge contaminants to land and to air associated with the processing and disposal of dewatered human effluent (dewatered sludge) at Carey's Gully, 201 Happy Valley Road, Brooklyn, Wellington.

The applicant requires consent from Greater Wellington Regional Council (GW) for three discretionary activities under the Regional Discharges to Land Plan (RDLP) and Regional Air Quality Management Plan (RAQMP). The consents are required for three discharge permits, two permits to cover the disposal of the sludge at the Southern Landfill and the associated discharge of contaminants to air from the disposal activities. The third discharge permit is to cover the discharge of contaminants to air from the operation of the Sludge Dewatering Facility (SDF).

The proposal also requires consent from Wellington City Council (WCC) as a discretionary activity under the Wellington City District Plan. The consent required is a land use consent for the disposal of sludge at the Southern Landfill.

The application was jointly notified and was jointly heard by a panel comprising two Councillors, Chris Laidlaw (Chair) and Nigel Wilson and one Commissioner, Kevin Rolfe. The hearing panel were delegated the authority by GW and WCC to determine a decision on their respective consents.

The hearing was held on Monday 5 October 2009 and Thursday 8 October 2009 and was closed following the applicant's right of reply on Thursday 8 October 2009 at 5.30pm.

Written evidence and oral submissions were tabled at the hearing, and the hearing panel took into account all of the documentation provided with the application, further information received, the GW and WCC officer's Section 42A reports, and the summary of the written submissions prepared by the GW officer. Full copies of all submissions lodged in regard to the application were available to the hearing panel. The hearing panel met to deliberate on the evidence presented on Friday 9 October 2009.

All consents applied for are **GRANTED** as detailed in Section 17 of this decision.

## **2. Location**

The application site is comprised of two main areas – the sludge dewatering facility buildings, and the disposal area of the Southern Landfill. Both areas are situated in the deeply incised, stream-cut valley known colloquially as ‘Carey’s Gully’. Approximately 1km to the east of the facility is Happy Valley Road. The west and south remain relatively undeveloped ridges and valleys, while the Southern Landfill is the immediate northern border to the facility, and, approximately 2km north, the Kowhai Park streets of Ashton Fitchett Drive and Waterhouse Drive can be found.

Mr Raymond Chang, the Resource Advisor from GW, provided a map of the site in his officer’s report which shows the various structures within the site that are integral to the operation of the dewatering facility, such as the sludge storage tanks, the site biofilter, the sludge dewatering plant building itself, and the additional centrate treatment facility. The map also shows the old co-composting building and the capped but active land filling area of the Southern Landfill.

## **3. Background**

### **3.1 General**

A summary of the background of the Southern Landfill and associated SDF was included in Mr Chang’s report, and a summary of the landfill designation was included in the report of Ms Hannah McCashin Planner for WCC.

### **3.2 Previous consents held**

The applicant has held consents from GW that were required to operate the SDF and to dispose of the dewatered sludge to landfill. The four consents were detailed in Mr Chang’s report, and expired on 30 July 2007 and 16 February 2008. The applicant applied for new consents to continue the activities on 27 April 2007. Under Section 124 of the Resource Management Act 1991 (the Act), a consent holder may continue to operate under the existing consents until a new consent is granted or declined, and all appeals are determined, provided the requirements of Section 124(2) are met.

Section 124(2) of the Act states that the aforementioned provisions apply when:

- (a) a resource consent is due to expire; and*
- (b) the holder of the consent applies for a new consent for the same activity; and*
- (c) the application is made to the appropriate consent authority; and*
- (d) the application is made in the period that –*
  - (i) begins six months before the expiry of the existing consent; and*

(ii) ends three months before the expiry of the existing consent;  
and

(e) the authority, in its discretion, allows the holder to continue to operate.

GW exercised this discretion, and thus, the continued operation of the SDF and associated disposal of sludge contaminants is provided for by Section 124 of the Act.

## **4. The proposal**

The proposal can be separated into two distinct processes for which consent is required, the SDF and the sludge disposal at the Southern Landfill.

### **4.1 Sludge dewatering facility**

The SDF is the infrastructure which dewateres the solids out of the waste stream, producing a liquid and a dewatered sludge mixture which is termed a 'spadeable' quality, and can be likened to the consistency of cake mixture.

The process at the SDF is detailed in full in Mr Chang's report; however, a brief outline of the process is as follows:

Liquid sludge, a mixture of solids (less than 1% by weight) and water (99% by weight) is pumped to the SDF via an underground sewage pipeline from the Moa Point Waste Water Treatment Plant (MPWWTP).

The liquid sludge is kept in one of two storage tanks on site for 13 to 16 hours before it is processed through the plant. The second tank provides a small capacity of storage available for contingency purposes.

This liquid sludge is dewatered by centrifuges, spinning some of the liquid fraction out of the raw liquid sludge. The dewatered sludge is continuously and automatically transferred from the centrifuges to one of eight skips in the skip bay. Full skips are then transferred by truck to the landfill on a daily basis. The disposal of the dewatered sludge is discussed in Section 4.2 of this report.

The air in the entire dewatering building is extracted, putting the building under negative pressure, and passed through the site's biofilter.

The liquid (centrate) that is extracted from the liquid sludge is pumped to the centrate treatment 'black boxes'. The treated centrate is then discharged to the sewer, while any settled solids are pumped back to the centrifuges. The gases from the centrate wet well are contained and extracted to the biofilter, whereas the gases from the black boxes discharge directly to atmosphere.

### **4.2 Sludge disposal**

The applicant intends to dispose of all dewatered sludge contaminants to the Southern Landfill for the mid-term, until a regionally-based solution can be found.

A detailed description of the sludge disposal methodology is provided in Mr Chang's report. This is summarised below:

The skip bins of sludge are removed from the skip bay at the SDF by the applicant's staff, and taken to a prepared area at the active landfill face. Municipal waste collected that morning is placed in a mound near the sludge skip disposal location. Once the sludge skip is emptied by the truck operator, the mound of municipal waste is pushed into the sludge location by a compactor and mixed through until a mixing ration of 1 part sludge to 4 parts municipal waste is achieved. The area is then covered with overburden material before the next skip bin arrives.

The overall mixing process from the time of dumping of the sludge load to the landfill face takes approximately 30 minutes per skip. The overall management of the disposal is explained in detail in the applicant's original Assessment of Environmental Effects (AEE) and in the 'Sewage Sludge De-watering and Disposal Operational Management Plan' developed by the applicant in March 1998.

The applicant disposes of the sludge daily with the exception of three public holidays (Good Friday, Christmas and New Year's day).

## **5. Consents required**

Sections 9 and 15 of the Act place restrictions on the use of land and on various discharges to the environment. The activities proposed by the applicant are not permitted as of right under these sections of the Act or by the regional and district plans; therefore, various resource consents are required.

Under the Regional Discharges to Land Plan (RDLP) – Discharges to land

### **5.1 Section 15(1)(d) of the Act provides as follows:**

*(1) No person may discharge any –*

*(d) Contaminant from any industrial or trade premises onto or into land –*

*Unless the discharge is expressly allowed by a rule in any relevant regional plan, a resource consent, or regulations.*

As examined previously, the activities occur and are a result of an industrial or trade premise, and are not provided for in regulations, and thus, a resource consent is required.

The Regional Plan for Discharges to Land for the Wellington Region (RPDL) is the relevant plan to consider when assessing the proposed disposal/discharge of dewatered sludge contaminants to land at the Southern Landfill.

Rule 1 of the RPDL provides for the discharge of contaminants onto or into land as a *permitted activity* provided the contaminants are stormwater discharged into a pipe which then discharges into surface water, or with the

exception of Rule 2 of the RPDL the discharge is not regulated by another rule in the RPDL; and that the discharge will not result in the contaminant creating a contaminated site. The proposed disposal of the dewatered sewage sludge will contribute towards the contamination of the Southern Landfill, and thus, the proposal cannot be considered under this Rule.

Rules 6 and 7 of the RPDL provide for the discharge of human effluent that is discharged on the same site as where it is generated from as a *permitted activity*. The dewatered sewage sludge is sourced from the municipal sewage system and thus cannot be considered under this Rule.

**Rule 8** of the RPDL states that any discharges containing human sewage onto or into land is a **discretionary activity** unless otherwise provided for in Rules 3, 5, 6 or 7. The proposal is not provided for by these rules and therefore falls under the ambit of this Rule.

## 5.2 Under the Regional Air Quality Management Plan (RAQMP) – Discharges to air

Section 15(1)(c) of the Act provides as follows:

(1) *No person may discharge any –*

(c) *Contaminant from any industrial or trade premises into air –*

*Unless the discharge is expressly allowed by a rule in a regional plan and in any relevant regional plan, a resource consent, or regulations.*

The Act provides a definition for ‘contaminant’ as any substance (including gases, odorous compounds, liquids, solids and micro-organisms) that by itself or in combination with the same, similar or other substances, when discharged into land, air or water is likely to change the physical, chemical or biological condition of the land, air or water onto or into which it is discharged.

The Act also provides a definition for an ‘industrial or trade premises’ as any premises used for any industrial or trade process, any premises used for the storage, transfer, treatment and disposal of waste materials or for other waste-management purposes, or any premises from which a contaminant is discharged in connection with any industrial or trade process.

An ‘industrial or trade process’ is defined in the Act as one which includes every part of a process from the receipt of raw material to the dispatch or use in another process of any product or waste material.

The applicant’s proposal therefore falls for consideration under this definition as an ‘industrial or trade premises’. As the proposed discharges to air are not provided for by regulations, resource consents are required.

The Regional Air Quality Management Plan for the Wellington Region (RAQMP) is the appropriate plan to consider when assessing the discharges to air. The two different discharges from the SDF and the disposal at the landfill

do not meet the requirements of permitted activity conditions of Rules in the RAQMP. These are:

Rule 20 of the RAQMP, which provides for the discharge of contaminants to air in connection with any landfilling and composting as a *permitted activity*, provided it meets a number of conditions. Condition (a) specifically excludes sites where waste materials are accepted from sources other than the property on which the landfilling and composting takes place, and as such, the applicant's proposed discharge of contaminants to air from the SDF and the disposal of the dewatered sludge to the Southern Landfill cannot fall for consideration under this Rule.

Rule 21 of the RAQMP provides for the discharge of contaminants to air in connection with sewage and liquid or liquid-bourne trade waste conveyance, treatment and disposal (including the operation of septic tanks and soakage pits), and specifically excludes the treatment of sewage and/or liquid or liquid-bourne trade wastes off the site on which it was generated.

The applicant's activities centre on the treatment, dewatering and disposal of wastes that are generated off-site, and thus do not fall for consideration under this Rule.

**Rule 23** of the RAQMP provides for the discharge of contaminants into air from any processes or activities explicitly excluded from Rules 1-22 of the RAQMP or any processes or activity which do not meet the requirements of those rules as a **discretionary activity**. Given that the proposed discharges to air cannot meet the requirements of the above Rules/are specifically excluded by them, the proposed discharges to air fall under the ambit of this Rule.

### 5.3 Under WCC District Plan

#### Designation

The site is designated under the Wellington City District Plan for 'refuse disposal and associated works' (designation number 61). The designation refers to Appendix M of the District Plan which consists of a plan of the landfill and identifies the following:

- The extent of the landfill,
- The staged development of the landfill,
- The proposed resource recovery centre, proposed future access road, proposed sludge processing plant and the proposed gas treatment plant; all now built.

Whether sludge may be disposed of at the landfill under the designation is not clearly evident as 'refuse' is not defined by the Plan. Furthermore, the designation was passed down to the current District Plan from the Transitional Plan. At the time that the Transitional Plan was prepared there was no form of

sewage treatment in Wellington and so it is questionable that sludge disposal would have been contemplated as being included in the term ‘refuse disposal’.

Given the above uncertainties, the applicant has chosen to apply for land use consent for the proposed sludge disposal at the Southern Landfill.

### 5.3.1 Operative District Plan

As described above the designation does not cover the proposed activity and land use consent is therefore sought. The proposed activity requires resource consent as a **discretionary activity** (Unrestricted) under Rule 17.3.2 in respect to the following:

#### **Non-recreational Activity**

17. Non-recreational activities, such as the use of an allotment for sludge disposal, are not specifically provided for by the District Plan. As such the activity must be assessed as a Discretionary Activity (Unrestricted) under Rule 17.3.2.

### 5.3.2 Plan Changes

#### **Plan Change 69 Contaminated Sites**

As the site is identified as being a Contaminated Site under GW’s ‘Selected Land Use Register’ (SLUR), the proposal must be assessed against Rule 32.2.1.

## **6. Statutory framework**

### **6.1 The Resource Management Act 1991**

In giving consideration to the proposal, the hearing panel particularly referred to Section 104 (1) of the Act which states:

*When considering an application for resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to –*

- (a) any actual and potential effects on the environment of allowing the activity; and*
- (b) any relevant provisions of –*
  - i. a national policy statement,*
  - ii. a New Zealand coastal policy statement,*
  - iii. a regional policy statement or proposed regional policy statement; and*
  - iv. a plan or proposed plan; and*

- (c) *any other matters the consent authority considers relevant and reasonably necessary to determine the application.*

The provisions of section 104 are all 'subject' to Part II, which means that the purpose and principles of the Act are paramount.

Part 2 of the Act sets out the purpose of the Act, which is to promote the sustainable management of natural and physical resources. Sections 6, 7 and 8 of the Act set out matters that consent authorities should consider when exercising their functions under the Act.

