

## 1. Permit Holder

Solid Waste Division  
Wellington City Council  
PO Box 2199  
WELLINGTON

## 2. Existing Resource Consents

**WGN 940045 (01):** Discharge Permit for the discharge of contaminants onto or into land for the purposes of land filling wastes at Southern Landfill at or about map reference NZMS 260: R27 562.852.

**WGN 940045 (02):** Discharge Permit for the discharge of landfill gas, odour, and dust to air from Southern Landfill at or about map reference NZMS 260: R27; 562.852.

## 3. The Review

Condition 8 of WGN 940045 (01)(02) allows the Wellington Regional Council to undertake the review of consent conditions in accordance with Section 128 (1) (a) (i) of the Resource Management Act 1991 (the Act). The Wellington Regional Council has undertaken the review at the time specified in condition 8 of both discharge permits to deal with the purpose specified in condition 8 (a).

8. *The 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, at any time within six months of the second, fifth, 10<sup>th</sup>, 20<sup>th</sup>, and 30<sup>th</sup> anniversary of the date of grant of this permit for either of the following purposes:*

- (a) *To deal with any adverse effects on the environment, which may arise from the exercise of this permit, and which it is appropriate to deal with at a later stage.*
- (b) *To review the adequacy of any plan prepared for this permit and / or the monitoring requirements so as to incorporate into the permit any modification to any plan or monitoring, which may be necessary to deal with any adverse effects on the environment arising from the management or operation of the landfill.*

## 4. Conditions to be Reviewed

The Wellington Regional Council has reviewed conditions 15, 16, 18, 23, 24 of WGN940045 (02) Discharge to Air Permit, and condition 17 of WGN940045 (01) Discharge to Land Permit.

Discharge to Air Permit WGN940045 (02)

- Condition 15

Subject to the completion of the reshaping of Stage II of the landfill for the purpose of implementing the landfill gas collection system, the grantee shall take all practicable steps to prevent offensive or objectionable odours from being detected at or beyond the boundary of the site as defined by the District Plan. Offensive odour shall be determined by an enforcement officer of the Wellington Regional Council.

- Condition 16

The grantee shall, at the end of each working day, fully cover the waste and refuse at the landfill with compacted suitable soil cover to contain odour emissions. Sufficient supplies of suitable cover material shall be stockpiled on site at all times.

- Condition 18

The grantee shall keep an accurate record of any odour complaints received by the grantee and shall provide such a record of remedial action taken to the Manager, Consents and Investigations, Wellington Regional Council, at three monthly intervals or upon request.

- Condition 23

The grantee shall progressively install and implement a gas collection system to collect landfill gas from Stage III of the landfill as it is filled.

- Condition 24

The grantee shall take all practicable measures to minimise the discharge of landfill gases that may not be collected.

Discharge to Land Permit WGN940045 (01)

- Condition 17

The grantee shall, by the end of each working day, fully cover the refuse and waste at the landfill with compacted suitable soil cover. Sufficient supplies of suitable cover material shall be stockpiled on site at all times.

## 5. Overview

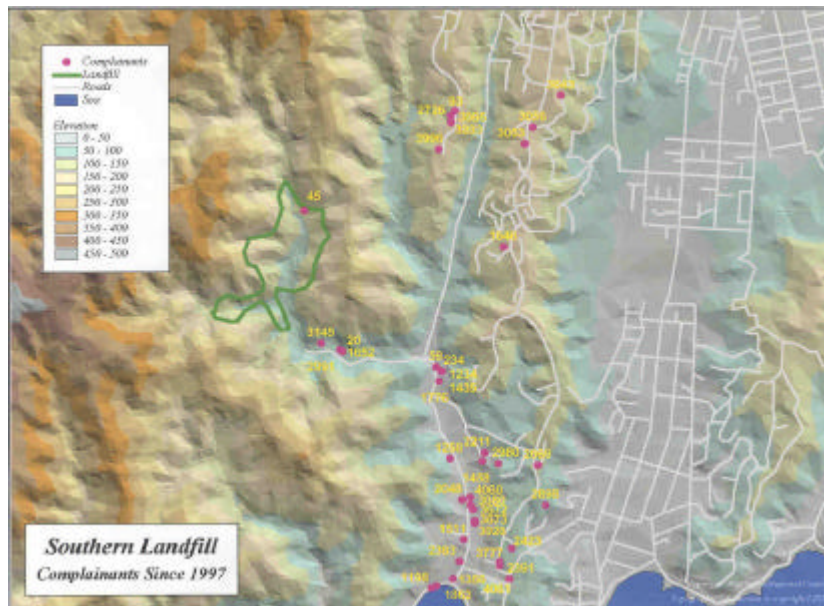
Since March 1999, Wellington Regional Council has received 44 complaints alleging odours from the Southern Landfill in the Happy Valley / Kingston area. Of these 44 complaints, three were confirmed as objectionable or offensive odours beyond the landfill boundary and were traced back to the landfill face. These offensive odour incidents were caused by excavations of buried refuse associated with the disposal of asbestos waste and carrying out works associated with landfill gas lines.

To address the adverse effects on the environment from landfill odour, the Regional Council has exercised its authority under Section 128 of the Resource Management Act 1991 (the Act) and sought to review the conditions of Southern Landfill's Discharge Permits. The Regional Council elected to review conditions 15, 16, 18, 23, and 24 of the Discharge to Air Permit WGN940045 (02) and condition 17 of the Discharge to Land Permit WGN940045 (01).

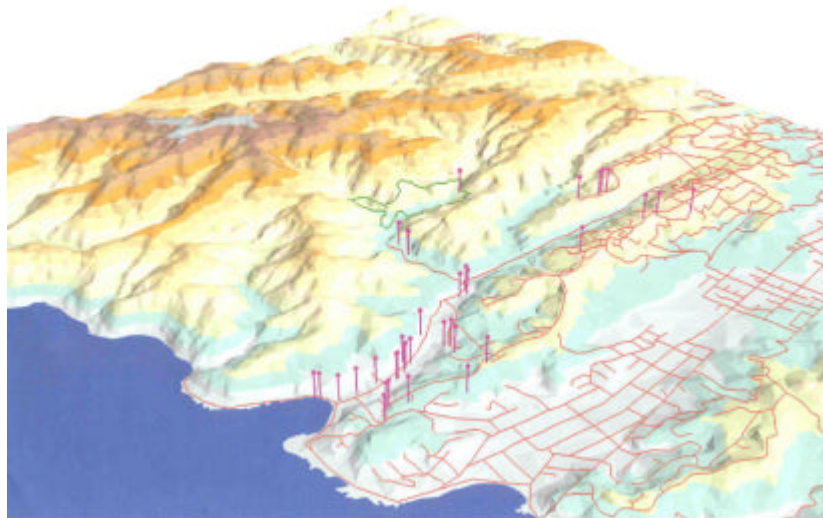
## 6. Reasons for Review: Complaints

Figures 1 and 2 illustrate the location of complainants regarding landfill odours since 1997. Outlined below is a summary of the recent complaints the Wellington Regional Council has received about Southern Landfill:

- **April 1999:** Complaints about objectionable / offensive landfill odours. WCC asked to provide an 'odour report', which concluded that the landfill was more odourous due to co disposal of abattoir waste and sewage sludge. WCC agreed to apply additional cover material and install a permanent deodouriser system.
- **17 May 1999:** Complaint confirmed by investigating Regional Council officer at the complainant's property. Objectionable odours sourced back to an open pit on the landfill face, which had been excavated to bury asbestos.
- **18 May 1999:** Abatement Notice issued for breach of condition 16 of WGN 940045 (02).
- **14 June 1999:** "Borderline objectionable odours" confirmed at complainant's property and traced back to land filled abattoir waste. WCC asked to provide better options for managing abattoir waste, including deodouriser system.
- **22 September 1999:** Complaint confirmed by investigating Regional Council officer. Objectionable odours sourced back to landfill face, which had been excavated to repair a gas pipeline. WCC asked to provide odour management plan and procedures to deal with future excavations.
- **1 February 2000:** Complaint confirmed by investigating Regional Council officer on Landfill Road. Objectionable odours sourced back to landfill face, which had been excavated to repair a gas pipeline. WCC were asked to provide an explanation of the incident.
- **9 February 2000:** Complaint confirmed by investigating Regional Council officers on Landfill Road. Objectionable odours sourced back to excavation trench. WCC asked to provide odour management plan and procedures. WCC were asked to provide an explanation of the incident.
- **14 February 2000:** Abatement Notice issued requiring the trench to be back filled and covered by 5.00 PM, 16 February 2000.