The hearing panel also had regard to Sections 105 and 107 of the Act, which raise matters relevant to the grant of certain discharge permits.

## **6.2 Planning instruments**

In making their decision on the application the hearing panel had regard to the following instruments and documents:

### **National**

- Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004
- Resource Management (National environmental standards for sources of human drinking water) Regulations 2007

### **Regional**

- The Regional Policy Statement for the Wellington Region 1995
- The Proposed Regional Policy Statement for the Wellington Region notified on 21 March 2009
- The Regional Air Quality Management Plan for the Wellington Region 2000
- The Regional Plan for Discharges to Land in the Wellington Region 1999

### **District**

- The Wellington City District Plan 2000

### **6.2.1 Regional planning instruments**

The relevant regional planning instruments are the Regional Policy Statement (RPS), Proposed Regional Policy Statement (PRPS), the RDLPlan and the RAQMP. The following section details the matters considered in determining this application. Chapters, Objectives and Policies of importance are considered later in this decision.

## **Regional Policy Statement**

The RPS is an overview document that outlines the resource management issues of significance to the region and provides a policy framework for managing the natural and physical resources of the region in a sustainable manner.

The regional plans assist the Regional Council to fulfil the policies of the RPS.

## **Proposed Regional Policy Statement**

The Proposed RPS was notified on 21 March 2009, and as such must also be considered pursuant to s104(1)(b)(iii). The Proposed RPS is in its early stages, and is currently going through the further submissions phase. Hearings have been scheduled for November 2009. At this time it still carries less statutory weight than the operative RPS. Section 4.2 of the proposed RPS contains the several relevant regulatory policies to be given particular regard when assessing and deciding on resource consent applications.

## **The Regional Air Quality Management Plan**

The RAQMP contains objectives, policies and rules for the sustainable management of air quality within the Region. The RAQMP is the relevant planning document for the discharge of contaminants to air.

## **The Regional Plan for Discharges to Land**

The RPDL contains objectives, policies and rules for the discharge of contaminants to land within the Region. The RPDL is the relevant planning document for the discharge of contaminants to land from the operation of the landfill and the various contaminated discharges from an existing contaminated site.

### **6.2.2 District Plan**

The site is shown on Map 2 of the District Plan and is located within the Open Space B Area. It is subject to Designation 61 which specifies the site is for refuse disposal and associated works. Portions of the site are also identified as being within the Ridgelines and Hilltops overlay, with the site being shown on Map 2 of the District Plan.

The site is also identified as being a Contaminated Site under Greater Wellington Regional Council's 'Selected Land Use Register'.

## **Plan Changes**

### *Plan Change 69 Contaminated Sites*

On 1 February 2009, proposed Plan Change No. 69 was notified, with submissions having closed on 6 April 2009. Plan Change 69 takes effect from the date of notification and as such an assessment under the provisions of Plan Change 69 has been undertaken.

Proposed District Plan Change 69 is a change to the objectives, policies and rules for contaminated land in all areas of the City. The Plan Change aims to provide a more flexible regime for managing contaminated land within Wellington City, while maintaining a level of control to ensure that any potential adverse environmental effects resulting from the use, redevelopment, or subdivision of contaminated land are avoided, remedied or mitigated.

### **6.3 Other matters considered relevant under Section 104(1)(c)**

#### **6.3.1 Waste Minimisation Act 2008**

The Waste Minimisation Act 2008 (Waste Min act) provides a general and overall encouragement to ensure that waste management practices are continued in a sustainable manner. Mr Chang's report provides an assessment of the applicant's proposal against the relevant sections of the Waste Min Act, which the hearing panel concur with.

## **7. Notification and Submissions**

### **7.1 Notification**

The application was jointly publicly notified by WCC and GW in the Dominion Post on 16 June 2007 in accordance with section 93(2) of the Act. In addition a sign was erected on the site and notice of the application was served on 3245 affected/interested parties.

Residents in the suburbs of Brooklyn and Happy Valley, Kingston, Vogelmorn, and the northern parts of Island Bay were notified of the proposal. Other groups notified were:

- The Berhampore Resident's Association
- The Brooklyn Resident's Association
- Owhiro Bay Resident's Association
- Vogelmorn Kingston Resident's Association
- Te Runanganui O Taranaki Whanui Ki Te Upoko O Te Ika Maui
- Wellington Tenth's Trust

### **7.2 Summary of submissions**

A total of 87 submissions were received by the close of submissions on 13 July 2007 at 4.30pm. A further eight submissions were received after the close of submissions, giving a total of 95 submissions. Of the submissions received one was in support and 91 were in opposition. Three neutral submissions were received. A summary of the submissions was provided in Mr Chang's report and full copies of all the submissions received were provided to the hearing panel.

#### **7.2.1 Late submissions**

Under Section 37(1)(b) of the Act, a consent authority may waive a requirement to comply with a time limit for the service of documents (e.g.

submissions). In making such a waiver, the consent authority is required by section 37A(1) of the Act to take into account:

- a) *The interests of any person who, in its opinion, may be directly affected by the waiver;*
- b) *The interests of the community in achieving adequate assessment of the effects of any proposal, policy statement or plan;*
- c) *Its duty under section 21 to avoid unreasonable delay.*

The applicant was provided with a copy of all submissions at the close of the notification period. The applicant was provided an opportunity to raise a discussion point around the acceptance of the late submissions. There was no issue raised with accepting late submissions, and as such the 20 working day time period was extended to allow the late submissions to be accepted. In extending the submission period it was considered that the submissions raised issues relevant to the assessment of the proposal and would not create unreasonable delay to the consent process.

#### 7.2.2 Issues raised by submissions

The key issues raised by submitters were related to odour from the wider Carey's Gully complex. This is discussed in the following sections.

#### 7.2.3 Issues raised by submissions in support

One submission was raised in support of the application. The submitter noted that it was for the greater public good that the processing of the sewage sludge continues at the facility, and for the solids to be disposed of either at the landfill or via co-composting at the LEL facility. Within the submission, it was requested that the applicant make 'serious efforts' to mitigate the odour that was generated by the entire facility at various times through the year; however, there was a recognition that if the facilities stopped working, there would be serious ramifications for Wellington City.

#### 7.2.4 Issues raised by submissions of conditional support or neutral submissions

Three submissions were neutral or provided conditional support to the application. Very little detail was provided by two of these submitters, with one wishing to be heard at the hearing.

Friends of Owhiro Stream, an environmental group concerned about the ongoing contamination of the Owhiro Stream, also provided a neutral submission. The group wishes to ensure that any long-term disposal of sludge to the landfill will not result in any additional adverse effects on the Owhiro Stream.

## 7.2.5 Issues raised by submissions in opposition

A clear majority of submitters were opposed to the application. Of those in opposition, the predominant concern of the submitters was the sporadic and sometimes intense bursts of odour that the submitters attributed to the operations at Carey's Gully. The associated effects of the odour that could be experienced by the submitters (and by extension the catchment in general) then also had follow-on effects associated with the devaluation of property values, health concerns around the breathing-in of such objectionable odours, and the lowering of the overall amenity value and standard of living experienced by the submitters.

Many submitters stated that they were forced indoors at times due to the odour, and that there were potentially long-term, unknown health effects. A number of submitters also highlighted that the applied-for duration of consent was too long.

Some submitters specifically opposed the dumping of sludge to landfill, as this is contrary to waste minimisation practices.

The Brooklyn Resident's Association provided a representation of many of the issues that have been raised by submitters. The association stated that:

*The odours from Carey's Gully Landfill have been a cause of concern for a number of years. Residents in Brooklyn and other parts of the city are periodically affected by offensive odours from the landfill. These odours cause stress and create feelings of frustration and anger for those affected.*

*It is difficult to reconcile the odours from the landfill with the Regional Council's publically stated commitment to Healthy Community and Healthy Environment community outcomes.*

*When we have raised concerns at meetings attended by regional councillors, such as Draft Annual Plan meetings, we have been told that 'it's not a problem' and that 'it's improving'. Such comments suggest a lack of understanding of the scale and impact of the problem.*

*Current attempts to 'mitigate' the problem are widely regarded within the community as derisory. A typical response on the weekly incident reports is 'incident logged (no action required).' It is not surprising that residents repeatedly report that they feel there is no point in reporting an incident. Similarly it is fondly hoped in response from GWRC that the planting of trees will have some long-term effect in reducing the effect of odours. It may, but this does not affect the immediate problem.*

*We have repeatedly submitted that the GWRC should invest in addressing the cause of the odours. This could be achieved through analysis of incoming waste. We are not satisfied with the response received on this point, and regard a recent report on odours from the landfill, commissioned by Wellington City Council, as partial and inadequate.*

*As a result, we would submit that:*

- Given the problems associated with the landfill, a consent term of 35 years be declined.*
- Discernable odours at or beyond the landfill's boundaries are more than minor, and therefore unacceptable; no consent should be granted if non-discernible odours at or beyond the boundaries cannot be guaranteed, and breach of this condition should result in significant legal action.*
- There should be immediate investigation of the cause of the odours, including the operation of the composting operation.*

The above submission highlights a number of concerns that characterise many submissions in opposition. The odours have been prevalent for a number of years, and it is not clear which particular facility they are arising from or their relative contributions towards the odours experienced in the catchment. As such, it is perceived that there has been inaction from both WCC and GW in dealing with the odour emanating from the Carey's Gully complex. It also highlights that, given the years of perceived in-action; there may have been a gradual decline in complaints to GW and WCC, as they believed it did not achieve anything.

The submissions also highlight that the odours from Carey's Gully as a whole are a concern for the community, and that it is difficult for all parties to differentiate the various sources of odour generated and experienced in the residential catchment.

## **8. Pre-hearing meetings**

Three pre-hearing meetings were held on 16 October 2007, 19 May 2008 and 7 April 2009. A summary of the main aspects of each of the three pre-hearing meetings was provided in Mr Chang's report and a copy of the pre-hearing meeting reports was provided in Appendix 4 of that report.

## **9. Site visit**

The hearing panel visited the site, including both the SDF and the Southern Landfill on 30 September 2009. The panel received a full tour of the SDF and explanation of the sludge dewatering process. The sludge disposal methodology and operation was observed from the opening of the skip bay doors to the completion of the mixing at the landfill face.

The hearing panel also viewed the site from the surrounding areas, including Mitchell Street, Ashton Fitchet Drive and the Brooklyn wind turbine immediately following their visit to the SDF and landfill.

The hearing panel notes the following observations from their site visit:

- A strong unpleasant sludge odour from the skip bay when the skip bay doors opened;

- There were deposits of sludge visible on the skip bay floor and skip bay loading area;
- An ad hoc method of mixing the sludge with the rubbish at the landfill face and no methodology to measure the mixing ratio achieved; and
- No coverage of the landfill area with soil after the skip bin of sludge was mixed in.
- No appreciable odour was noticed elsewhere in the landfill.

## **10. The hearing**

### **10.1 Evidence**

The hearing took place over two days on Monday 5 October and Thursday 8 October 2009 at the GW offices. Following introductions and opening comments from the Chair the reporting officer's from GW and WCC summarised the application, the main issues and their recommendations.

### **10.2 Applicant's case**

The applicant presented its case which involved presentations from the following witnesses:

- Kerry Anderson – Legal counsel for the applicant;
- Stavros Michael – Director of Infrastructure;
- James Feary – Contract Manager with UWI;
- Sylvia Allan – Independent Planning Consultant for the applicant;
- Dr Paul Heveldt – Senior Environmental Specialist with MWH NZ Ltd

### **10.3 Submitters**

The hearing panel heard from the following eight submitters:

- Patrick John Renshaw & Steve Watson
- George Holley (Southern Environmental Association)
- Dr John Robinson
- George Holley
- Stanley James Andis
- Carl Savage (Brooklyn Residents Association Incorporated)
- Stuart Bagley
- Mercina Viatos

### **10.4 Recommendations of the reporting officers**

Following the presentations from the applicant's witnesses and the submitters, the hearing panel heard from the respective Council officers.

#### 10.4.1 Greater Wellington Regional Council

- Raymond Chang – Resource Advisor
- Ron Pilgrim –Independent peer reviewer

Mr Chang's report recommends that all the consents required from GW be granted subject to the suggested conditions. Mr Chang recommended a duration which would bring the application together with the Southern Landfill consents which are required from GW expiring 14 June 2026. This recommendation did not change upon hearing the presentation from the applicant and the evidence of the submitters.

#### 10.4.2 Wellington City Council

- Hannah McCashin – Planner

Ms McCashin recommended in her Section 42A report that the proposal should be granted subject to recommended condition of consent, and until the year 2100 to link with the designation. Ms McCashin stated that she had no issues with the applicant's altered wording of the WCC recommended conditions of consent and noted that there was little contention with these conditions. She did confirm that the Long Term Reuse condition (condition 10 currently included in the GW suite of conditions) would be more appropriate to remain with the GW conditions rather than be included within the WCC conditions.

In regards to duration of consent Ms McCashin confirmed that the applicant had applied for a duration of 25 years, and that the effects of the proposal would be the same should a 91 year or 25 year consent be granted.

Ms McCashin also clarified that she recognised that odour issues were very important it is not a matter which is generally dealt with under the District Plan. Finally Ms McCashin stated that Plan Change 69 – Contaminated Sites had been assessed throughout her report but does not substantially affect the assessment of the activity.