**Figure 1:** Location of Southern Landfill complainants since 1997 - location and incident database number.



**Figure 2:** Digital Elevation Model of the Happy Valley / Brooklyn area. Lollipops indicate location of Southern Landfill complainants since 1997.

## 6.1. **Reasons for Review: Conditions**

Conditions 15, 16, of WGN 940045 (02) and condition 17 WGN 940045 (01) have proven to be inadequate. There have been a significant number of incidents of offensive odour reported from residents well beyond the landfill boundaries. This level of odour was an unforeseen adverse effect when the consents were granted and may have been exacerbated by changes to the landfill topography since the consent was granted (i.e., the creation of a large bund between Stage II and III, the excavations for the LEJV plant). In certain weather conditions these changes appear to facilitate the dispersion of odours off site.

The adverse effects resulting from the changes in the landfill's topography were also not anticipated when the consent was granted in 1994. Furthermore, conditions 15, 16, and 17 do not provide sufficient certainty for the consent holder nor do they provide local residents and businesses with enough protection from objectionable and offensive landfill odours.

The Wellington Regional Council has undertaken the review of conditions 15, 16, and 17 at the time specified in condition 8 to deal with the unforeseen adverse environmental effects, which have arisen from the exercise of this permit.

Condition 18 is inadequate because it does not require the consent holder to notify the Regional Council when they have received odour complaints. The Wellington Regional Council has undertaken the review of condition 18 at the time specified in condition 8 of WGN 940045 (02) to assess the adequacy of self-monitoring requirements and incorporate any modifications necessary to deal with any adverse effects arising from the management or operation of the landfill.

Conditions 23 and 24 are inadequate because they do not provide for excavations or repairing of damaged gas fill extraction lines in Stage III. The Regional Council is concerned that landfill odours, especially when buried waste is exposed, are generally offensive and objectionable when experienced in a residential area (beyond the site boundary) have an adverse effect on the environment.

Therefore, Wellington Regional Council has undertaken the review of conditions 23 and 24 at the time specified in condition 8 of WGN 940045 (02) to deal with the unforeseen adverse environmental effects, which have arisen from the exercise of this permit.

In summary, the Regional Council has initiated the review to address the adverse effects on the environment due to landfill odour that was unforeseen when the consents were granted. The purpose of the review is to assess the overall adequacy of the conditions to deal with adverse effects on the environment arising from the exercise of the consent as provided by condition 8 of WGN940045 (01) and (02).

## 7. **Scope of the Review**

It is important to note that the review of the consent conditions is a discretionary process provided for under the Act. It allows a consent authority to ensure that conditions do not become outdated, irrelevant, or inadequate. A review is not a

mechanism where the consent itself can be re-litigated and a consent authority is not entitled to amend existing conditions or impose new conditions to prevent the activity for which the resource consent was granted.

Therefore, the existing consent cannot be challenged and the review must be limited to those conditions indicated (i.e. conditions 15, 16, 18, 23, 24 of WGN940045 (02) and condition 17 of WGN940045 (01)). The requirements of the other consent conditions relating to these permits are still valid and do not warrant being reviewed.

## 8. Notification

The notice of review was publicly notified in the *Evening Post* on Saturday 15 April 2000 in accordance with Section 129 (2) (b) and 130 RMA. The review was notified because the Regional Council was not satisfied that the requirements of Section 130 (3) RMA could be fulfilled.

## 9. Submissions

Ten submissions were received by the close of the submission period on Monday 17 May 2000. All submissions received were in support of the review. The principal reason for support was due to concerns about objectionable and offensive odours and their effect on the lifestyles of the local residents. A summary of submissions is attached in Appendix 1.

## 10. Matters Outlined in Section 131

Section 131 RMA outlines what matters the Regional Council shall consider when reviewing the conditions of a resource consent. These aspects include:

- the matters in Section 104; and
- whether the activity allowed by a resource consent will continue to be viable after the change.

Section 104 of the RMA, includes those matters that the Regional Council should have regard to when considering an application for resource consent, i.e., a review of consent conditions. When considering an application for a discharge permit the Regional Council should have regard to:

- the actual and potential effects on the environment of the activity;
- the nature of the discharge and the sensitivity of the proposed receiving environment to adverse effects; and
- any possible alternative methods of discharge (not relevant to a review of consent conditions).

Appendix 2 outlines the matters the Environment Committee must have regard to under Sections 104 and 131 RMA when considering the review of the consents.

## 11. **Location**

The location of the land to which the resource consent condition review relates is the Southern Landfill site at Careys Gully, Landfill Road, Happy Valley, Wellington, at or about map reference NZMS 260 R27; 562.852.

The legal description of the property is Lot 1 DP 29398 and Part Sections 4 – 6 Upper Kaiwharawhara District (Plan A1149) and Sections 17 and 22 Owhiro District (Plan A782) and Part Subdivisions 8 – 17 of Sections 19 and 21 Owhiro District (Plan ML 1109) and Pt Lot 1 DP 25110 and Pt Lot 1 DP 26908.

## 12. **Beneficial Effects of the Landfill**

The Southern Landfill site was purchased by the Wellington City Council in 1975 and has been used continuously since 1976 for refuse disposal. The property is designated for “Refuse Disposal and Associated Works and other Wellington City Council Purposes”. The designation has been rolled over in the operative Wellington City District Plan for a term of 100 years.

Southern Landfill contains approximately 4.5 million cubic metres of fill, which is comprised mainly of municipal solid waste with some cover material. The landfill has capacity for a further 25 million cubic metres of fill; the current volume of refuse received at Southern is 120,000 – 240,000 cubic metres per annum giving an anticipated life of greater than 100 years. The landfill accepts all solid waste material (excluding hazardous and liquid wastes) from domestic, commercial, and industrial premises inside the boundaries of Wellington City.

The Southern Landfill provides a vital service, which is an integral part of the Wellington City Council’s Solid Waste Management Business Plan. The plan sets out a multi - faceted programme that includes recycling, composting, land filling, and recovery of landfill gas.

## 13. **Careys Gully Since 1997**

In 1997 the Wellington City Council entered into a programme to upgrade the wastewater treatment facilities of the city. As part of this upgrade, Anglian Water International (NZ) Ltd (AWI) sludge dewatering and centrate treatment plant and the Living Earth’s Joint Venture Company (LEJV) biosolids co-composting facility were constructed at Carey’s Gully / Southern Landfill as part of the *Clearwater Wellington* programme.

The dewatering plant was commissioned by AWI early in 1998. The plant dewateres sewage sludge from the Moa Point wastewater plant. The sludge is piped eight kilometres to the plant, dewatered by centrifuges at Careys Gully, and then is co-composted with green-waste at the Living Earth Joint Venture facility. The centrate from the dewatered sludge is discharged back into the public sewer system where it is returned to Moa Point wastewater plant for further treatment.

When the dewatering plant was commissioned in early 1998, numerous odour complaints were received from Happy Valley / Owhiro Bay residents. These odours arose from centrate making its way into the domestic sewerage system. In 1999 a centrate treatment plant was constructed next to the existing dewatering plant to solve the on going odour problems experienced by local residents.

In 1997 consents were obtained by LEJV for the co-composting operation at Southern Landfill. The plant was finally commissioned in October 1999. The composting plant uses sludge from the AWI dewatering plant and a bulking agent primarily shredded green waste, to produce organic compost. The Wellington Regional Council has never received any odour complaints about the LEJV plant.

## **14. Assessment of Environmental Effects**

Owing to the physical, chemical, and biological characteristics of landfills and many traditional operational and management practices, Southern Landfill has had an impact on those who own or use properties near the location. The Regional Council is concerned that when offensive and objectionable landfill odours are experienced in residential areas around Carey's Gully (beyond the site boundary) they have an adverse effect on the environment.

### **14.1 Source of Landfill Odours**

Municipal solid wastes are highly odourous. Several tons of odourous refuse are deposited at Southern Landfill each day by trucks unloading at the landfill face. In conjunction with standard daily refuse, several skip loads of abattoir waste (from Taylor Prestons) are disposed of each week at the landfill. The disposal of putrescible organic matter, standard daily refuse, and previous inferior tip face practices (e.g. only covering waste once daily) create offensive and objectionable odours that have the potential to cause adverse effects on the environment.

The odour associated with buried refuse is highly offensive and objectionable therefore, all excavations of refuse should be undertaken in a fashion that mitigates odours being discharged beyond the landfill boundary. The history of complaints resulting from the excavations indicate that the consent holder has failed in the past to adequately manage the works so as to prevent offensive and objectionable odours being experienced beyond the site boundary.

Although fugitive gas emissions are not considered a major contributor to the odour problem at the Southern Landfill, conditions 23 and 24 are inter-related. Landfill gas is a mixture of methane gas and carbon dioxide produced by the natural biological breakdown of the organic matter in a landfill. Odourous hydrogen sulphide and amines are also usually present, along with small quantities of chemicals such as chlorinated hydrocarbons produced from chemicals or plastics in the refuse. Fugitive landfill gas emissions can escape and cause odour problems via cracks in the landfill surface, gas bubbles, or leaks in the gas extraction system.

Active tip face practices; inappropriate operational practices in closed landfill cells; and fugitive gas emissions (to small extent) have been identified as sources of odour from the Southern Landfill that have adverse effects on the environment.



## 14.2 **Impact of Odour**

The hedonic nature of odour (perceived pleasantness or unpleasantness) varies markedly between individuals although there are some odours, which appear to be almost universally accepted, e.g., the smell of baking bread. Conversely, some odours are almost universally rejected by people not naturally or occupationally exposed, e.g., landfill odours. People who are accustomed to or no longer perceive an odour may quickly notice if odour increases or decreases from normal background levels.

Odour experienced by an individual may generate negative, neutral, or positive associations. For example, the smell of newly mowed grass induces a positive association; most smells resulting from cooking generate positive or negative associations; and the smell of offensive and objectionable landfill odours usually generates negative to strongly negative associations.

When an odour is offensive and frequent (thus generating strongly negative associations), it will impact on people's lives by detracting from the amenity of an area, thus having an adverse effect on the environment i.e. the social and mental well being of the people exposed.

### *Transport of Odour*

## 14.3 **Topography**

Southern Landfill is located on the floor of a steep walled valley in the rugged hill country 5 km to the south - west of Wellington City. The main valley has a general north - south orientation with high ridges to the east and west, rising to about 150 – 200 metres above the valley floor. The valley is also bound to the north and south by steep ridges, which effectively contain the landfill in a natural amphitheatre. Changes to the landfill topography since the consents were granted include the creation of a large bund between Stage II and III and the excavations for the Living Earth Joint Venture plant.

The high scrub covered ridges separate the site (visually) from any residential or commercial land uses. The nearest residential properties are located on Happy Valley Road, approximately 800 metres from the landfill site and there are a small number of industrial premises located on Landfill Road at the bottom of Careys Gully.

## 14.4 **Weather and Temperature**

Meteorological data collected from the Wellington Airport indicates that the Wellington area is predominately influenced by winds from the north (frequency 46%) and from the south (frequency 28%). Calm periods occur at a frequency of 6%, whilst winds from the westerly sector occur only 0.4% of the time. Although windy conditions occur throughout the year, lower wind speeds are generally encountered in autumn and winter, which can reduce the ability to disperse atmospheric contaminants, particularly in sheltered areas.

#### 14.5 Odour Dispersion and Dilution

The traditional approach to eliminating the impact of odours from municipal solid waste landfills has been by dilution. To do this it is necessary to incorporate a large landfill buffer zone so that odourous emissions are diluted below detectable amounts at the boundary of the property. The complaints we have received during the past 18 months would suggest that the buffer zone that surrounds Southern Landfill is not extensive enough to ensure the dilution of odours to a level where it cannot be detected beyond the boundary.

A reduction in odour concentration is also dependent on the atmospheric stability at the time. While landfill odours are usually dissipated within a few kilometres of the area of active deposition, there are situations where much greater distances are required. These situations are associated with *inversions* where there is little or no dilution of the odourous compounds as an air mass moves down a valley e.g. Careys Gully.

#### 14.6 Temperature Inversions

The best conditions for odour dispersion usually occur on sunny, windy days, especially in summer. Conversely, the most intense odour concentrations occur on cool, windless evenings, usually in winter and autumn. The complaints we have received about Southern Landfill over the past 18 months have usually coincided with these types of weather conditions.

When the ground cools below the air temperature an inversion occurs; these take place on clear wind free nights when there is rapid cooling of the earth's surface. Inversions have particular significance in the Careys Gully area as they effectively prevent the upward dispersal of pollutants causing landfill odour to be concentrated in the valley. Where these situations occur, odours dissipate much more slowly than would otherwise be expected.

Inversions (thus odour concentration) is a problem during clear, cool, windless nights, when cold air-flows down Careys Gully towards residential areas causing offensive and objectionable odours beyond the landfill boundary. When valley surfaces cool by the emission of long wave radiation lower air layers cool and slide down slope under the influence of gravity. These *katabatic winds* usually flow gently downhill and convergence at the valley centre result in a weak lifting motion.

All of the down slope flows combine into a down valley flow, which seeps out of valleys and onto adjacent lowlands e.g., Happy Valley Road. These 'down valley winds' transport concentrated odours from Careys Gully / Southern Landfill to local housing areas. This ultimately results in complaints from the residents.

#### 14.7 Summary

Windless evenings, cool temperatures, and topography combine to create ideal conditions for the transport of offensive / objectionable odour beyond the Southern Landfill boundary. The traditional approach used to eliminate the impact of odour from landfills on adjacent land has been the use of extensive buffer zones to dilute odours to acceptable levels. This has proved to be an ineffectual method to use in the

Careys Gully area because of the limited buffer zone between the landfill site and residential homes. The complaints we have received since March 1999 suggest that dilution / dispersion cannot be relied upon to mitigate, remedy, or avoid adverse environmental effects resulting from the operation of the landfill.

Landfill odour will always be transported from the landfill site when the combination of conditions is right, therefore the most effective method of ensuring that there are no discharges that are offensive and objectionable beyond the landfill boundary is reassess operational landfill practices.

## 15. **Recommended Changes to Conditions**

### WGN 940045 (02) Condition 15

I have recommended that condition 15 be amended so there shall be no discharges to air that are noxious, dangerous, offensive or objectionable at or beyond the landfill boundary. To achieve this the permit holder shall develop and maintain an *Odour Plan* that details all management and operational procedures, methodologies, contingency and emergency plans necessary to comply at all times with conditions 15,16, and 23. The recommended changes make the condition enforceable and therefore provide certainty and protection for the residents in the Happy Valley area.

### WGN 940045 (02) Condition 16 and WGN 940045 (01) Condition 17

I have recommended that condition 16 WGN 940045 (02) and condition 17 WGN 940045 (01) be amended so the permit holder is required to keep all uncovered areas to a minimum; cover all malodorous wastes immediately; cover all refuse the end of each day; maintain a stock pile of cover material onsite; and ensure no refuse with the potential to create objectionable odours is left in the transfer station overnight. This should ensure that the tip face is managed in fashion, which minimises odour emissions during working hours and reduces the potential for objectionable odours to be transported beyond the landfill boundary.

### WGN 940045 (02) Condition 18

Condition 18 simply outlines the procedures, timeframes and the information that should be recorded when the permit holder receives an odour complaint. The consent holder is to notify the Manager, Consents Management, Wellington Regional Council as soon as any incident is identified that has the potential to result in offensive odours being discharged beyond the landfill boundary.