### 10.5 Applicant's right of reply

Ms Anderson presented the right of reply on behalf of the applicant. Ms Anderson noted that since co-composting had ceased in September 2008 there had been a decline in odour complaints, and that the conditions proposed would adequately mitigate any odour. Ms Anderson also highlighted that there are positive effects associated with the activity, significant investment in the facility and associated infrastructure, and that it was consistent with the relevant policy statements and plans and Part 2 of the Act.

The applicant clarified the matters of the timing of complaints and when the skips were removed as well as how the mixing ratio will be maintained in the future. Ms Anderson also discussed the surrendering of the co-composting consent, the duration, the value of the investment and the proposed conditions. Of particular significance was the discussion about the revised draft Odour

Management Plan (OMP) that was prepared by Mr Feary and the condition requiring a Community Liaison Group (CLG).

## **11. Potential effects on the environment**

The actual and potential effects resulting from the proposal can be separated into two main categories: positive and adverse effects of the development. The actual and potential adverse effects resulting from the proposal can be further separated into the following aspects:

- Positive effects
- Odour
- Public health
- Visual amenity
- Noise
- Traffic
- Cultural

### **11.1 Positive effects**

#### **11.1.1 Discussion of evidence and findings**

The positive effects associated with the applicant's proposal have been assessed in both Mr Chang and Ms McCashin's reports. The applicant also provided an assessment of positive effects in their evidence. The hearing panel agreed with the council officer's assessments.

The hearing panel considers the SDF and the disposal of sludge to landfill are integral in providing for the health and wellbeing of the Wellington community. Also the continued use of important infrastructure constitutes an efficient use of an existing physical resource and is one means of achieving sustainable management.

They also consider that the odour has been considerably reduced as a result of the closure of the co-composting plant and the implementation of the sludge disposal to land methodology and feel this has been of great benefit to the surrounding community.

In addition, the evidence provided by the applicant shows that in theory the disposal of sludge may increase the levels of methane gas produced at the landfill that will then be captured and used to generate electricity, although in practice this may not be the case. The hearing panel acknowledge this potential as a positive effect of the proposal.

### **11.2 Odour effects**

The main environmental effect of the proposal is odour. An extensive assessment of the odour effects of the activities associated with the SDF and the disposal of sludge to landfill has been provided in Mr Chang's report. The hearing panel concur with this assessment.

## **Submitter's concerns regarding odour**

Odour from Carey's Gully was raised as a contentious issue by all of the submitters. The general feeling of these submitters was that odour from Carey's Gully can sometimes be at unacceptable limits and that it can impact on their day-to-day activities and recreation. Many submitters expressed doubts that the applicant could or would adequately manage the odour or that GW or WCC would take effective action. However, some of the submitters acknowledged that the odour issue had largely disappeared since the closure of the co-composting plant in late 2008.

Both Mr Chang and the applicant stated in their evidence that the number of odour complaints received by GW had dropped considerably since the closure of the co-composting plant. However, many of the submitters stated that the number of complaints had dropped because from the community perspective, complaining did not seem to give the assurance that odour emissions would cease, and hundreds gave up complaining due to their 'complaint fatigue'.

Mr Patrick John Renshaw and Mr Steve Watson stated that they had endured 10 years of at times unbearable odour emission from the applicant's site and the activities there, and due to the proximity of their property to the landfill. They felt ongoing odour issues have the potential to affect the amenity values and saleability of their property. The submitter also stated that despite many recorded complaints, GW and WCC has been ineffective in its monitoring and compliance enforcement role.

Dr John Robinson and Mr George Holley submitted that the suburbs of Brooklyn, Kingston, Kowhai Park, Happy Valley, and Vogeltown have all been subject to chemical contamination (the odour discharges) from the applicant's site. They believe that the applicant does not understand the biological chemistry of the sludge and due to the length of time taken to process the sludge from Moa Point to the completion of the dewatering process; the sludge becomes anaerobic, which causes it to be more odorous. Mr Holley explained that the answer to the problem of the sludge becoming and staying anaerobic is to keep it in an oxidative state, by pumping air into it. Mr Holley stated that this was not an uncommon practice in New Zealand.

Although not directly affected by the odour from Carey's Gully, Mr Stan Andis requested in his submission that the odour condition placed on the consent be "*That odour should not be discernible at or beyond the boundary.*" Mr Andis stated that it is inconceivable that after hundreds of odour complaints by distressed residents adjacent to Carey's Gully, that only one odour complaint could have ever been "confirmed" over a period of 11 years. In his view the deterrent of the current odour condition, "*offensive, objectionable or noxious,*" is unacceptable when determination is required for compliance with the Act.

Mr Chang responded to this in his closing comments, stating that he continues to support the use of the offensive, objectionable or noxious, odour condition. Mr Chang drew attention to the use of the FIDOL factors in odour assessments. In particular, the use of the location factor which gives control to consider the sensitivity of the receiving environment. Mr Chang considers the use of the

FIDOL factors provides enough control around discharges of odour beyond the boundary.

Mr Andis also requested in his submission that a CLG be set up as a forum for residents to liaise with the applicant and other parties involved. This idea was also raised by Mr Carl Savage, of the Brooklyn Residents Association Incorporated (BRAI), but in the form of annual meetings where the applicant reports to the local community. Mr Chang stated in his closing comments that he would strongly support a CLG; however, he considered rather than form a new one, it would be best to combine with the existing Carey's Gully Southern Landfill CLG.

Mr Savage raised the issue that GW officers were not able to access the southern landfill independently of WCC officials to investigate complaints of odour. In response, Mr Chang, in his closing comments, confirmed that GW officers are warranted officers and have enforcement powers under the Act, which allows them to enter the applicant's site to investigate any complaints of odour. Mr Chang also confirmed that GW has a key to the landfill and can access the site after hours without a WCC official.

Mr Savage also commented on the level of frustration from the Brooklyn residents that no one responds to their complaints of offensive and objectionable odour, and there was also confusion as to who to contact and the complaints procedure. The complaints procedure is discussed in Section 12.1 of this report.

In addition to similar concerns raised by the other submitters, Ms Mercina Viatos requested the applicant be required to make the management plans available to the public and that the long term sustainable reuse report be required not just on the fifth anniversary but also the tenth.

Most of the submitters opposed the 25 year consent duration sought by the applicant. Many requested much shorter durations, ranging from one year to five or 10 year durations with regular review periods.

### **Proposed mitigation measures**

The applicant acknowledges that in the past, odour emissions from the various sources at Carey's Gully have been a significant issue for the community. The applicant, however, pointed out that the application only relates to the sludge dewatering and the disposal of sludge to land activities. The applicant considered that largely the odour issue was caused by the co-compositing plant, which closed in late 2008, and that the complaints record provided proves this. However, the applicant acknowledges that the odour management at the SDF must continue to be maintained at its current high level. As such they have proposed a number of mitigation measures to ensure the effects of odour from the activities at the SDF and the disposal of sludge to landfill are minimised. These include operational measures, such as the daily removal of skip bins; prompt closing of the skip bay doors, centrate treatment system, and the ventilation of the air in the plant to a biofilter.

In addition to these the applicant has proposed an OMP and a Sludge Disposal to Land Plan (SDLP) that will set out the site management practices to be undertaken in a manner that is consistent with industry best practice and that the potential adverse effects of the activities are mitigated to ensure they are no more than minor. The applicant considers that the OMP will set out the details of how it is intended to meet the requirement of no offensive, objectionable or noxious odours at or beyond the boundary of the site, to ensure compliance with this requirement.

As a response to submitters concerns around the lack of action from their complaints, the applicant has included as a proposed condition of consent that they will ensure that each complaint received in responded to.

The applicant considers that the conditions proposed are comprehensive and will very adequately mitigate any odour from the activities at the SDF and the landfill disposal site.

### 11.2.1 Findings – odour

The hearing panel acknowledge that the community has endured long suffering and distress in relation to the odours discharged from the Carey's Gully complex over the past 11 years, and this has been shown by the extensive number of complaints, and number of submissions received on this application.

The hearing panel considers that the continuation of the activities at the SDF and the disposal of sludge to landfill have the potential to generate offensive odours. Although complaints have dropped considerably since the closing of the co-composting plant at the end of 2008, the panel acknowledges that there have still been complaints of odour since this time and consider that this highlights the need for the on-going management of the SDF to be maintained at a high level.

The hearing panel considered Dr Robinson's and Mr Holley's evidence and considered in theory they made an excellent point. They panel accepts that the process is a lengthy one, there is a high potential for the sludge to get in an anaerobic state and oxidisation of the sludge would in effect reduce the odours emitted. However, the panel felt there were practical difficulties with implementing this approach as the process to keep the sludge in an oxidative state would require the applicant to aerate the sludge often. This would then create another source of odour to treat with large costs associated.

The panel were not convinced that additional aeration is required at this stage, due to the practical difficulties and significant costs associated. The panel considers the review conditions, including implementation of the Best Practicable Option, will provide the opportunity to require further treatment in the future. Furthermore, as Commissioner Rolfe observed, some of the higher order reduced sulphur compounds (thiols and disulphides) are actually quite difficult to oxidise, and standard aeration may be inadequate. The use of oxygen or chemical oxidants such as hydrogen peroxide or ozone may be required, at considerably increased expense.

In regards to the ‘no discernable odour’ condition requested by Mr Andis, the hearing panel consider that this condition is virtually impossible to comply with or enforce and is likely to create unattainable expectations. The ‘no discernable odour’ condition means that any waft of odour (no matter what the nature of that odour is, e.g. the deodoriser) detected at or beyond the boundary of the site and identified as resulting from the operation of the SDF or disposal of sludge to landfill, will be a breach of the resource consent. The panel consider there is no need to set more stringent requirements that the Act prescribes in this case. The panel consider the ‘no offensive, objectionable, or noxious’ condition, is appropriate as it is effects based and the FIDOL factors used in the assessment of odour discharges, provides for consideration of the sensitivity of the receiving environment.

The hearing panel support the formation of a CLG and have included this requirement as a condition of consent. The panel considers the CLG is an important forum to try and rebuild the trust between the applicant and the community. The hearing panel expects the management plans can be provided to the CLG and the plans can be discussed with the community in this forum. This addresses Ms Viatos’ request that the management plans be made available to the public. The hearing panel felt it was best to combine the CLG with the existing Carey’s Gully Southern Landfill CLG.

The hearing panel believe continued good practice and improvement is the key to ensuring the ongoing good will and support of the community. The panel consider that the mitigation and monitoring measures proposed and conditions placed on the discharge to air permits will form a robust set of control measures that should ensure that any discharges of odour will not result in adverse effects on the surrounding community.

In addition, should the adverse effects increase to levels that are greater than those expected, the adaptive management conditions controlling the black boxes and the skip bay and skip bay doors, will provide additional options for further mitigation of any odour discharges that remain uncertain at the time of making this decision.

The hearing panel are satisfied that they have addressed the concerns of the submitters with the consent conditions, and that overall the odour effects of the proposal will be no more than minor.

### **11.3 Public health effects**

A number of the original submissions on the application noted the adverse health effects of the discharges from Carey’s Gully, including nausea and headaches occurring as a result of the odours. However, Stuart Bagley stated in his evidence at the hearing that he believed the health effects associated with the odour discharges had largely diminished since the closure of the co-composting plant.

Dr John Robinson also raised in his submission the issue of health effects from the discharges of odour from Carey’s Gully. In regards to the statement made by Mr Pilgrim in his peer review of the application *“it is highly likely that*

*contaminants having an offensive or objectionable odour will be present in concentrations in the ambient air outside of Carey's Gully that are approaching their physical irritation levels"* Dr Robinson stated that this was wrong. He commented that many of the 502 signatories to his petition told him of sickness, headaches and nausea and having to stay indoors due to the stink.

In response to Dr Robinson, Mr Pilgrim stated in his closing comments his statement in his peer review was made in regards to physical irritation thresholds. He was not saying that it did not stink and people did not experience nausea, rather in his opinion physical tissue irritation from the discharges would not be experienced at the concentrations of contaminants found in the ambient air in the outer catchment. In other words, his opinion was it is not a physiological irritation rather a physiological irritation.

#### **11.3.1 Findings – health effects**

The hearing panel acknowledges that there have been adverse health effects experienced by members of the community as a result of the discharges of odour from Carey's Gully. However, they note that the odours discharged have largely diminished since the closure of the co-composting plant.

The hearing panel agrees with the assessment of adverse health effects provided by Mr Pilgrim and consider that the conditions of consent, in particular the odour management plan, will ensure that the SDF is managed appropriately to ensure that any contribution to the odours experienced in the catchment are minimised.

#### **11.4 Visual amenity effects**

As outlined in the site description the sludge disposal is proposed to occur at the Southern Landfill which is located in a deeply incised, stream cut valley. The ridges and valleys which surround the site block views of the landfill from surrounding properties, as well as from Happy Valley Road to the east and Ashton Fitchett Drive to the north. The matter of visual effects was not raised within the applicant's evidence. Mr Watson, represented by Mr Renshaw, discussed the distance of the permitted sludge disposal level to his site and illustrated in map which accompanied his written evidence. This concern related primarily to the potential for odour issues to increase in the future, as well as the visual proximity of the sludge to the submitters site.

##### **11.4.1 Findings – visual amenity**

The hearing panel agreed with the assessment of visual effects within Ms McCashin's report. Ms McCashin stated that the sludge disposal at the tip face, when viewed from the transfer station, will be not different to the tipping of any other substances and as such one would anticipate that this activity would occur on the site. Furthermore the activity will not be visible from any other areas that the public could be reasonably expected to access.