I have recommended that if a complaint is received that has resulted from the operation of the landfill a report must be submitted to the Wellington Regional Council within 3 working days outlining the problem and the action taken to mitigate the problem. If the problem cannot be remedied within this timeframe a timetable shall be submitted detailing the actions to taken.

#### WGN 940045 (02) Condition 23

Condition 23 requires the permit holder to progressively install and implement a gas extraction system as Stage III is filled. I have recommended that all remedial works (that could result in condition 15(a) of the permit being contravened) should be undertaken in accordance with the Odour Plan required by condition 15(b) of the permit. The permit holder must notify the Manager, Consents Management, Wellington Regional Council, 5 days before any remedial works start. The permit holder may be required to consult with the local community prior to the works starting.

#### WGN 940045 (02) Condition 24

I have recommended that all discharge gases not collected by the landfill gas collection system should be minimised. This will be achieved by a walkover at least once a week. Any evidence of potential gas leaks should be investigated immediately and subject to condition 23, remedial action undertaken as soon as possible.

## 16. **Conclusion**

The Southern Landfill provides a vital service to Wellington City by disposing of industrial, commercial, and residential wastes. The Wellington City Council has a responsibility to provide this service in such a way as not to produce potential adverse effects on the environment.

The discharge of odour from the Southern Landfill is unlikely to result in adverse effects on human health however, due to the odours offensive and objectionable nature it does have an adverse effect on the environment. Consequently, I have recommended that the permit holder meet the requirements detailed in amended conditions 15, 16, 18, 23 and 24 of WGN 940045 (02) and condition 17 of WGN 940045 (01). I am satisfied that the recommended consent conditions provide an appropriate level of environmental protection and in my view, do not compromise the viability of the operation.

I have recommended that Wellington City Council maintain an Odour Plan detailed in amended condition 15(b) to ensure that the consent holder complies with conditions 15, 16, 17, and 23 of the permits. The Odour Plan will serve as a guide to determine whether the management and operational procedures, methodologies, and contingency and emergency plans outlined in plan are appropriate and can avoid, remedy, or mitigate any adverse effects that may occur from the operation of the landfill.

I have recommended that condition 18 be amended to require accurate logging of odour complaints received by the permit holder and to clarify the procedures, timeframes, and the information that should be recorded.

I have recommended that condition 24 be amended so the consent holder undertakes an active monitoring programme to identify any evidence of potential gas leaks, odour, cracks in the landfill surface, gas bubbles, or leaks in the extraction system. This also places a requirement on the consent holder to maintain records and minimise fugitive gas leaks as soon as practicable.

## 17. Recommendation

I recommend that the Environment Committee amend conditions 15, 16, 18, 23 and 24 of the Discharge to Air Permit WGN 940045 (02) and condition 17 of the Discharge to Land Permit WGN 940045 (01), to the following:

### WGN 940045 (02) Condition 15

There shall be no discharges to air resulting from the exercise of this permit that are noxious, dangerous, offensive or objectionable at or beyond the boundary of the site as defined by designation 61 of the district plan (see appendix 1B to chapter 24).

The permit holder shall maintain an Odour Plan detailing all management and operations procedures, methodologies, and contingency and emergency plans necessary to comply with conditions 15, 16, and 23 of this permit at all times. The Odour Plan shall be submitted to the Manager, Consents Management, Wellington Regional Council, by 30 September 2000. Any subsequent changes to the Odour Plan shall be forwarded to the Manager, Consents Management, Wellington Regional Council within 10 working days of the change of procedure being adopted by the permit holder.

### WGN 940045 (02) Condition 16

The permit holder shall:

- (a) Manage the active landfill face so as to keep all uncovered areas to a practical minimum so as to minimise odour emissions during working hours;
- (b) Immediately cover malodorous wastes, such as putrescible organic matter, with cover material when such waste is deposited on the landfill face;
- (c) Fully cover all refuse with cover material by the end of each working day;
- (d) Maintain on the site at all times a stockpile of at least 7 days supply of cover material;
- (e) Ensure no refuse with the potential to create offensive or objectionable odour remains in the transfer station at the end of the working day.

All cover material referred to in this condition shall be suitable for the purpose of preventing odour emissions and for minimising vector attraction.

### WGN 940045 (02) Condition 18

- (a) The permit holder shall notify the Manager, Consents Management, Wellington Regional Council, of any odour complaints relating to the exercise of this permit as soon as the complaint is received by the permit holder;
- (b) The permit holder shall record, where possible, the following information in relation to any complaints received:
  - (i) The name, address and telephone number of the complainant, unless the complainant chooses not to supply these details;
  - (ii) Date and time the complaint is received and the date and time of the alleged incident;
  - (iii) Nature of the complaint;

- (iv) Weather conditions at the time of the complaint;
  - (v) Any cause(s) identified as a trigger for the complaint;
  - (vi) Action taken in response to the complaint.
- (c) Paragraphs (a) and (b) do not apply where a complaint is received by the Wellington City Council call centre, and the call centre has referred the caller to the Wellington Regional Council 24 Hour Pollution Response Service, or its equivalent service.
- (d) The permit holder shall notify the Manager, Consents Management, Wellington Regional Council of any incident, as soon as the incident is brought to the attention of the permit holder, which has the potential to result in any discharges to air that are noxious, dangerous, offensive or objectionable at or beyond the boundary of the site as defined by designation 61 of the district plan (see appendix 1B to chapter 24).
- (e) The permit holder shall forward the information recorded under condition 18 (b) to the Manager, Consents Management, Wellington Regional Council either within 24 hours of the complaint being received or the next working day.
- (f) If any complaint arises out of the operation of the landfill, and if required by the Manager, Consents Management, Wellington Regional Council, the permit holder shall submit a report to the Manager, Consents Management, Wellington Regional Council within 3 working days detailing the action(s) undertaken to mitigate the complaint and the results of these actions. If it is not possible to mitigate the complaint within 3 working days, a timetable shall be submitted to the Manager, Consents Management, Wellington Regional Council detailing the actions to be taken.

#### WGN 940045 (02) Condition 23

The permit holder shall progressively install and implement a gas collection system to collect landfill gas from Stage III of the landfill as it is filled.

Remedial works, including excavation of buried refuse, which could result in condition 15(a) of this permit being contravened, shall be undertaken in accordance with the Odour Plan required by condition 15(b) of this permit. The permit holder must notify the Manager, Consents Management, Wellington Regional Council at least 5 working days before the work is due to commence and notify the Wellington Regional Council when the work is complete. The Manager, Consents Management, Wellington Regional Council may require the permit holder to undertake community consultation prior to the works being undertaken.

Note: This condition does not apply to emergency works as defined by s320 of the Resource Management Act 1991.

#### WGN 940045 (02) Condition 24

The permit holder shall minimise the discharge of landfill gases that are not collected by the landfill gas collection system.

A walkover site inspection shall be undertaken at least once a week. Any evidence of actual or potential landfill gas leaks, such as landfill gas odour, cracks in the landfill surface, gas bubbles, or leaks in the gas extraction system shall be investigated immediately.

Where necessary, and subject to condition 23 of this permit, remedial action shall be undertaken as soon as practicable to minimise fugitive landfill gas discharges. The permit holder shall maintain records of inspections undertaken and any remedial work done as a result of the inspections. These records shall be provided to the Manager, Consents Management, Wellington Regional Council upon request.

WGN 940045 (01) Condition 17

The permit holder shall:

- (a) Manage the active landfill face so as to keep all uncovered areas to a practical minimum so as to minimise odour emissions during working hours;
- (b) Immediately cover malodorous wastes, such as putrescible organic matter, with cover material when such waste is deposited on the landfill face;
- (c) Fully cover all refuse with cover material by the end of each working day;
- (d) Maintain on the site at all times a stockpile of at least 7 days supply of cover material;
- (e) Ensure no refuse with the potential to create offensive or objectionable odour remains in the transfer station at the end of the working day.

## Appendix 1

### Submission Summary WGN940045 (01) and (02)

Owhiro Bay Residents Association	Colleen Cox	Submitters are sometimes confined to their houses because of odour. There are problems with tracking the source, and there is mismanagement of landfill complaints procedures. Submitter wants a monitoring procedures policy and it managed. Would like daily monitoring to enforce nil odour beyond landfill boundary and monitoring results advertised .	Support	Y
Szaltowski	Deborah	Submitter finds the odour revolting and offensive. The smells badly affect their lifestyle. Would like council to continue adequate monitoring of complaints, review them regularly and ensure conditions are being met.	Support	Y
Living Earth	Tim Wood	Submitter wants to ensure that odour control is the same as Living Earths. Submitter would like to ensure conditions will result in nil odour at the boundaries and dust monitoring to be established.	Support	N
Duncan	Jane Margaret	Submitter would like conditions 15 & 16 reviewed. The neighbourhood has been subjected to offensive odours and these affect their lifestyles. Doors and windows must be closed during summer.	Support	N
Wahren	James	Submitter is sick of the odour problem and finds it unacceptable the problem has gone on this long. He would like odour monitoring and complaints more closely followed up.	Support	Y
Hirst	Jay Joshua Carl	Submitter says the smell is unbearable and probably a health risk. He has problems renting his property because of the odour. By the WRC get out to a complaint the smell has gone. He wants the source of the odour to be stopped.	Support	



Clisby	Jeffrey	Submitter would like to see discharge to air conditions 15, 16, 18, 23, 24 and discharge to land condition 17 changed. The odours are offensive on cool, calm evenings.	Support	N
Wrigley	Gary Robert	Submitter would like conditions 15 and 16 changed. He finds the odours offensive and has had to close windows and doors to avoid the smell. Submitter would like tighter controls on discharges to air would like the WRC to have more discretionary powers to act on complaints.	Support	N
Owhiro Bay Residents Association	Colleen Cox	Submitters are sometimes confined to their houses because of odour. There are problems with tracking the source, and there is mismanagement of landfill complaints procedures. Submitter wants a monitoring procedures policy and it managed. Would like daily monitoring to enforce nil odour beyond landfill boundary and monitoring results advertised .	Support	Y
Szaltowski	Deborah	Submitter finds the odour revolting and offensive. The smells badly affect their lifestyle. Would like council to continue adequate monitoring of complaints, review them regularly and ensure conditions are being met.	Support	Y
Living Earth	Tim Wood	Submitter wants to ensure that odour control is the same as Living Earths. Submitter would like to ensure conditions will result in nil odour at the boundaries and dust monitoring to be established.	Support	N

## Appendix 2

### Matters for Consideration

#### 1. Resource Management Act 1991

Section 104 of the Resource Management Act 1991 outlines the matters that a consent authority is to have regard to when considering an application. Section 104 gives precedence to Part II of the Act.

Section 104 (1) states that the consent authority shall have regard to:

- (a) *Any actual and potential effects on the environment of allowing the activity; and*
- (b) *Any relevant regulations; and*
- (c) *Any relevant national policy statement, New Zealand coastal policy statement, regional policy statement, and proposed regional policy statement; and*
- (d) *Any relevant objectives, policies, rules, or other provisions of a plan or proposed plan; and*
- (e) *Any relevant district plan or proposed district plan, where the application is made in accordance with a regional plan; and*
- (f) *Any relevant regional plan or proposed regional plan, where the application is made in accordance with a district plan; and*
- (g) *Any relevant water conservation order or draft water conservation order; and*
- (h) *Any relevant designations or heritage orders or relevant requirements for designations or heritage orders; and*
- (i) *Any other matters the consent authority considers relevant and reasonably necessary to determine the application.*

Section 104 (4) states:

*Without limiting subsections (1) and (3), when considering an application for a coastal permit, a consent authority shall have regard to—*

- (a) *Any relevant policy stated in a New Zealand coastal policy statement in respect of the Crown's interests in land of the Crown in the coastal marine area; and*

- (b) *Any relevant provisions included in the appropriate regional coastal plan to implement that policy.*

Section 105 Decisions on applications states:

- (2) *A consent authority shall not grant a resource consent —*
- (2A) *Notwithstanding any decision made under section 94(2)(a), a consent authority must not grant a resource consent for a non-complying activity unless it is satisfied that —*
  - (a) *The adverse effects on the environment (other than any effect to which section 104(6) applies) will be minor; or*
  - (b) *The application is for an activity which will not be contrary to the objectives and policies of,—*
    - (i) *Where there is only a relevant plan, the relevant plan; or*
    - (ii) *Where there is only a relevant proposed plan, the relevant proposed plan; or*
    - (iii) *Where there is a relevant plan and a relevant proposed plan, either the relevant plan or the relevant proposed plan.*

In section 3 of the Resource Management Act *effect* means:

- (a) *Any positive or adverse effect; and*
- (b) *Any temporary or permanent effect; and*
- (c) *Any past, present, or future effect; and*
- (d) *Any cumulative effect which arises over time or in combination with other effects—*  
*regardless of the scale, intensity, duration, or frequency of the effect, and also includes—*
- (e) *Any potential effect of high probability; and*
- (f) *Any potential effect of low probability which has a high potential impact.*

Part II of the Act, Purposes and Principles, includes:

Section 5 – Purpose

- (1) *The purpose of this Act is to promote the sustainable management of natural and physical resources.*
- (2) *In this Act, “sustainable management” means 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.*

Section 6 – Matters of National Importance

*In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:*

- (a) *The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
- (b) *The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*
- (c) *The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
- (d) *The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*
- (e) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.*

## Section 7 – Other Matters

*In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—*

- (a) *Kaitiakitanga:*
- (b) *The efficient use and development of natural and physical resources:*
- (c) *The maintenance and enhancement of amenity values:*
- (d) *Intrinsic values of ecosystems:*
- (e) *Recognition and protection of the heritage values of sites, buildings, places, or areas:*
- (f) *Maintenance and enhancement of the quality of the environment:*
- (g) *Any finite characteristics of natural and physical resources:*
- (h) *The protection of the habitat of trout and salmon.*

## Section 8 – Treaty of Waitangi

*In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).*

Part III of the Act, Duties and Restrictions, includes:

## Section 9 – Restrictions on use of land

- (1) *No person may use any land in a manner that contravenes a rule in a district plan or proposed district plan unless the activity is—*
  - (a) *Expressly allowed by a resource consent granted by the territorial authority responsible for the plan; or*
  - (b) *An existing use allowed by [section 10 or section 10A].*
- (2) *No person may contravene [section 176 or section 178 or section 193 or section 194 (which relate to designations and heritage orders)] unless the prior written consent of the requiring authority concerned is obtained.*

- (3) *No person may use any land in a manner that contravenes a rule in a regional plan or a proposed regional plan unless that activity is—*
- (a) *Expressly allowed by a resource consent granted by the regional council responsible for the plan; or*
  - (b) *Allowed by section 20 (certain existing lawful uses allowed).*
- (4) *In this section, the word “use” in relation to any land means—*
- (a) *Any use, erection, reconstruction, placement, alteration, extension, removal, or demolition of any structure or part of any structure in, on, under, or over the land; or*
  - (b) *Any excavation, drilling, tunnelling, or other disturbance of the land; or*
  - (c) *Any destruction of, damage to, or disturbance of, the habitats of plants or animals in, on, or under the land; or*
  - (d) *Any deposit of any substance in, on, or under the land; or*
  - [(da) *Any entry on to, or passing across, the surface of water in any lake or river; or]*
  - (e) *Any other use of land—and “may use” has a corresponding meaning.*
- (5) *In subsection (1) “land” includes the surface of water in any lake or river.*
- (6) *Subsection (3) does not apply to the bed of any lake or river.*
- (7) *This section does not apply to any use of the coastal marine area.*
- [(8) *The application of this section to overflying by aircraft shall be limited to any noise emission controls that may be prescribed by a territorial authority in relation to the use of airports.*]

#### Section 15 – Discharge of contaminants into environment

- (1) *No person may discharge any—*
- (a) *Contaminant or water into water; or*
  - (b) *Contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water; or*
  - (c) *Contaminant from any industrial or trade premises into air; or*
  - (d) *Contaminant from any industrial or trade premises onto or into land—  
unless the discharge is expressly allowed by a rule [in a regional plan and in any relevant proposed regional plan], a resource consent, or regulations.*