The hearing panel acknowledged the concerns of the submitter, Mr Watson, but noted that the plan presented as part of his evidence was inaccurate. Mr

Watson produced District Plan Map 2 from the WCC District Plan and highlighted the location of his property comparative to the permitted fill heights for the landfill. The fill lines as indicated by the submitter are part of an overlay for the Ridgeline and Hilltops Area, as specified in the WCC District Plan. Furthermore the hearing panel considered that the issue of landfill height was a matter more appropriately dealt with under the consents for the landfill and is out of the scope of the current application.

The hearing panel concluded that overall the visual effects are no more than minor.

## **11.5 Noise effects**

### **11.5.1 Discussion of evidence and findings**

The issue of noise is not considered to be a matter of concern or contention in regards to the proposal. The hearing panel noted that noise effects were not raised within the submissions received, or discussed within the evidence presented at the hearing.

The hearing panel agreed with the assessment of Ms McCashin. Ms McCashin's report determined that the effects of any noise associated with sludge disposal would be minor.

## **11.6 Effects on traffic**

### **11.6.1 Discussion of evidence and findings**

No traffic issues were raised during the course of the hearing which didn't relate to the truck movements associated with transporting the sludge from the skip bay to the land fill face. Ms McCashin's report discussed traffic effects and determined that these were acceptable.

The hearing panel concurred with the assessment of effects within Ms McCashin's report and determined that the effects to traffic are no more than minor.

## **11.7 Cultural effects**

### **11.7.1 Discussion of evidence and findings**

The hearing panel understood that the cultural effects for iwi need to be recognised and assessed, in accordance with the WCC District Plan and Part 2 of the Act. There were no submissions received that discussed the impact of the proposal to iwi. Ms McCashin, assessed the effects to iwi within her report and concluded that the proposal was acceptable.

The hearing panel took into account that the applicant undertook two cultural impact assessments. Te Runanga o Toa Rangatira Inc. and consultants acting for the Wellington Tenth Trust provided these documents. The hearing panel also noted that no submitters expressed concern about the adverse cultural effects. They also noted that impacts of the proposal to iwi were not a point of

contention between the Council Officers and the applicant. The hearing panel therefore determined that the proposal would not have adverse effects to existing cultural values.

## **12. Other matters raised at the hearing**

### **12.1 Complaints procedure**

A number of submitters, including Mr Savage on behalf of the BRAI, raised concern around the complaints procedure. Mr Savage commented that many of the residents did not know who to direct their complaints to, and felt many reported to WCC got 'lost in the system'. Many submitters also complained about a lack of follow up action in response to their complaints.

The applicant is permitted to emit an odour provided that the odour is not offensive or objectionable beyond the boundary of the site.

GW takes five factors into account when assessing odour. These factors are called the 'FIDOL' factors.

**Frequency** – How often the odours are occurring at a particular location over a period of time.

**Intensity** – Strength of the odour – usually rated on a scale of 0 to 5 (0 = can't smell anything, 5 = overpowering and intolerable).

**Duration** – The number of times and total length of time the odour is detected during our investigation.

**Offensiveness (Hedonic Tone)** – Perception of the degree of unpleasantness of an odour.

**Location** – Where the odour is detected.

All five of these factors are assessed together to determine whether the odour is objectionable or offensive. No single FIDOL factor determines on its own whether the odour is offensive or objectionable; however, some, like 'location', have more significant weighting placed upon them when considering the effect of the odour. Residential areas in general would be expected to remain of generally higher air quality. GW's investigation staff have 'calibrated' noses so we know how sensitive to odour they are compared to the general population.

In addition to this, GW must be able to identify the source of the odour in order to undertake any enforcement action. Once investigation staff can confirm the source of an objectionable or offensive odour, GW will speak with the operators to mitigate and eliminate the effects as far as practicable quickly, and then will request a written explanation to gather further details about the cause of the incident.

GW has two main protocols to follow in odour investigations for Carey's Gully – They are *reactive monitoring* and *proactive monitoring*.

### 12.1.1 Reactive monitoring

The reactive monitoring for Carey's Gully is based on complaints received on the 24 hour pollution hotline service on 0800 496 734 which is answered by a call centre. It must be noted that if WCC receives a complaint of odour, they forward on this complaint to the GW pollution hotline.

During working hours a number of factors are taken into account before an officer responds to odour complaints. These include climatic factors, availability of an officer to respond in a timely manner, and whether a second compliant has been received within a certain timeframe.

GW currently has an after hours (5pm to 8am) odour response protocol which sets a threshold of three complaints received within a certain timeframe that indicates the presence of an odour within the catchment prior to responding to an incident. This threshold has been set for staff health and safety reasons and is reviewed on a regular basis.

### 12.1.2 Proactive monitoring

Acknowledging that in some circumstances an investigating staff member will arrive on site after receiving a compliant and not be able to detect the odour at its strongest, as it may have passed, GW also undertakes proactive monitoring. This is undertaken when meteorological conditions are favourable for any odour that may be at Carey's Gully to be transported to the neighbouring residential areas, such as Brooklyn, Vogeltown, Mornington and so on.

## 12.2 Surrender of LEL consents

A number of submitters raised the matter that if the applicant is not going to co-compost the sludge anymore they should be required to surrender their existing consents for the co-composting plant. The applicant stated in their right of reply, lead by Ms Anderson, that requiring the applicant to surrender the co-composting consents is outside the scope of this consent process. However, Ms Anderson stated that they have no intention of recommencing co-composting at the Co-Composting Plant, and this was also confirmed by Mr Stavros Michael, of WCC, in his evidence. The reason the applicant has not surrendered the consents is because it currently undertakes a green waste composting activity and that activity relies on the existing consents for any discharges resulting from the composting. The applicant advised they will be discussing with GW if there is the ability to remove the reference to the sludge aspect of the consents; however, that will be subject to a separate process under the Act.

## 13. Objectives and policies of the relevant planning instruments

### 13.1 National planning instruments

An assessment of the application against the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and

Other Toxics) Regulations 2004 and the Resource Management (National environmental standards for sources of human drinking water) Regulations 2007 was provided in Mr Chang's report. The hearing panel have given consideration to both regulations when making their decision and they agree with Mr Chang's assessment that the discharge to air is highly unlikely to cause the airshed to breach the regulations and that there will be no effect on human drinking water sources from the activities proposed.

### **13.2 Regional and District planning instruments**

Having assessed the effects of the proposal the hearing panel considered the section 104 'gateway' test pertaining to whether the application is contrary to the relevant objectives and policies in the Regional Policy Statement, Proposed Regional Policy Statement, Regional Plans and the District Plan.

The hearing panel consider that Mr Chang and Ms McCashin in their Section 42 officer's reports correctly cover all of the relevant objectives and policies to this application, and there was no disagreement at the hearing between the parties on their assessments. However, the objectives and policies of particular importance are discussed in the sections below.

A full list of the objectives and policies the hearing panel have considered is contained in Appendix 7 in Mr Chang's report and within Ms McCashin's report.

### **13.3 The Regional Policy Statement**

The relevant objectives and policies relate to iwi environmental management, freshwater, air, ecosystems and waste management and hazardous substances, which are largely reflected in the objectives and policies of the RAQMP, and the RPDL.

In considering the proposal against the provisions of the RPS and having regard to the mitigation measures that are proposed or those to be imposed by way of conditions of consent, the hearing panel conclude that the proposal to continue to operate the SDF and the disposal of the sludge to landfill would be overall consistent with the objectives and policies of the RPS.

The hearing panel agree with the assessment on the relevant objectives and policies of the RPS provided by Mr Chang in his report. However, the objectives and policies the hearing panel consider are of particular note are discussed below.

#### **13.3.1 Chapter 8- Air**

*Objective 2* of this chapter seeks to enhance air quality in areas with degraded air quality. The hearing panel considers that in this case, the applicant has sought to enhance degraded air quality that has been experienced in the adjacent residential suburbs. The hearing panel note that since the co-composting of sewage sludge has ceased, and the applicant has disposed of all the sludge to landfill (over the last nine months), the number of odour

complaints received by GW and WCC has diminished dramatically, leading to a perceived increase in the air quality in the local environment.

*Policies 8, 10 and 11* seek to avoid, remedy or mitigate the adverse effects of a possible discharge to air that may have effects on human health, surface and ground water, soil, plants, animals, and public amenity values. The hearing panel are satisfied that the applicant has proposed a number of mitigation measures to ensure that the adverse effects of the discharge are adequately mitigated. Additionally, the hearing panel consider that the conditions imposed and the applicant's mitigation measures (including the OMP) provide for the continued minimisation of emissions of contaminants to air to adequately mitigate the adverse effects on the environment, in particular with public amenity. As such, the hearing panel consider that granting the discharge permits is consistent with these policies.

### 13.3.2 Chapter 13 – Waste Management and Hazardous Substances

*Objective 2* seeks to reduce and minimise the quantity of residual wastes for disposal through reuse, recycling and resource recovery. Reusing materials for the same or similar purposes are ways of making use of resources which would otherwise be disposed of as waste – and similarly for recycling and resource recovery.

The hearing panel considers that, overall; the disposal of sludge to landfill does not fully meet the intent of this objective. For that reason the panel has imposed as a condition of consent the requirement for the applicant to continue to investigate the long term options of sludge reuse to continue to be sustainable.

*Policy 5* seeks to promote, as a matter of priority, the concepts of clean production and waste minimisation and to support all sectors of the community in the implementation of these concepts and *Policy 6* seeks to provide opportunities for the reuse of waste materials, recycling and recovery of resources from waste.

The hearing panel consider that overall the intent of these policies is not met, however; they feel that the conditions of consent, in particular, the condition requiring the applicant to investigate long term disposal options to provide for the reuse of sludge will ensure the proposal is consistent with these policies.

### 13.4 The Proposed Regional Policy Statement

The hearing panel have given consideration to the PRPS when making their decision; however, they have given it less statutory weight than the ORPS. Having regard to the mitigation measures that are proposed or would be implemented by way of conditions of consent, the hearing panel conclude that the continued operation of the SDF and the disposal of the sludge to landfill would be consistent with the objectives and policies of the PRPS.

### **13.5 The Regional Air Quality Management Plan**

The hearing panel consider that the proposal is not opposed in nature to objectives identified in the RAQMP. The hearing panel agree with the assessment on the relevant objectives and policies of the RAQMP provided by Mr Chang in his report. Policies of note are:

*Policy 4.2.4* seeks to avoid, remedy or mitigate any adverse effect of the discharge of contaminants to air that is noxious, dangerous, offensive or objectionable. The hearing panel are satisfied that if the proposed management regime and the conditions of consent will ensure the proposal is consistent with this policy.

*Policy 4.2.5 and 4.2.6* recommend that, where appropriate and practicable, the discharge of contaminants to air should be avoided or minimised at their source. Additionally, any measures adopted should take account of the sensitivity of alternate receiving environments (e.g. water and soils). The hearing panel consider that if the operations of the SDF are as well managed as they have been and the conditions of consent are adhered to the discharge of contaminants will be minimised appropriately at the source, and the intent of this policy achieved.

*Policy 4.2.14* provides specific guidance around the discharge of odorous contaminants, stating that the adverse effects (including those on human health and amenity values) should be avoided, remedied or mitigated. The hearing panel agree with Mr Chang's assessment against this policy in his report and consider the proposal is consistent with this policy.

### **13.6 The Regional Plan for Discharge to Land**

The hearing panel consider that the proposal is not opposed in nature to objectives identified in the RDLP. The hearing panel agree with the assessment on the relevant objectives and policies of the RDLP provided by Mr Chang in his report. The policy of particular note is:

*Policy 4.2.3* seeks to promote waste management strategies which take into account the true costs of managing residual solid wastes, particularly those strategies which achieve valuing landfill assets and the costs of disposal of waste in landfills, implementing 'generator pays' waste management charges, and preparing contracts for waste management services which do not contain incentives to maintain or increase the amount of waste discharged.

The hearing panel consider that the disposal of sludge to the Southern Landfill does not fulfil the intent of this policy; however, they acknowledge the attempts made by the applicant to minimise the disposal of sludge to landfill and consider that the conditions of consent will ensure that the intent of the policy is fulfilled.

## **13.7 The District Plan**

Ms McCashin, stated in her decision report that the proposal is consistent with the objectives and policies in the Operative District Plan and Plan Change 69 – Contaminated Sites.

Both Ms Anderson and Ms Allan, for the applicant, stated in their evidence that they concurred with the general conclusions made by Ms McCashin in her assessment of the objectives and policies.

Overall the hearing panel agreed with the assessment of the applicant and Ms McCashin and considered that the continuation of the landfill activity within its current site is a positive and efficient use of resources. The relevant objectives and policies under the District Plan were not raised as a point of contention by the submitters. Therefore the hearing panel could conclude that proposal is consistent with the relevant objectives and policies in the Operative District Plan and Plan Change 69.

A full list of the objectives and policies that the hearing panel has considered is contained within Ms McCashin's report.

## **14. Section 104(2A), 105 and 108 of the Act**

### **14.1 Section 104(2A)**

The applicant stated in their legal submissions, presented by Ms Kerry Anderson of DLA Phillips Fox, that they consider Section 104(2A) to be particularly pertinent to their application. Section 104(2A) states:

*When considering an application affected by section 124, the consent authority must have regard to the value of the investment of the existing consent holder.*

The applicant considers the value of the investment in the 'Clearwater' project as a whole is significant and the SDF is a substantial part of that project. They consider the investment in the SDF and the piping to get the sludge to the plant from Moa Point represents a significant community investment. Mr Chang commented that he agreed with the applicant's statement. The hearing panel were satisfied with this consideration of Section 104(2A).

### **14.2 Section 105 of the Act**

The hearing panel note that Section 105 of the Act applies to the discharge permits associated with the discharge of contaminants to the air and to land associated with the proposal and have had regard to the matters detailed in Section 105(1) (a) and (c) of the Act when making their decision. The panel have considered the nature of the discharge and the sensitivity of the receiving environment to adverse effects.

The hearing panel have considered all the evidence presented by Mr Chang, Mr Pilgrim, Dr Heveldt and Ms Allan.

The discharge of sludge to land is the preferred method of disposal. The applicant has tried alternative disposal methods, namely the co-composting. However, it was found that the co-composting facility was found to involve odour effects that were not able to be mitigated in terms of the surrounding residential environment. The disposal of sludge to landfill is seen as an alternative method to address the odours. The applicant has stated that the disposal to landfill method is a medium term solution, and long-term potential regional strategies are being investigated, and this has been imposed as a condition of consent.

The applicant did not advise of any other alternative methods of discharging contaminants to air, as they feel alternative methods are neither necessary or practicable. The hearing panel accepts that there are no reasonable alternatives for the discharges to air and notes that the mitigation measures to be employed will minimise the discharges and the associated effects.

The hearing panel acknowledges the need to maintain good air quality and that the evidence before them is that the discharges are unlikely to cause a breach of the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.

The hearing panel consider that the conditions of consent will minimise the discharge of contaminants to air and land. Therefore they conclude that given the adaptive management approach adopted, with ongoing monitoring and the opportunity to implement conditions and review the conditions of consent should desired outcomes not be met, the proposed discharge of contaminants to the air and land will not have significant adverse effects on those receiving environments and significant adverse effects.

### **14.3 Section 108 of the Act**

The hearing panel believe that the conditions of consent suggested by both the applicant and the officers represent practicable and robust measures that will avoid, remedy or mitigate the adverse effects on the environment as a result of the proposal. The consent conditions imposed are within the scope of conditions allowed by Section 108 and are included in Schedules 1 and 2 to this decision.

#### **14.3.1 Conditions agreed to at the hearing**

Ms Allan, on behalf of the applicant, outlined a number of conditions recommended by the council officers that they did not agree with or wished to amend. Ms Allan considered that a number of conditions were onerous, expensive and had time-consuming requirements and did not reflect the very low level of adverse effects that are associated with the activities for which consents are sought. Given this disagreement, following the adjournment of the hearing after day 1, the Chair, Cr Laidlaw gave directions for the applicant and council officers to consult further on the proposed conditions and the two proposed management plans prior to the hearing resuming two days later. Cr Laidlaw noted that any conditions agreed would be subject to any further changes following hearing of the submissions.

As directed on 7 October 2009, Mr Chang met with Ms Anderson and Dr Heveldt to discuss the conditions which were in contention to see if some agreement could be made. As a result a number of the conditions were amended in a mutually agreeable manner. Conditions that remained in disagreement related to the development of the management plans (OMP and a SDLP), and whether the conditions should lie within the management plans or as separate conditions. The applicant also disagreed with the conditions relating to alternative methods for the transfer and covering of full skip bins should they be left for longer than 48 hours and the recording of the opening and closing of the skip bay doors.

#### 14.3.2 Conditions imposed- Greater Wellington consents

The hearing panel were happy with the amendments agreed to between the applicant and Mr Chang, and considered that the amendments made express the requirements more clearly and enhance the accuracy and the enforceability of the conditions. The hearing panel have considered the applicant's comments, officer's recommendations and all the evidence presented at the hearing when making their decision on the consent conditions. The decisions made by the hearing panel on the conditions that remained in disagreement are discussed below. All other conditions have remained as recommended by the council officers.

##### **WGN070230 [26013] - To discharge sludge contaminants to land at the Southern Landfill**

*Condition 9* - The hearing panel felt it was important to include the requirement in the SDLP that if in the unlikely event that a full skip bin of sludge is left for more than 48 hours, a specific procedure is in place to ensure that effects from the transfer are minimised, in particular the odour effects. The applicant has advised a 'full skip bin' is defined as a net skip weight of 16 tonnes, as that is the weight at which they move onto filling the next skip. As this definition of 'full skip bin' may change when new skip bins are introduced, the panel have required the definition of 'full skip bin' to be included in the SDLP. The hearing panel notes that the process is unique in New Zealand and the sludge dewatering process at the plant is fairly long i.e. 24 hours. The hearing panel acknowledges that the length of processing time is a problem as there is a high potential for the sludge to get anaerobic and to stay anaerobic; resulting in more odorous sludge. The hearing panel feel that this requirement is important to include in the SDLP to give the submitters reassurance on this matter.

*Condition 11* – This condition specifies the mixing ratio of at least four parts rubbish to one part sludge be achieved on a daily basis. The hearing panel agreed with Mr Chang's recommendation that this is an integral condition that serves to provide assurance to submitters that the status quo of the last year will be continued and enforceable, while also acknowledging that the mixing ratio is *mostly* to do with the stability of the landfill. On the basis of their site visit, the hearing panel felt that the requirement of the 100mm capping layer of soil after each skip bin of sludge was a very important measure to mitigate the

effects of odour from the landfill and as such have included it as a separate condition, *Condition 12*.

*Condition 13* – The hearing panel noted a strong odour from the skip bay during the loading of the skip bin during their site visit and they agree with Mr Chang’s recommendation that in the unlikely event that any full skip bins of sludge are left for more than 48 hours, the skip bins need to be covered during their transport to the landfill. Due to the uncertainty as to the contribution of the transfer of the full skip bins to the odour released, the hearing panel feel a precautionary approach must be adopted and have included this condition to ensure odour effects are minimised and that the concerns of the submitters are met.

The hearing panel have made minor wording changes to a number of other conditions to make the intent of the conditions clearer for the applicant.

**WGN070230 [26014] - To discharge contaminants to air, namely odour, from the biofilter, centrate treatment plant and other structures and operations at the SDF.**

*Condition 4* of both discharge to air permits- states that there shall be no discharges to air that are, in the opinion of an enforcement officer of the Wellington Regional Council, noxious, dangerous, offensive or objectionable at or beyond the site boundary. The hearing panel consider this condition is appropriate in this case as it is effects based, and for the reasons detailed in Section 11.2.1 of this report.

*Condition 7* – This condition refers to the ventilation of air from the SDF and the volume of air discharged to the biofilter. The hearing panel note that during maintenance works the biofilter will not be operating at full capacity. As such, they felt it was important to include limits on the amount of ventilated air that can be discharged to the biofilter when it is operating without one cell.

*Condition 10* – This condition outlines the requirements of the OMP which covers operation of the SDF. The hearing panel agreed with Mr Chang’s recommendation that it was important for the applicant to include a methodology for recording and keeping a log of the times the skip bay doors are opened and closed each day in the OMP. The hearing panel consider, on the basis of their site visit and the evidence presented at the hearing, that there is room for improvement with the operation of the skip bay doors and the divide in responsibilities between the SDF and landfill contactors. They feel this is an area of high risk for odour discharges and the operation of the skip bay doors need to be tightly managed. The panel also feel that the management of the skips from the Western Waste Water Treatment Plant needs to be outlined in the OMP.

*Condition 11*- Requires the applicant to conduct ‘building tightness’ audits. Mr Chang recommended in his in his section 42A officer’s report that these audits be undertaken every two years. During the further discussions Mr Chang had with the applicant while the hearing was adjourned, this requirement was changed to once every 10 years. However, Mr Chang stated in his closing

comments that after hearing the submitters' evidence he felt the audits should be undertaken every two years, which is consistent with his original recommendation. Mr Pilgrim also commented, that if building tightness audits were undertaken, they would have to be done sufficiently often to be effective, and considered in his expert opinion, that they should be undertaken on a two yearly basis as opposed to 10 yearly. The hearing panel considered the applicant's proposed time period of every 10 years; however, after hearing all the evidence presented concurred with Mr Chang and Mr Pilgrim's opinion. The hearing panel feel this condition addresses the submitters concerns.

*Condition 12*- requires annual biofilter monitoring. The applicant considered that this condition should be included in the OMP. However, Mr Chang considered that the biofilter is a key component of the mitigation of odours generated by the SDF and recommended the inclusion of a condition which requires the good operation and maintenance of the biofilter. The hearing panel agreed with Mr Chang's recommended condition. *Condition 14* sets operational limits on the biofilter. Again the applicant felt that this condition would better sit within the OMP. Mr Chang stated that he strongly supported the inclusion of this condition as it includes design criteria that must be met to ensure there is adequate treatment of air. The hearing panel agreed with Mr Chang's opinion and have included the condition with some additions to include temperature and moisture parameters to be consistent with the parameters in the draft OMP.

*Condition 16* – requires the investigation of additional mitigation measures to treat odours from the black boxes should it be found they are required. Given there is uncertainty around how offensive the odours from the black boxes are and that there is significant capital expenditure involved in the development of the treatment of air associated with the black boxes, Mr Chang recommended this adaptive management condition. Mr Chang noted that there was some confusion around the overall volumetric contribution of the black boxes of odorous air to the atmosphere and considered that if the black boxes are found to be a source of odour then the condition can be enforced to ensure that the effects are mitigated.

Commissioner Rolfe commented that the odour from the black boxes would be quite distinct and if it did become a problem it would be relatively obvious. The hearing panel acknowledges the compromise reached between the applicant and Mr Chang with this condition as there are significant costs associated with the treatment of the odours from the black boxes, when the actual contributions from the black boxes is unknown.

The chemical nature of the gases from the black boxes would be different to those from the sludge dewatering plant, and hence it would be appropriate for them to be treated at a separate, additional biofilter. If that were to eventuate, it would be desirable to discontinue extraction of the centrate plant wet well gases to the existing biofilter, and instead take them to the new, additional biofilter. This would have at least three benefits, viz.: downloading the existing biofilter; having the treatment of gases of a similar chemical nature from the centrate plant operations in a common biofilter; and reducing the length of ducting for the extraction of gases from the centrate plant wet well to

treatment. The additional biofilter would need to be sized to accommodate all of the gases from the centrate plant.

*Condition 17* – The hearing panel felt it was important to include the requirement to have a Community Liaison Group (CLG) as requested by a number of the submitters. The panel have considered all the comments received by the submitters on the draft CLG condition; however, they feel it is important to keep the condition consistent with CLG conditions on other recent consents. The panel considers the details of the Terms of Reference can be decided upon at the first CLG meetings. The hearing panel agreed with a number of the submitters that the CLG should meet more than once a year and they have included this requirement in the condition.

Following their site visit and considering all the evidence presented at the hearing the panel felt it was also important to include reference to the skip bay doors in this condition. They feel this will ensure that if the skip bay is found to be a source of offensive odour the council has the ability to require the applicant to investigate further ventilation and treatment of the air in the skip bay. The hearing panel consider that this condition will provide the submitters with reassurance that any odour issues from the SDF will be effectively managed by the SDF contactors and through enforcement of the conditions by the council. The installation of an additional biofilter at the centrate plant, including a rerouting of the centrate wet well gases to that biofilter, would allow consideration of more and better targeted extraction at the SDF, including the possibility of air curtains at the skip bay doors, but with all this still within the volumetric limits of the existing biofilter.

The hearing panel have made minor wording changes to a number of other conditions to make the intent of the conditions clearer for the applicant.

### **Review conditions**

A review condition has been placed on all three consents and will enable GW to review any conditions of the consents in order to assess the adequacy of the monitoring requirements; to address any adverse effects arising from the exercise of the consents or to require the implementation of the Best Practicable Option (BPO) with respect to disposal to land methodologies or new treatment technology. The hearing panel have amended the wording of the review conditions slightly to make the intent of the condition in regards to the BPO clearer for the applicant.

#### **14.3.3 Conditions imposed- Wellington City Council consents**

##### **SR No. 161775 – To dispose of sludge contaminants at the Southern Landfill.**

During the course of the hearing the applicant suggested amendments to the WCC conditions which Ms McCashin was agreeable to. These amendments were for the purposes of ensuring that the conditions were consistent with the conditions within the GW consents. *Condition 3* requiring a SDLP and *condition 4* were both amended to be consistent with GW. *Condition 5*

regarding which sets out the standard for solids content, was also removed to ensure consistency.

The hearing panel agreed with the majority of these conditions and the changes accepted by the Ms McCashin and the applicant. *Condition 2* in regards to the duration of the land use consent was altered by the hearing panel so that it was aligned with the other consents on the site. This is discussed further within the section 17.3 of this report.

## **15. Part 2 considerations**

### **15.1 Section 5 Matters**

In considering the application the hearing panel had regard to the matters identified in Part 2 of the Act. In particular they had to consider whether the proposal achieves the purpose of the Act, which is to promote the sustainable management of natural and physical resources. In making their assessment the hearing panel had regard to section 5(2) of the Act, which defines the meaning of ‘sustainable management’ as follows:

*... managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—*

*(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*

*(b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*

*(c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

The hearing panel considered this and agreed that on balance the proposal was consistent with Section 5 of the Act, as the proposal promotes the sustainable development of natural and physical resources. The hearing panel acknowledged that while the end product of the sludge disposal was unable to be used efficiently in terms of a usable composting product, this proposal achieved the best outcome in terms of avoidance of adverse effects to the environment. The conditions of consent are considered to remedy and mitigate the adverse effects of the proposal. The hearing panel agreed with the GW Officer and the applicant that the sludge dewatering plant and associated disposal of the dewatered sludge will provide a positive service to the social, economic and cultural wellbeing of the Wellington Region.