- (2) *No person may discharge any contaminant into the air, or into or onto land, from—*
- (a) *Any place; or*
  - (b) *Any other source, whether moveable or not,—*  
*in a manner that contravenes a rule in a regional plan or proposed regional plan unless the discharge is expressly allowed by a resource consent[, or regulations,] or allowed by section 20 (certain existing lawful activities allowed).*

Section 108 – Conditions of resource consents

- [(1) Except as expressly provided in this section and subject to any regulations, a resource consent may be granted on any condition that the consent authority considers appropriate, including any condition of a kind referred to in subsection (2).
- [(2) A resource consent may include any one or more of the following conditions:
- (a) Subject to subsection (10), a condition requiring that a financial contribution be made:
  - (b) A condition requiring that a bond be given in respect of the performance of any one or more conditions of the consent, including any condition relating to the alteration or the removal of structures on the expiry of the consent:
  - (c) A condition requiring that services or works, including (but without limitation) the protection, planting, or replanting of any tree or other vegetation or the protection, restoration, or enhancement of any natural or physical resource, be provided:
  - (d) In respect of any resource consent (other than a subdivision consent), a condition requiring that a covenant be entered into, in favour of the consent authority, in respect of the performance of any condition of the resource consent (being a condition which relates to the use of land to which the consent relates):
  - (e) Subject to subsection (8), in respect of a discharge permit or a coastal permit to do something that would otherwise contravene section 15 (relating to the discharge of contaminants) or section 15B, a condition requiring the holder to adopt the best practicable option to prevent or minimise any actual or likely adverse effect on the environment of the discharge and other discharges (if any) made by the person from the same site or source:
  - (f) In respect of a subdivision consent, any condition described in section 220 (notwithstanding any limitation on the imposition of conditions provided for by section 105(1)(a) or (b)):
  - (g) In respect of any resource consent for reclamation granted by the relevant consent authority, a condition requiring an esplanade reserve or esplanade strip of any specified width to be set aside or created under Part X:
  - (h) In respect of any coastal permit to occupy any part of the coastal marine area (relating to land of the Crown in the coastal marine area or land in the coastal marine area vested in the regional council), a condition—

- (i) Detailing the extent of the exclusion of other persons:
  - (ii) Specifying any coastal occupation charge.]
- [(3) A consent authority may include as a condition of a resource consent a requirement that the holder of a resource consent supply to the consent authority information relating to the exercise of the resource consent.
- [(4) Without limiting subsection (3), a condition made under that subsection may require the holder of the resource consent to do one or more of the following:
  - (a) To make and record measurements:
  - (b) To take and supply samples:
  - (c) To carry out analyses, surveys, investigations, inspections, or other specified tests:
  - (d) To carry out measurements, samples, analyses, surveys, investigations, inspections, or other specified tests in a specified manner:
  - (e) To provide information to the consent authority at a specified time or times:
  - (f) To provide information to the consent authority in a specified manner:
  - (g) To comply with the condition at the holder of the resource consent's expense.
- [(5) Any conditions of a kind referred to in subsection (3) that were made before the commencement of this subsection, and any action taken or decision made as a result of such a condition, are hereby declared to be, and to have always been, as valid as they would have been if subsections (3) and (4) had been included in this Act when the conditions were made, or the action was taken, or the decision was made.]
- (6) Any condition under subsection [(2)(b)] may, among other things,—
  - (a) Require that the bond be given before the consent may be exercised or at any other time:
  - (b) Require that section 109(1) apply to the bond except in the case of a land use consent or a subdivision consent:
  - (c) Provide that the holder of the resource consent remains liable under this Act for any breach of conditions of the consent which occur before the expiry of the consent and for any adverse effects on the environment which become apparent during or after the expiry of the consent:
  - (d) Require the holder of the resource consent to provide such security as the consent authority thinks fit for the performance of any condition of the bond:
  - (e) Without limiting paragraph (d), require the holder of the resource consent to provide a guarantor (acceptable to the consent authority) to bind itself to pay for the carrying out and completion of any condition in the event of any default of the holder or any occurrence of any adverse environmental effect requiring remedy:
  - (f) Provide that the bond may be varied or cancelled or renewed at any time by agreement between the holder and the consent authority.
- (7) Any condition under subsection [(2)(d)] may, among other things, provide that the covenant may be varied or cancelled or renewed at any time by agreement between the consent holder and the consent authority.



- (8) Before deciding to grant a discharge permit or a coastal permit to do something that would otherwise contravene section 15 (relating to the discharge of contaminants) [or section 15B] subject to a condition described in subsection [(2)(e)], the consent authority shall be satisfied that, in the particular circumstances and having regard to—
- (a) The nature of the discharge and the receiving environment; and
  - (b) Other alternatives, including any condition requiring the observance of minimum standards of quality of the receiving environment—  
the inclusion of that condition is the most efficient and effective means of preventing or minimising any actual or likely adverse effect on the environment.
- [(9) In this section, “financial contribution” means a contribution of—
- (a) Money; or
  - (b) Land, including an esplanade reserve or esplanade strip (other than in relation to a subdivision consent), but excluding Maori land within the meaning of the Maori Land Act 1993 unless that Act provides otherwise; or
  - (c) A combination of money and land.
- [(10) A consent authority must not include a condition in a resource consent requiring a financial contribution unless—
- (a) The condition is imposed in accordance with the purposes specified in the plan (including the purpose of ensuring positive effects on the environment to offset any adverse effect); and  
The level of contribution is determined in the manner described in the plan.]

#### Section 128 – Circumstances when conditions can be reviewed

- (1) A consent authority may, in accordance with section 129, serve notice on a consent holder of its intention to review the conditions of a resource consent—
- (a) At any time [or times] specified for that purpose in the consent for any of the following purposes:
    - (i) To deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
    - (ii) To require a [holder of a discharge permit or a coastal permit to do something that would otherwise contravene section 15] [or section 15B] to adopt the best practicable option to remove or reduce any adverse effect on the environment; or
    - (iii) For any other purpose specified in the consent; or
  - [(b) In the case of a water, coastal, or discharge permit, when a regional plan has been made operative which sets rules relating to maximum or minimum levels or flows or rates of use of water, or minimum standards of water quality or air quality, or ranges of temperature or pressure of geothermal water, and in the regional council's opinion it is appropriate to review the conditions of the permit in order to enable the levels, flows, rates, or standards set by the rule to be met; or]

- (c) If the information made available to the consent authority by the applicant for the consent for the purposes of the application contained inaccuracies which materially influenced the decision made on the application and the effects of the exercise of the consent are such that it is necessary to apply more appropriate conditions.
- [(2) Except in accordance with section 234, this section does not apply to a subdivision consent in respect of which the survey plan has been deposited by the District Land Registrar or Registrar of Deeds in accordance with Part X.]

Section 130 – Public notification, submissions, and hearing

- (1) Sections 96 to 102 shall, with all necessary modifications, apply in respect of a review of any resource consent (other than a coastal permit granted in respect of a restricted, coastal activity) as if—
  - (a) The notice of review under section 129 were an application for a resource consent; and
  - (b) The consent holder were the applicant for the resource consent.
- (2) Where the Minister of Conservation reviews a consent granted in respect of a restricted coastal activity, the hearing shall be conducted by a hearing committee set up under section 117, and sections 96 to 102 and section 118 (which relate to hearings, the decision of a hearing committee, and rights of inquiry) shall apply with all necessary modifications to its recommendation to the Minister as if—
  - (a) A hearing committee were a consent authority; and
  - (b) A recommendation were a decision; and
  - (c) A notice of review were an application for a resource consent; and
  - (d) The consent holder were the applicant for a resource consent.
- (3) Nothing in subsection (1) or (2) requires a review of a resource consent to be notified in accordance with section 93 if the consent authority is satisfied—
  - (a) That either—
    - (i) The adverse effect (other than any effect on any person whose written approval has been obtained in accordance with paragraph (b)) of the activity after the review will continue to be minor; or
    - (ii) The degree of adverse effect (other than any effect on any person whose written approval has been obtained in accordance with paragraph (b)) of the activity is likely to be unchanged or decreased as a result of the review; and
  - (b) That written approval has been obtained from—
    - (i) Every person who made a submission or lodged an appeal on the original application; and
    - (ii) Every person who, in the opinion of the authority, may be adversely affected as a result of the review,—  
unless in the authority's opinion it is unreasonable in all the circumstances to obtain every such approval.
- (4) Subsection (3) applies whether or not—
  - (a) Notification is required by a plan or proposed plan; or