### **15.2 Section 6, 7 and 8**

The hearing panel considered Section 6, Matters of National Importance, Section 7, Other Matters, and Section 8, Treaty of Waitangi in their deliberations.

The applicant stated that there are no matters raised by the applications in relation to Section 6, due to the specific locations within which the activities take place. The landfill is completely isolated from Carey's Gully Stream and the Owhiro Stream, so rivers and their margins are protected. The hearing panel agreed with this assessment as well as the conclusions made by the Council Officers that the proposal was consistent with Section 6(e) which provides for the relationship of Maori with ancestral lands, water, sites, waahi tapu and taonga.

The hearing panel noted that the applicant and the Council Officers were generally in agreement about what the relevant matters of Section 7 were. These were identified as:

*(a) kaitiakitanga:*

*(aa) the ethic of stewardship:*

*(b) the efficient use and development of natural and physical resources:*

*(c) the maintenance and enhancement of amenity values:*

*(f) maintenance and enhancement of the quality of the environment:*

*(j) the benefits to be derived from the use and development of renewable energy.*

The hearing panel took into account the evidence given by the applicant and the assessments of the Council Officers. They also noted that no submissions specifically addressed the relevance and consistency with the provisions of Section 7.

As outlined above, the hearing panel did not consider that the application would have an adverse impact to the principle of kaitiakitanga. The hearing panel noted that the Council Officers and the applicant both agreed that the proposal was consistent with (b) and (c). Furthermore the Southern Landfill has been using the gas released from the facility to generate energy which is an efficient benefit of the proposal.

The hearing panel considered that the requirement of the consent holder to comply with the conditions placed on the consent would allow for the application to be consistent with (c), (f) and (j).

Section 8 of the Act requires the hearing panel to take into account the principles of the Treaty of Waitangi. All parties considered that the proposal did not raise any Treaty issues. The hearing panel concurred with this assessment and for the reasons discussed above and within the assessment of iwi issues, the proposal was seen to be consistent with Section 8.

In conclusion the hearing panel determined that the proposal was consistent with Part 2 of the Act.

## 16. Main findings of fact

- The hearing panel note the considerable amount of time that has gone by throughout this process and the period where a considerable number of odour complaints were received from which no immediate action from the applicant resulted.
- The hearing panel consider this application is an encouraging example of the consultative and pre-hearing process in responding to concerns from the submitters and getting people together prior to the hearing.
- The proposal has a number of benefits including the generation of methane gas earlier and more methane produced from the sludge disposal at the landfill.
- The hearing panel acknowledge the lengthy timeframe involved in the process and high potential for the sludge to get Anaerobic. Approximately 24 hours to get the sludge from MPWWTP to the SDF and then dewatered, and then time to dispose of the sludge to landfill is a long duration, this being a unique process in New Zealand.
- The hearing panel noted that there are significant benefits from the ongoing operation of the SDF; including the fact that continued use of important infrastructure constitutes an efficient use of an existing physical resource. The activities requiring consent provide a necessary service to the social, economic and cultural wellbeing of the community, Wellington City and the Wellington Region.
- The hearing panel acknowledges that there is a level of distrust towards the applicant in dealing with the odour issue. The formation of a CLG, required as a consent condition, may help address this issue. The panel also sees the CLG as a forum to try and rebuild the trust between the applicant and the community.
- The hearing panel acknowledges that a significant period of time has gone by in this process and the community has complaint fatigue. This may have in part contributed to the decline in complaints received by GW
- The hearing panel acknowledges the compromise reached between the applicant and officers regarding the treatment of odours from the black boxes, but would like it recorded that if an additional biofilter is installed it be of sufficient size to also take the centrate wet well gases, which in turn would allow consideration of more and better targeted extraction at the SDF, including the possibility of air curtains at the skip bay doors. These comments are to be provided by additional Notes to conditions.
- The hearing panel is satisfied that any actual or potential adverse effects resulting from the discharges can be appropriately avoided, remedied or mitigated provided the applicant adheres to the conditions of consent.

- The hearing panel is satisfied the ongoing discharges are generally consistent with the objectives of the RPS the PRPS, the RDLP and the RAQMP, provided the conditions of consent are adhered to throughout the durations granted.

## **17. Grant of consents**

### **17.1 Consents sought from Greater Wellington**

The Hearing Commissioners acting pursuant to the powers delegated to it by the Wellington Regional Council under Section 34 of the Act, and subject to Sections 104, 104B, 105, 107 and 108 of the Act, hereby **grant** the following resource consents for the reasons stated in section 17.4 of this decision and subject to the conditions listed in Schedule 1 to this decision and for the durations stated in section 17.2 of this decision:

#### **WGN070230 [26013]: Discretionary Activity**

To discharge dewatered human effluent ('sludge') contaminants to land at the Carey's Gully Southern Landfill.

#### **WGN070230 [26014]: Discretionary Activity**

To discharge contaminants to air, namely odour, from the biofilter, centrate treatment plant and other structures and operations at the Carey's Gully Landfill Sludge Dewatering Facility.

#### **WGN070230 [26015]: Discretionary Activity**

To discharge contaminants to air, namely odour, from the disposal of dewatered human effluent ('sludge') contaminants to land at the Carey's Gully Southern Landfill.

### **17.2 Duration of consents sought from Greater Wellington**

The applicant has applied for a duration of 25 years for each of the GW consents.

Mr Chang in his Section 42A officer's report recommended a duration of consent that aligns with the expiry of the existing WCC Southern Landfill consents; that is 14 June 2026. This would provide the applicant with a consent duration of approximately 16.5 years.

Mr Chang based his recommendation on the effects of the proposal, focusing on the location of the discharge to air from the Carey's Gully complex. Mr Chang considers that this is a pragmatic approach to ensuring that all odour effects can be considered together from Carey's Gully to remove uncertainly generated by multiple consents. Mr Chang stated in his closing comments that many of the submitter's consider a duration of 25 years is too long, given their lack of trust towards the applicant in being able to resolve the odour issues. Mr Chang also stated that discharge permits in the Wellington region are typically granted a term of 10 years, or 15 years for those with a good compliance

history. Mr Chang considers a duration of 16.5 years is long enough to provide the applicant with some certainty while also taking into account the submitters concerns.

Ms Allan, on behalf of the applicant, stated they wished to ensure the 'Clearwater' projects receive the same consent term and the MPWWTP was recently granted a term of 25 years, expiring on 11 May 2034. Ms Allan feels that the SDF is an essential service for the Wellington community and is the result of significant expenditure on behalf of WCC and its ratepayers. The applicant feels the costs of obtaining new consents is prohibitive, and that the SDF is a high quality, permanent plant and that a resource consent of less than 25 years would effectively limit its life.

The hearing panel have paid due consideration to the arguments presented by both Mr Chang and the applicant. The hearing panel viewed that aligning the duration of the consents with the duration of the existing Southern Landfill consents was the most appropriate course of action. The panel feel it is important to grant a duration based on environmental effects as opposed to just operational issues i.e. to line with the MPWWTP consents and this will allow for the effects from all the activities at the landfill to be considered together when the consents come up for renewal.

In considering Part 2 of the Act and acknowledging the existing infrastructure in accordance with section 104(2A) and the effects of the proposal on the community, the hearing panel decided that the duration should be considered in terms of environmental effects and be consistent with the existing consents associated with the Southern Landfill.

The GW consents **WGN070230 [26013] [26014] and [26015]** expire on **14 June 2026**.

### **17.3 Consent sought from Wellington City Council**

The Hearing Commissioners acting pursuant to the powers delegated to them by the Wellington City Council under Section 34 of the Act, and subject to Sections 104, 104B and 108 of the Act, hereby **grant** the following resource consent for the reasons stated in section 17.5 of this decision and subject to the conditions listed in Schedule 2 to this decision and for the durations stated in section 17.4 of this decision:

#### **SN161775: Discretionary Activity (Unrestricted)**

To dispose of sludge contaminants at the Southern Landfill.

### **17.4 Duration of consent from Wellington City Council**

The applicant applied for a land use consent with a duration of 25 years. Ms McCashin recommended in her report and her opening statement that the land use consent be granted until the year 2100, or the decommissioning of the landfill, whatever occurs first, so that it is in line with the designation. This recommendation was made on the basis that it would avoid the need for reassessment of the activity which is inherently linked with the lifetime of the

sludge dewatering plant. Ms McCashin again stated that in her closing that while her recommended duration may be outside of the scope of the application, she saw no effects based reason for the City Council's consent to be limited to less than 25 years as was original applied for. She also noted that land use consents do not normally have a time limit but in this instance it is appropriate.

Ms Anderson for the applicant, confirmed in her right of reply that the Council accepts that it is limited to the duration that they applied for (25 years) and that this is the maximum period that the hearing panel can grant the land use consent for.

The hearing panel considered the evidence given by Ms McCashin and the applicant in regard to the duration of the land use consent. They concurred with the view of Ms Anderson that 25 years was the longest period that they could grant consent for.

The hearing panel viewed that aligning the duration of the land use consent with the durations of the discharge consents was the most appropriate course of action. Therefore the land use consent would expire on 14 June 2026 and have a period of approximately 16.5 years. The hearing panel considered the argument of the applicant that the consents should be lined up with MPWWTP consents which have been granted consents for a period of 25 years from early 2009. However in considering Part 2 of the Act the hearing panel decided that the duration should be consistent with the discharge consents associated with the disposal of sludge and specific to the subject site, Carey's Gulley.

The WCC consent **SN161775** expires on **14 June 2026**.

## **17.5 Reasons**

The reasons for granting consent and imposing the conditions in Schedules 1 and 2 are discussed earlier in this decision and can be summarised here as:

- The activities provide a necessary service to the social, economic and cultural wellbeing of the community, Wellington City and the Wellington Region.
- The proposed continued use of the SDF has a number of benefits including the continued use of existing infrastructure which is an efficient use of an existing physical resource.
- The mitigation measures and conditions of consent will avoid, remedy or mitigate the adverse effects of the discharges on the environment.
- Consent conditions imposed on the resource consents will ensure that the Best Practicable Option is being utilised to address the effects of the discharges.
- The proposed activities are not contrary to the relevant objectives and policies of the RPS, PRPS, RDLP, RAQMP, and the WCC District Plan.

- The activity is consistent with the Purpose and Principles of the Resource Management Act 1991.
- Overall, the granting of these consents is consistent with Part 2 of the Act.

**For the Wellington Regional Council and Wellington City Council:**

  
Chris Laidlaw (Chair)  
On behalf of the Hearing Panel

Date: 30/10/09



## Schedule 1

### Conditions imposed on Wellington Regional Council Consents

#### **WGN070230 [26013]: To discharge dewatered human effluent ('sludge') contaminants to land at the Carey's Gully Southern Landfill.**

1. The location and nature of the discharge shall be in accordance with the consent application and its associated plans and documents lodged with the Wellington Regional Council on:

- 26 April 2007 (original application),
- 23 August 2007 (additional information and bioaerosol monitoring), and
- 13 August 2009 (additional information and updates to the proposal).

Where there may be contradictions or inconsistencies between the application and further information provided by the applicant, the most recent information applies. In addition, where there may be inconsistencies between information provided by the applicant and conditions of consent, the conditions shall apply.

Note: Any change from the location, design concepts and parameters, implementation and/or operation may require a new resource consent or a change of conditions pursuant to Section 127 of the Resource Management Act 1991.

2. The *discharge area* shall be the land for which leachate collection has been implemented and defined in designation 61 as shown in the Wellington City District Plan Map 2.
3. Sludge contaminants and dewatered sludge shall be defined as human effluent and dewatered human effluent sourced from the municipal wastewater treatment plant process which includes:
  - dewatered sewage,
  - or any material which includes dewatered sewage sludge,

No sludge contaminants having a dry solids content of less than 15% by volume shall be disposed of under this permit.

4. The permit holder shall ensure that the sludge disposed to landfill is no less than 20% dry solids content by volume basis, based on a weekly average measurement of a minimum of 5 grab samples per week from different skip bins prior to their disposal at the landfill.

Note: It is therefore possible to dispose of sludge which is at times less than 20% dry solids (but no less than 15% dry solids) provided the overall weekly average is greater than 20%.

5. No more than 200 wet tonnes per day (recorded at the weigh bridge) of sludge contaminants shall be discharged to the Southern Landfill.

The permit holder shall ensure that this information shall be recorded at the weigh bridge for each skip bin disposed of.

6. The permit holder shall keep a copy of this permit and provide all documents and plans referred to in this permit to each operator/contractor undertaking the operation.

A copy of this permit shall be kept within the site office and displayed in a prominent place at all times in a manner that meets the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

A copy of this permit shall be presented to any Wellington Regional Council officer on request.

7. The permit holder shall, at all times, operate, maintain, supervise and control all processes and equipment on site to ensure compliance with the **Sludge Disposal to Landfill Plan** pursuant to condition 9 and all other conditions of this permit.

#### **Administrative conditions**

8. The permit holder shall keep a record of any complaints received alleging adverse effects from the permit holder's operations. The complaints record shall contain the following where practicable:

- The name and address of the complainant, if supplied,
- Identification of the nature of the complaint,
- Date and time of the complaint,
- Weather conditions at the time of the complaint,
- Results of the permit holder's investigations, and
- Any mitigation measures adopted.