- (b) The review relates to a resource consent in respect of a ... controlled, discretionary, or non-complying activity.
- [(5) Where a regional plan or regional coastal plan states that a rule will affect the exercise of existing resource consents under section 68(7), a consent authority shall not notify a review in accordance with section 93, but shall hear submissions only from the consent holder where the consent holder requests to be heard within 20 working days of service of the notice under section 129.
- [(6) Where a consent which would otherwise be heard under subsection (5) is a consent granted for a restricted coastal activity, the provisions of subsection (2) shall apply except that the hearing committee shall only hear from the consent holder and the Minister of Conservation.
- [(7) Notwithstanding subsections (5) and (6), if a consent authority considers special circumstances exist, it may require that a review be notified and a hearing be held even if a plan expressly states that a rule shall affect the exercise of existing consents under section 68(7).]

#### Section 131 – Matters to be considered in review

- (1) When reviewing the conditions of a resource consent, the consent authority or hearing committee set up under section 117 in respect of a permit for a restricted coastal activity—
  - (a) Shall have regard to the matters in section 104 and to whether the activity allowed by the consent will continue to be viable after the change; and
  - (b) May have regard to the manner in which the consent has been used.
- (2) Before changing the conditions of a discharge permit or a coastal permit to do something that would otherwise contravene section 15 (relating to the discharge of contaminants) [or 15B] to include a condition requiring the holder to adopt the best practicable option to remove or reduce any adverse effect on the environment, the consent authority shall be satisfied, in the particular circumstances and having regard to—
  - (a) The nature of the discharge and the receiving environment; and
  - (b) The financial implications for the applicant of including that condition; and
  - (c) Other alternatives, including a condition requiring the observance of minimum standards of quality of the receiving environment—that including that condition is the most efficient and effective means of removing or reducing that adverse effect.

#### Section 132 – Decisions on review of consent conditions

- (1) A consent authority may change the conditions of a resource consent (other than any condition as to the duration of the consent) on a review under ... section 128 if, and only if, one or more of the circumstances specified in [that section] applies.

- (2) Sections 106 to 116 (which relate to conditions, decisions, and notification) and sections 120 and 121 (which relate to appeals) apply, with all necessary modifications, to a review under section 128 (other than a review initiated by the Minister of Conservation) as if—
  - (a) The review were an application for a resource consent; and
  - (b) The consent holder were an applicant for a resource consent.
- (3) Sections 118 and 119 apply, with all necessary modifications, to a review of consent conditions initiated by the Minister of Conservation as if—
  - (a) A hearing committee were a consent authority; and
  - (b) A recommendation were a decision; and
  - (c) A notice of review were an application for a resource consent; and
  - (d) The consent holder were the applicant for a resource consent.
- [(4) Notwithstanding sections 128 to 131 and subsections (1) to (3), where—
  - (a) A consent authority reviews a resource consent under section 128(1)(c); and
  - (b) The application contained inaccuracies which the consent authority considers materially influenced the decision made on the application; and
  - (c) There are significant adverse effects on the environment resulting from the exercise of the consent—the consent authority may cancel the resource consent.]

## 2. Wellington Regional Policy Statement

### 8. Air

#### 8.3 Objectives

**Objective 1** *High quality air in the Region is maintained and protected, and there is no significant deterioration in air quality in any part of the Region.*

**Objective 2** *Air quality is enhanced in those areas with degraded air quality.*

**Objective 3** *The adverse effects of the discharge of contaminants into air on human health, local or global environmental systems and public amenity are avoided, remedied or mitigated.*

**Objective 4** *The output of gases which potentially promote climate change is at a level which is consistent with central government climate change policy.*

The **objectives** are concerned with protecting and maintaining air quality where it is good, enhancing it where it is not so good, preventing further deterioration in all areas and avoiding or reducing the effects of air pollution on a range of human and environmental values.

Air quality in the Region is generally assumed to be high. Whilst knowledge of atmospheric processes and changes brought about by human activities has increased in recent years, much is still unknown. Given the life supporting significance of clean air and the limited availability of data, it is appropriate to adopt a cautious approach to decisions that could have significant impacts on air quality.

**Objective 1** recognises that insofar as it is possible to identify areas of high quality air, there is a need to ensure that as a minimum, such areas of high quality are maintained and protected.

**Objective 1** also reflects a public desire for high air quality in all locations and at all times. However, the objective also acknowledges through the use of the word "significant" that there may be circumstances and occasions when a minor or short-term deterioration of quality is a necessary and acceptable cost for the achievement of other objectives.

**Objective 2** is based on the understanding that, as information is progressively obtained, it may prove to be desirable to enhance air quality in certain geographical areas of the Region by reducing the quantities or eliminating the types of emissions that are degrading the quality of air in that area.

**Objective 3** concerns avoiding or reducing adverse effects arising from the discharge of contaminants into air. In assessing such effects, consideration needs to be given to three closely related areas:

- Adverse effects on **human health**;
- Adverse effects on **environmental systems**, including effects on soil, water, plants and animals; and
- Adverse effects on **personal and public amenity**, including effects on personal comfort and aesthetic enjoyment, and general environmental well-being.

**Objective 4** specifically addresses the issue of climate change and the reduction of greenhouse gases from sources in the Region. The nature of climate change makes it difficult to choose appropriate targets for reductions in greenhouse gas emissions and enhancement of greenhouse gas sinks. For this reason the target adopted is expressed in terms of national objectives. In the short-term, central government's objective is to reduce New Zealand's total carbon dioxide emissions by 3-4 percent below the level that they would otherwise reach by 2000. This will contribute to central government's primary target

of reducing net carbon dioxide emissions to 1990 levels by the year 2000.

Collectively, **Objectives 1-4** set a direction for air quality management which recognises and aims to protect the value of an important natural asset in the Wellington Region.

### **Policies for Avoiding Air Pollution at Source**

**Policy 6** *To avoid or minimise, where appropriate and practicable, the discharge of contaminants to air at their source by the development and implementation of improved control technology and by good pollution control practice.*

**Policy 7** *To promote the use of energy sources and transport fuels that are low or non-polluting of the atmosphere.*

Air quality in the Wellington Region was previously administered under the Clean Air Act 1972. This legislation focused on minimising emissions and was primarily orientated towards the **process** that produced the emissions.

The Resource Management Act 1991, however, is based on an "air quality management" approach, which is orientated towards **effects**. Under this approach, desired air quality in an area is defined within certain parameters. Emission sources are managed to maintain the air quality within these parameters. Regardless of the approach, control of processes and sources of emissions is an important means of managing adverse effects on air quality.

**Policies 6 and 7** focus on ways to manage air pollution at source. While the establishment of air quality guidelines (Policy 5) reflects the merits of the air quality management approach, these complementary policies draw on the beneficial experience gained under previous legislation of using control technology to minimise emissions. The words "where appropriate and practicable" in this policy indicate that in some situations alternative ways of avoiding, remedying or mitigating the adverse effects of air pollution may be more appropriate than avoiding or minimising emissions at source (e.g., setting emission limits or establishing buffer zones). The circumstances in which avoiding or minimising emissions at source (including, where this is the most effective and efficient means of control, using the best practicable option) will be clarified in the Regional Air Quality Management Plan.

The philosophy of preventing or minimising emissions at source is consistent with the concepts of waste minimisation and cleaner production, and is one way of avoiding, remedying or mitigating adverse effects of discharges.

Together, **Policies 5, 6 and 7** represent a mix of the air quality management approach allied to best practice.

**Policies for Protecting Human Health, Local and Global Environmental Systems, and Public Amenity**

- Policy 8**      *To avoid, remedy or mitigate the adverse effects of local and global air pollution on human health.*
- Policy 9**      *To promote measures that achieve a net reduction in the emission of greenhouse gases and ozone depleting substances.*
- Policy 10**     *To avoid, remedy or mitigate the adverse effects of air pollution on surface and groundwater, soil, plants and animals.*
- Policy 11**     *To avoid, remedy or mitigate the adverse effects of air pollution on public amenity values.*
- Policy 12**     *To avoid, remedy or mitigate the adverse effects of odours on public amenity.*

Several Issues identified earlier in this chapter relate to the actual or potential impact of various forms of air pollution, including naturally occurring substances, on human health. **Policy 8** specifically deals with this set of effects.

**Policies 9 and 10** are concerned with the effects of air pollution on global and local environmental systems. The wording in **Policy 9** points to the need to reduce the release of gases that contribute to the greenhouse effect. **Policy 9** is consistent with central government climate change policy, that is, that there is a reduction in net additions of greenhouse gases to the atmosphere. This approach takes account of both sources of greenhouse gas emissions and sinks which remove greenhouse gases from the atmosphere.

**Policy 9** also refers to a reduction in the release of ozone-depleting substances. The policy is included to indicate regional support for central government's international commitments concerning ozone depleting substances. Specific reference to ozone depletion is also made to emphasise the value of local actions that complement national policies.

**Policy 10** deals with a range of environmental effects that arise from air pollution. It seeks to avoid, for example, unintended damage to plants and animals from spray drift, or the deposition of lead from vehicle exhausts in waterways. This policy is augmented by Policy 6, which seeks to reduce air pollution through good practice. **Policy 10** is also supported by specific policies in the Fresh Water, Soil, Ecosystems and Coastal Environment chapters of the Regional Policy Statement.

**Policy 11** identifies the need to protect a range of amenity values from the adverse effects of air pollution. In the Act, amenity values are interpreted as:

*.... those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.*

The policy therefore deals with concerns about the effects of air pollution on visual quality, on the damage that chemical erosion can have on the appearance and structural integrity of important buildings, and on tangata whenua perceptions of the value of air as taonga.

**Policy 12** specifically distinguishes odour as one important facet of amenity, and aims to tackle the problematical area of odour management. The variability of tolerance between individuals, and technical difficulties in measuring odours means that a range of perceptions and flexibility in interpretation will need to be accommodated in managing odours.

Many materials which have reached the end of their useful life in one form may still have similar or other uses in a different form. Reusing materials for the same or similar purposes, recycling and recovering materials from the waste stream (e.g., compost or energy) are ways of making use of resources which would otherwise be disposed of as waste. This reduces the amount of residual waste material which needs to be disposed of (and therefore reduces the problems associated with waste disposal) and provides opportunities for sustainable production based on reused materials rather than on raw resources.

### 13.3 Objectives

**Objective 3** *Adverse effects on the environment and human health from the inappropriate disposal of residual liquid and solid wastes are avoided or, where this is not possible, remedied or mitigated.*

Even if all possible steps are taken to minimise the amount of waste left for disposal, there will still be some materials which cannot be reused, recycled or recovered from the waste stream. The objective for residual waste is to dispose of it in a manner which avoids the adverse effects on human health and the environment which have characterised past waste management practices. Not all adverse effects from waste disposal can be avoided immediately, particularly effects that result from poor waste management practices in the past. They can, however, be remedied or mitigated and planning to avoid adverse environmental effects **now** will save future generations from the problems of dealing with our wastes and contaminants.



### 3. **Wellington Regional Air Quality Management Plan**

#### 4. **Objectives and Policies**

##### 4.1 **Objectives**

- 4.1.1 High quality air in the Region is maintained and protected, degraded air is enhanced, and there is no significant deterioration in ambient air quality in any part of the Region.

*Objective 4.1.1 is implemented by all the policies in this Plan.*

- 4.1.2 Discharges to air in the Region are managed in a way, or at a rate which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while ensuring that adverse effects, including any adverse effects on:

local ambient air quality;

human health;

amenity values;

resources or values of significance to tangata whenua;

the quality of ecosystems, water, and soil; and

the global atmosphere;

are avoided, remedied or mitigated.

*Objective 4.1.2 is implemented by Policies 4.2.4-4.2.25 in particular.*

- 4.2.4 To avoid, remedy or mitigate any adverse effect of the discharge of contaminants to air that is noxious, dangerous, offensive, or objectionable.
- 4.2.5 To avoid or minimise, where appropriate and practicable, the discharge of contaminants to air at their source.
- 4.2.6 To ensure that any measures adopted to avoid, remedy or mitigate the effects of discharges of contaminants to air, take account of the sensitivity of alternative receiving environments (e.g., water or soil).
- 4.2.7 To avoid, remedy or mitigate the adverse effects of the discharge of contaminants to air on amenity values.
- 4.2.14 To avoid, remedy or mitigate any adverse effects, (including on human health or amenity values) which arise as a result of the frequency, intensity, duration, offensiveness, time and location of the discharge to air of odorous contaminants.

## **Rule 20 Landfilling and composting**

The discharge of contaminants into air in connection with any:

- (1) landfilling and composting;
- (2) sites which have been used in the past for landfilling (closed landfills);

is a **Permitted Activity**, provided it complies with the conditions below, and **excluding** any discharges or contaminants to air arising from:

- (a) sites where waste materials are accepted from sources other than the property on which the landfilling or composting takes place; and/or
- (b) waste transfer stations.

### **Conditions**

The person(s) responsible for the activity shall ensure that:

- (i) there is no dust, gas (including carbon dioxide and methane gases), or odour from the process which is offensive, objectionable, noxious, or dangerous at or beyond the boundary of the premises or property.

## **6. Methods (other than rules)**

### **6.1 General Ambient Air Quality Management**

- 6.1.4 Assess the influence of meteorology and topography on the Region's ambient air quality and their effects on the dispersion of contaminants discharged from point sources.

*This method implements Policy 4.2.3 in particular.*

- 6.1.7 Ensure that complaints relating to the discharge of contaminants to air are registered and appropriately dealt with, including where necessary, forwarding relevant information to other authorities for their action.

*This method implements Policy 4.2.3 in particular.*

- 6.1.8 Promote the use of odour diaries, where appropriate, to record complaints about potentially odorous activities.

*This method implements Policy 4.2.3 in particular.*

- 6.1.9 Prepare and disseminate information to agencies and resource users, as appropriate, on ways of preventing or minimising the adverse effects of discharges of contaminants to air. This could include information on:

- (1) the best practicable option for preventing or minimising odour;

- (2) good practice for land clearance by burn-off;
- (3) the requirement for discharge consents for the burning of certain materials and substances, especially those noted in Rule 19; and
- (4) the application of all or particular rules contained within this Plan.

*This method implements Policy 4.2.8 in particular.*

- 6.1.11 To encourage provisions in district plans which promote the avoidance, remedying or mitigation of the adverse effects of discharges of contaminants to air on amenity values.

*This method implements Policy 4.2.7 in particular.*

## **4. Wellington Regional Plan for Discharges to Land**

### **4. Objectives and Policies**

#### **4.1 Objectives**

##### **Solid contaminants**

- 4.1.1 The quantity of wastes discharged to land in the Region is significantly reduced by:

- (1) minimising the amount of waste generated at its source;
- (2) re-using, recycling and recovering materials from the waste stream to the greatest extent practicable; and
- (3) ensuring that waste generators meet the true costs of managing the wastes they produce.

Policies 4.2.1-4.2.4 provide guidance to achieve this Objective.

- 4.1.2 The Region's landfills are sited rationally, with respect to community benefit and environmental considerations.

Policies 4.2.5-4.2.7 provide guidance to achieve this Objective.

- 4.1.3 Any adverse effects from discharging solid contaminants to land are avoided, remedied or mitigated.

Policies 4.2.8-4.2.11 provide guidance to achieve this Objective.

**Rule 10      Landfills, rubbish dumps and tips**

Except as allowed by Rule 9(1), the discharge of contaminants onto or into land used for the disposal of waste materials, with the exception of land used exclusively for cleanfill disposal, but including disposal at a landfill, rubbish dump or tip, is a **Discretionary Activity**.