The complaints record shall be made available to the Wellington Regional Council on request. The permit holder will ensure that each complaint it receives is responded to.

9. Within three months of the commencement of this permit, the permit holder shall prepare and maintain a **Sludge Disposal to Landfill Plan (SDLP)** for submission and approval to the Manager, Environmental Regulation, Wellington Regional Council. The SDLP can be updated by the consent holder at any time and filed with Wellington Regional Council for its approval. The SDLP shall address, but not necessarily be limited to, the following:

- Procedures to ensure that, as much as practicable, dewatered sludge is transferred from the skip bay to the landfill within 24 hours of each skip bin being full.

- The procedures for the transfer of any skip bin containing sludge from the skip bay to the landfill should the bins be left for more than 48 hours (to meet the requirements of condition 14 of this permit). Alternative procedures for the transfer of sludge from the skip bay to the landfill should the bins be full for more than 24 hours.
- Procedures to ensure the mixing ratio of sludge to other waste is met (1 part sludge to 4 parts other waste) and the mixture covered after each skip bin is tipped.
- The procedural steps to ensure that the sludge to municipal waste mixture being fully covered with a suitable compacted cover by the end of each working day.
- The procedural steps to ensure that a final capping layer of at least 600mm of suitable low permeability material (that meets the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council specifically) being applied to each landfill stage.
- Procedures to ensure that sludge contaminants are not tracked or otherwise taken off the disposal site.
- Procedures to ensure that the public is excluded from contact with sludge contaminants at all times.
- Include a definition of a 'full skip bin'.
- The permit holder can seek additional approval from the Manager, Environmental Regulation, Wellington Regional Council to apply for alternative disposal to landfill methodologies.

The SDLP shall be operated and developed in general accordance with the:

- Sewage Sludge Dewatering and Disposal Operational Management Plan, Wellington City Council submitted to Wellington Regional Council with the application on 26 April 2007;
- Draft Operations and Management Plan submitted to Wellington Regional Council as additional information on 13 August 2009; and
- Sludge Disposal Plan submitted to Wellington Regional Council as additional information on 13 August 2009.

Note: The SDLP required by this condition of the permit relates specifically to the methodology for the disposal of sludge to the Carey's Gully Landfill and should be included in the OMP for the Sludge Dewatering Facility (WGN070230 [26014]) as part of that document.

10. **Long term reuse:** Within six months of the tenth anniversary of the commencement of this permit, the permit holder shall provide to the Manager, Environmental Regulation, Wellington Regional Council, a Long

Term Sustainable Reuse Report. The assessment required by the report shall be undertaken by a suitably qualified and experienced specialist or specialists in wastewater and sludge beneficial reuse.

The report shall be to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council. The scope of the assessment should address, but not necessarily be limited to, the following:

- a) An assessment of the compliance/consistency of the current method of disposal with any relevant national or legislation standards or guidelines in effect at that time;
- b) A summary of any actual or potential effects of the continued discharge of sludge to land, irrespective of whether those effects are in accordance with the conditions of this permit, or the associated Southern Landfill permits (consent suite WGN940045);
- c) An outline of technological changes and advances in relation to wastewater and sludge management, treatment and disposal with specific regard to beneficial use technologies which may be available to assess the above adverse effects;
- d) An assessment of whether there are any infrastructure improvements or new facilities which are available to address the adverse effects identified, and to ensure that the waste being disposed of to landfill is minimised;
- e) An assessment of whether any such options or combination of options represent the Best Practicable Option to minimise the effects of the discharge, to minimise the disposal of sludge to landfill, and to meet the intents of the principle of waste minimisation and sustainable management;
- f) Whether and when (if applicable) the permit holder intends to incorporate such changes.

The intent of this options report is to investigate the beneficial reuse of sludge contaminants beyond the life of this consent. Nothing in this condition implies any obligation on the permit holder to further investigate or pursue any particular option.

11. The consent holder will provide to the Manager, Environmental Regulation, Wellington Regional Council, the annual reports that are provided to the Strategy and Policy Committee, Wellington City Council, regarding any alternative options for the disposal of bio-solids in the Wellington district.

### **Monitoring**

12. The permit holder shall ensure that sludge contaminants discharged to landfill be combined with municipal solid waste and/or bulking material at a ratio of

at least four parts municipal solid waste/bulking material to one part sludge contaminants by mass on a daily basis. Should a four to one ratio be not possible due to limited municipal solid waste/bulking material, the highest ratio available shall be used.

Irrespective of this provision, the weekly mean ratio shall be at least four parts municipal solid waste/bulking material to 1 part sludge contaminants.

Alternative disposal methodologies as provided for in the SDLP do not need to meet this requirement. However, the prior approval of the Manager, Environmental Regulation, Wellington Regional Council is required before proceeding with alternative disposal methodologies detailed in the SDLP.

13. The permit holder shall ensure that a minimum of 100mm of soil is used to cap the landfill area after each skip bin of sludge is mixed.
14. The permit holder shall, as far as practicable, ensure that a full dewatered sludge skip bin (as defined in the SDLP required under Condition 9) is transferred to the Southern Landfill or other appropriate disposal facility within 24 hours of becoming full (excluding Good Friday, Christmas and New Years Day).

Should any sludge skip bin not be transferred once full (as defined in the SDLP required under Condition 9) for a period of greater than 48 hours, the permit holder shall ensure that the sludge skip bin(s) are covered with an impermeable membrane or similarly effective cover during the transport of the skip bin from the sludge dewatering facility to the disposal point.

15. The permit holder shall keep daily records and weekly averages for:
  - The total tons per day of sludge contaminants disposed of to landfill;
  - The source of the dewatered sludge contaminants (e.g. the SDF or the Western Waste Water Treatment Plant);
  - The dry solids content of the sludge in the skip bins determined by the grab samples, presented as a weekly average;
  - The volume of solid municipal waste deposited and mixed with the sludge at the landfill; and
  - An estimate of the volume of any additional bulking material used to achieve the required mixing ratio.

The records shall meet the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

These records shall be submitted to the Manager, Environmental Regulation, Wellington Regional Council. The records shall be submitted within three

months of 30 June of each year, and contain information for all reporting conditions for the previous year between 1 July and 30 June.

### **Review conditions**

16. Wellington Regional Council may review any or all conditions of this permit by giving notice of its intention to do so pursuant to Section 128 of the Resource Management Act 1991, within six months of the second, fourth, sixth, eighth, tenth, twelfth and fourteenth anniversaries of the commencement of this permit, for any of the following reasons:
  - a) To review the adequacy of any plan and/or monitoring requirements, and if necessary, amend these requirements outlined in this permit;
  - b) To deal with any adverse effects on the environment that may arise from the exercise of this permit; and which are appropriate to deal with at a later stage;
  - c) To require the implementation of Best Practicable Options, with respect to new methodologies for the disposal of sludge to landfill, to avoid, remedy or mitigate any significant adverse effect on the environment arising from the discharge;
  - d) To enable consistency with any relevant Regional Plans or any National Environmental Standards.

The review of conditions shall allow for the deletion or amendment of conditions of this permit; and the addition of such new conditions as are shown to be necessary to avoid, remedy or mitigate any significant adverse effects on the environment.

17. Wellington Regional Council shall be entitled to recover from the permit holder the costs of any review, calculated in accordance with and limited to the Council's scale of charges in force and applicable at the time pursuant to Section 36 of the Resource Management Act 1991.

### **WGN 070230 [26014]: Discharge permit to discharge contaminants to air, namely odour, from the biofilter, centrate treatment plant and other structures and operations at the Carey's Gully Sludge Dewatering Facility.**

1. The location and nature of the discharge shall be in accordance with the consent application and its associated plans and documents lodged with the Wellington Regional Council on:
  - 26 April 2007 (original application),
  - 23 August 2007 (additional information and bioaerosol monitoring); and
  - 13 August 2009 (additional information and updates to the proposal).

Where there may be contradictions or inconsistencies between the application and further information provided by the applicant, the most recent information applies. In addition, where there may be inconsistencies between information provided by the applicant and conditions of consent, the conditions shall apply.

Note: Any change from the location, design concepts and parameters, implementation and/or operation may require a new resource consent or a change of conditions pursuant to Section 127 of the Resource Management Act 1991.

2. The discharge area shall be from the site biofilter, the centrate 'black boxes', from the periodic opening and closing of the sludge skip bay doors for the removal and return of skip bins, and other minor fugitive emissions from the area defined by approximate map references NZMS 260: R27; 2656037.5985429, NZMS 260: R27; 2656074.5985435, NZMS 260: R27; 2656162.5985358, NZMS 260: R27; 2656097.5985285 and NZMS 260: R27; 2656077.5985321.

Note: 'Minor fugitive emissions' are expected to be minimal contributions to the overall discharges to atmosphere from the facility. These are expected to include emissions from the opening of skip bay doors, irregular maintenance areas such as the wet well, and other general activities which may result in odours being released which are generally out of the control of 'best practicable option' solutions for containing and treating odorous discharges.

3. The permit holder shall keep a copy of this permit and provide all documents and plans referred to in this permit to each operator/contractor undertaking the operation.

A copy of this permit shall be kept within the site office and displayed in a prominent place at all times in a manner that meets the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

A copy of this permit shall be presented to any Wellington Regional Council officer on request.

4. There shall be no discharges to air that are, in the opinion of an enforcement officer of the Wellington Regional Council, noxious, dangerous, offensive or objectionable at or beyond the outer perimeter of the legal boundaries defined by the Wellington City District Plan (Designation No. 61, Planning Map 2).

Note: This designation is appended as Schedule 2 to this resource consent.

5. The permit holder shall, at all times, operate, maintain, supervise and control all processes and equipment on site to ensure compliance with the OMP pursuant to condition 10 and all other conditions of this permit.

6. The permit holder shall ensure that all installed emissions control equipment namely the biofilter, including all ducting and ventilation equipment shall be well-maintained and operating correctly in a fully functional state.

The emissions control equipment shall draw adequate negative pressure to ensure the effective capture and treatment of air discharged from the Sludge Dewatering Plant building, centrate wet well, and all other areas from which air is extracted to ensure that fugitive emissions are minimised.

7. The permit holder shall ensure that the liquid sludge storage tanks, significant odour generating processes within De-watering Plant Building, and from the Centrate Plant wetwell, shall be mechanically ventilated to a biofilter to minimise the emission of odour into air.

The volume of ventilation air discharged to the biofilter or biofilters shall not exceed a rate that causes the biofilter loading to exceed  $40\text{m}^3$  of inlet air flow per  $\text{m}^3$  of active media per hour ( $40\text{ m}^3/\text{m}^3/\text{hour}$ ).

During any maintenance works when the biofilter or biofilters are operating without one cell, the volume of ventilation air discharged to the biofilter or biofilters shall not exceed a rate that causes the biofilter loading to exceed  $50\text{m}^3$  of inlet air flow per  $\text{m}^3$  of active media per hour ( $50\text{m}^3/\text{m}^3/\text{hour}$ ).

The permit holder shall notify the Manager, Environmental Regulation, Wellington Regional Council of any proposed maintenance a minimum of 48 hours prior to the works commencing.

Note: Notice can be emailed to [notifications@gw.govt.nz](mailto:notifications@gw.govt.nz). Please include the consent reference (WGN070230) and a contact name and number of a person responsible for the works.

8. As far as practicable, the permit holder shall ensure, to minimise the time that sludge skip bins containing dewatered sludge are held at the facility, that filling of skips is sequenced so that skips are full (as defined in the SDLP required under Condition 9 of permit WGN070230 [26013]) before loading into an empty skip.

### **Administrative conditions**

9. The permit holder shall keep a record of complaints received alleging adverse effects from the permit holder's operations. The complaints record shall contain the following where practicable:

- The name and address of the complainant, if supplied;
- Identification of the nature of the complaint;
- Date and time of the complaint;
- Weather conditions at the time of the complaint;
- Results of the permit holder's investigations; and
- Any mitigation measures adopted.

The complaints record shall be made available to the Wellington Regional Council on request. The permit holder will ensure that each complaint it receives is responded to.

10. The permit holder shall prepare and maintain an **Odour Management Plan (OMP)** for submission to the Manager, Environmental Regulation, Wellington Regional Council within three months of the commencement of this permit. The OMP can be updated by the consent holder at any time and filed with Wellington Regional Council for its approval. The scope of the OMP shall include the sludge dewatering facility and but not be limited to the following information:

- Methods for ensuring the biofilter monitoring and recording parameters required by conditions of this permit are met.
- The maintenance procedures for ensuring the good, clean condition of the skip bins and containers to keep them free of leaks and old sludge material.
- The operation and maintenance of all emissions control equipment (including the associated ducting for this equipment).
- Staff training on the process requirement, use of emissions control equipment, and emergency response.
- A methodology to record and log the times during which the Skip Bay doors are opened and closed each day.
- An outline of the specific roles of each of the Sludge Dewatering Facility contractors, skip bin removal contractors and Wellington City Council as consent holder and their responsibilities in regards to the sludge dewatering and disposal processes.
- The process for the mitigation of any odour from the skip bins of sludge transported/transferred from the Western Waste Water Treatment Plant.

The OMP shall be operated and modelled in general accordance with the Draft Operations and Management Plan submitted to Wellington Regional Council as additional information on 13 August 2009.

The OMP shall be prepared to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council. The permit holder shall ensure that the plan is consistent with the conditions of this permit, and shall be updated as required, with the latest copy made available to the Manager, Environmental Regulation, Wellington Regional Council.

## **Monitoring**

11. **Building tightness:** The permit holder shall ensure that an independent, appropriately qualified person who meets the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council conducts a "building

tightness' audit a minimum of once every two years (the first being conducted within one year of the commencement of this permit). At a minimum, the audit shall take into account the:

- Design extraction rates of the ventilation system;
- Actual rate of extraction; and
- Negative pressure within the building.

A report shall be produced and submitted with the findings and any recommendations to ensure compliance with the conditions of this permit (with specific regard to condition 6) to the Manager, Environmental Regulation, Wellington Regional Council within one month of the completion of the audit.

Should the report and audit find that the 'building tightness' is lower than necessary to ensure compliance with the conditions of this permit, the permit holder shall undertake any maintenance and repair works that are to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council within two weeks of the submission of the report or other timeframe as agreed with the Manager, Environmental Regulation, Wellington Regional Council.

12. **Annual biofilter monitoring:** The permit holder shall undertake a comprehensive assessment of the quality of the biofilter media on an annual basis (or more frequently if deemed appropriate by the permit holder). The assessment shall involve an evaluation of the media size distribution and composition.

The results of this assessment, including a summary of the findings, details of any action(s) to be taken to improve the efficiency and function of the biofilter, and a timetable for those actions to be undertaken, shall be submitted to the Manager, Environmental Regulation, Wellington Regional Council within one month of the assessment being undertaken.

Actions to be undertaken may include, but are not limited to:

- Turning, restructuring and dampening of bed material;
- The addition of supplementary bed material;
- Partial bed material replacement' or
- Total bed material replacement.

13. **Scheduled biofilter monitoring:** The permit holder shall measure and record the following parameters:

- Continuous online display of differential pressure in the final air duct ahead of the biofilter that is automatically logged,
- Weekly recording of pressure across the biofilter bed,
- Weekly general visual observations of the biofilter condition, including weed growth, compaction, and short circuiting,
- Monthly media moisture content in the upper two thirds layer, and

- Monthly monitoring of the pH of the biofilter bed media in the upper two thirds layer.

All monitoring results shall be recorded and compiled and be made available to an officer of Wellington Regional Council on request and as part of the overall reporting condition as required by Condition 15 of this permit.

14. **Biofilter requirements:** The permit holder shall ensure that the biofilter and bed complies with the following limits at all times:

- A minimum bed depth of filter media of 1.0 metres,
- A minimum gas retention time based on an empty bed volume of 90 seconds, except during planned maintenance works that have been notified to the Wellington Regional Council under Condition 7 of this permit.
- A bed temperature of 20 – 35°C,
- A bed moisture content of between 40 – 60% by weight,
- A pH of filter media between 5.5 and 8,
- An even distribution of gas flow through the filter bed, and
- That there are no short circuits of untreated air through the filter bed.

15. The permit holder shall prepare and submit the relevant monitoring results, data and other information as required by conditions 11 - 14 of this permit in the form of a report to the Manager, Environmental Regulation, Wellington Regional Council.

The report shall meet the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council and be submitted within three months of 30 June of each year, and contain information for all monitoring conditions for the previous year between 1 July and 30 June.

#### **Management of the 'Black box' centrate treatment and skip bay**

16. In the event that the skip bay or the 'black box' centrate treatment process is found by a warranted enforcement officer of Wellington Regional Council to be the cause of odour at or beyond the boundary of the site (as defined by condition 4 of this permit) that does not comply with any condition of this permit, the permit holder shall ensure that a suitably qualified person who meets the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council prepares and submits a report within three months of the event, providing:

- A methodology to appropriately capture the emissions from the skip bay or the centrate 'black boxes' and to adequately ensure that fugitive emissions from the skip bay or centrate 'black boxes' are minimised;
- A method to route this captured air to effective odour control equipment:  
and

- Any changes to house-keeping measures to ensure that further discharges from the skip bay or centrate 'black boxes' are minimised.

The permit holder shall undertake to provide for the recommendations contained within the report in a manner and timeframe that meets the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

Note 1: These activities may require further resource consent(s).

Note 2: If the preferred technical solution to such an odour situation is the installation of additional biofiltration, then this should be done via a separate, additional biofilter at the centrate plant, of sufficient capacity to take the gases from both the black boxes and the centrate wet well, the latter rerouted from the existing biofilter. This would allow consideration of more and better targeted extraction at the sludge dewatering facility, including the possibility of air curtains at the skip bay doors.

### **Community Liaison Group**

17. The permit holder shall continue to engage with the **Community Liaison Group (CLG)** established and maintained under Consent WGN940045 [20316] and [20346] (general Southern Landfill consents).

The role of the CLG will be to liaise with the community about activities relating to the Carey's Gully Sludge Dewatering Plant and associated disposal to the Landfill, and provide information to the community. Meetings of the CLG will be held on a quarterly basis (i.e. every three months). However, the frequency of the meetings can be reduced by agreement at the CLG.

A terms of reference, setting out the rights and responsibilities of the CLG and its relationship to Council and its officers, will be drawn up by the permit holder in consultation with the CLG within four months of the commencement of this permit.

A summary of each meeting that includes, but is not limited to, issues discussed, actions agreed upon and any follow-up on agreed actions from previous meetings, shall be forwarded to the Manager, Environmental Regulation, Wellington Regional Council within 10 working days of each CLG meeting.

It will be the responsibility of the members of the community who wish to be a member of the CLG to contact the permit holder to register expressions of interest. The permit holder will contact all persons who had registered interest to inform them of upcoming meetings.

### **Review conditions**

18. Wellington Regional Council may review any or all conditions of this permit by giving notice of its intention to do so pursuant to section 128 of the

Resource Management Act 1991, within six months of the second, fourth, sixth, eighth, tenth, twelfth and fourteenth anniversaries of the commencement of this permit, for any of the following reasons:

- a) To review the adequacy of any plan and/or monitoring requirements, and if necessary, amend these requirements outlined in this permit,
- b) To deal with any adverse effects on the environment that may arise from the exercise of this permit; and which are appropriate to deal with at a later stage,
- c) To require the implementation of Best Practicable Options, with respect to new treatment technology for the treatment of discharges to air from the operations of the Sludge Dewatering Facility, to avoid, remedy or mitigate any significant adverse effect on the environment arising from the discharge, and
- d) To enable consistency with any relevant Regional Plans or any National Environmental Standards.

The review of conditions shall allow for the deletion or amendment of conditions of this permit; and the addition of such new conditions as are shown to be necessary to avoid, remedy or mitigate any significant adverse effects on the environment.

19. Wellington Regional Council shall be entitled to recover from the permit holder the costs of any review, calculated in accordance with and limited to the Council's scale of charges in force and applicable at the time pursuant to Section 36 of the Resource Management Act 1991.

**WGN 070230 [26015]: To discharge contaminants to air, namely odour, from the disposal of sludge contaminants to land at the Carey's Gully Southern Landfill.**

1. The location and nature of the discharge shall be in accordance with the consent application and its associated plans and documents lodged with the Wellington Regional Council on:
  - 26 April 2007 (original application),
  - 23 August 2007 (additional information and bioaerosol monitoring), and
  - 13 August 2009 (additional information and updates to the proposal).

Where there may be contradictions or inconsistencies between the application and further information provided by the applicant, the most recent information applies. In addition, where there may be inconsistencies between information provided by the applicant and conditions of consent, the conditions shall apply.

Note: Any change from the location, design concepts and parameters, implementation and/or operation may require a new resource consent or a

change of conditions pursuant to Section 127 of the Resource Management Act 1991.

2. The discharge area shall be the same as the atmosphere above the land as defined in the resource consent WGN070230 [26013], and as shown in the Wellington City District Plan Map 2.
3. The permit holder shall keep a copy of this permit and provide all documents and plans referred to in this permit to each operator/contractor undertaking the operation.

A copy of this permit shall be kept within the site office and displayed in a prominent place at all times in a manner that meets the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

A copy of this permit shall be presented to any Wellington Regional Council officer on request.

4. There shall be no discharges to air that are, in the opinion of an enforcement officer of the Wellington Regional Council, noxious, dangerous, offensive or objectionable at or beyond the outer perimeter of the legal boundaries defined by the Wellington City District Plan (Designation No. 61, Planning Map 2).

Note: This designation is appended as Schedule 2 to this resource consent.

5. The permit holder shall, at all times, operate, maintain, supervise and control all processes and equipment on site to ensure compliance with the Sludge Disposal to Landfill Plan prepared in accordance with Condition 9 of consent WGN070230 [26013], and all other conditions of this permit.

#### **Administrative conditions**

6. The permit holder shall keep a record of complaints received alleging adverse effects from the permit holder's operations. The complaints record shall contain the following where practicable:
  - The name and address of the complainant, if supplied,
  - Identification of the nature of the complaint,
  - Date and time of the complaint,
  - Weather conditions at the time of the complaint,
  - Results of the permit holder's investigations, and
  - Any mitigation measures adopted.

The complaints record shall be made available to the Wellington Regional Council on request. The permit holder will ensure that each complaint it receives is responded to.

## Review conditions

7. Wellington Regional Council may review any or all conditions of this permit by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, within six months of the second, fourth, sixth, eighth, tenth, twelfth and fourteenth anniversaries of the commencement of this permit, for any of the following reasons:
  - a) To review the adequacy of any plan and/or monitoring requirements, and if necessary, amend these requirements outlined in this permit;
  - b) To deal with any adverse effects on the environment that may arise from the exercise of this permit; and which are appropriate to deal with at a later stage;
  - c) To require the implementation of Best Practicable Options, in respect to new methodologies for the disposal of sludge to landfill and the transport/transfer of sludge, to avoid, remedy or mitigate any significant adverse effect on the environment arising from the discharge;
  - d) To enable consistency with any relevant Regional Plans or any National Environmental Standards.

The review of conditions shall allow for the deletion or amendment of conditions of this permit; and the addition of such new conditions as are shown to be necessary to avoid, remedy or mitigate any significant adverse effects on the environment.

8. Wellington Regional Council shall be entitled to recover from the permit holder the costs of any review, calculated in accordance with and limited to the Council's scale of charges in force and applicable at the time pursuant to Section 36 of the Resource Management Act 1991.

## **Schedule 2**

### **Conditions imposed on Wellington City Council Consent**

#### **SN161775: To dispose of sludge contaminants at the Southern Landfill.**

##### **General**

1. The location and nature of the discharge shall be in accordance with the information provided with Service Request No. 161775 received by the Council on consent application and documents lodged with the Wellington City Council on 27 April 2007.
2. The duration of the consent shall be until the 14 June 2026.
3. Within six months of the commencement of this permit, the permit holder shall prepare and maintain a Sludge Disposal to Landfill Plan (SDLP) for submission and approval to the Wellington City Council's Compliance Monitoring Officer. The SDLP can be updated by the consent holder at any time and filed with Wellington City Council for its approval. The SDLP shall address, but not necessarily be limited to, the following
  - A description of how the consent will be exercised in accordance with best practical options such that adverse effects on the environment are minimised.
  - Identification of contingency and precautionary measures to be put in place. These contingency and precautionary measures are to include required storage capacity and procedures to return sludge via the sewer in emergencies.
  - A description of the monitoring programmes relating to the exercise of this consent.
  - A description of the sequencing of works, including existing and planned landfill gas, leachate and stormwater management systems.
  - A description of the operational responsibilities for all aspects of the operation.
  - A description of measures to effectively exclude the public from present and previous sludge disposal areas.
4. The permit holder shall ensure that the sludge disposed to landfill is no less than 20% dry solids content by volume basis, based on a weekly average measurement of a minimum of 5 grab samples per week from different skip bins prior to their disposal at the landfill.

Note: It is therefore possible to dispose of sludge which is at times less than 20% dry solids (but no less than 15% dry solids) provided the overall weekly average is greater than 20%.

5. The consent holder must, by the end of each working day, fully cover the sludge refuse mixture at the landfill with compacted suitable soil cover to contain odour emissions.
6. A final capping layer of at least 600 millimetres of low permeability material shall be applied by the consent holder to each landfill stage to contain odour emissions.
7. The landfill must be monitored for landfill gas evolution and migration through its operational stages and following closure of each landfill stage. Records of monitoring must be forwarded to Wellington City Council's Compliance Monitoring Officer on request.
8. Dewatered sludge discharged to the landfill must be combined with solid refuse at a ratio of at least four parts per solid refuse to one part of sludge measured on a daily basis.
9. The consent holder must keep accurate daily records of the dewatered sludge volume and the waste deposited at the landfill. These records must be made available to Wellington City Council on request.
10. The consent holder must take effective precautions to ensure that dewatered sludge is not tracked or otherwise taken off the disposal site.
11. The consent holder must ensure that the public is excluded from any sludge disposal area within the landfill at all times, unless the sludge refuse mixture is thoroughly mixed, compacted and covered with at least 600 millimetres of suitable soil cover.
12. The consent holder must pay to the Wellington City Council the actual and reasonable costs associated with the monitoring of conditions [or review of consent conditions], or supervision of the resource consent as set in accordance with section 36 of the Resource Management Act 1991. These costs\* may include site visits, correspondence and other activities, the actual costs of materials or services, including the costs of consultants or other reports or investigations which may have to be obtained.

\* Please refer to the current schedule of Resource Management Fees for guidance on the current administration charge and hourly rate chargeable for Council officers.