

NOVEMBER 2003

# **Annual Environmental Incident Report 2003**

Resource Investigations Department  
Greater Wellington Regional Council



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## Executive Summary

### Introduction

This report summarises Greater Wellington's pollution control activities over the financial year 1 July 2002 to 30 June 2003.

A total of 1,140 environmental incidents were logged by Greater Wellington during this reporting period, which gave rise to a total of 1,494 individual complaints. These incidents occurred mainly in populated parts of the region, with the majority of complaints attributed to industrial odours, and the discharge of liquid waste and hydrocarbons to streams. Regulatory action during this period included two prosecutions and the service of 16 infringement notices and 18 abatement notices.

The *Take Charge* pollution prevention programme was launched during this year. This involves Pollution Control Officers visiting business premises throughout the region, to evaluate environmental performance, compliance status, and opportunities for improvement. The initial focus of the *Take Charge* programme has been service stations, with 58 sites visited during this reporting period. Opportunities to improve provisions for stormwater protection were identified at a number of the sites visited.

Greater Wellington maintains a Selected Land Use Register, which holds information about sites that are known to be contaminated, or have the potential to be contaminated by virtue of their past or present land use. There are currently 1,501 sites listed in the Selected Land Use Register.

A total of 9.5 tonnes of unwanted chemicals were collected from rural properties during this reporting period. This agrichemical collection service has now stopped, although Greater Wellington has developed a HAZMOBILE waste reception facility. This portable unit is available to Territorial Authorities in the region when they undertake household hazardous waste collections.

The Pollution Control Team is continuing with its shift in approach from incident response to pollution prevention, which is considered to be a more cost-effective operating strategy. It is anticipated that Pollution Control Officers will be spending a greater proportion of their time on *Take Charge* assessments and targeted environmental investigations in the coming year.



## 1. Introduction

Greater Wellington's Pollution Control Team manages pollution in the western Region via a 24-hour incident response service, site inspections, and targeted investigations. The objective is to establish compliance with the Resource Management Act 1991 and Regional Plans. In the Wairarapa, the Compliance and Resources section provide a similar function.

Pollution incidents include contaminant discharges to air, water and land, unauthorised works, and noise emissions in the Coastal Marine Area. Investigating officers evaluate the significance of each incident, and determine the optimum action to remedy or mitigate environmental impacts arising, and whether enforcement action is necessary. Samples, measurements and other evidence may be collected, to confirm and quantify pollution incidents.

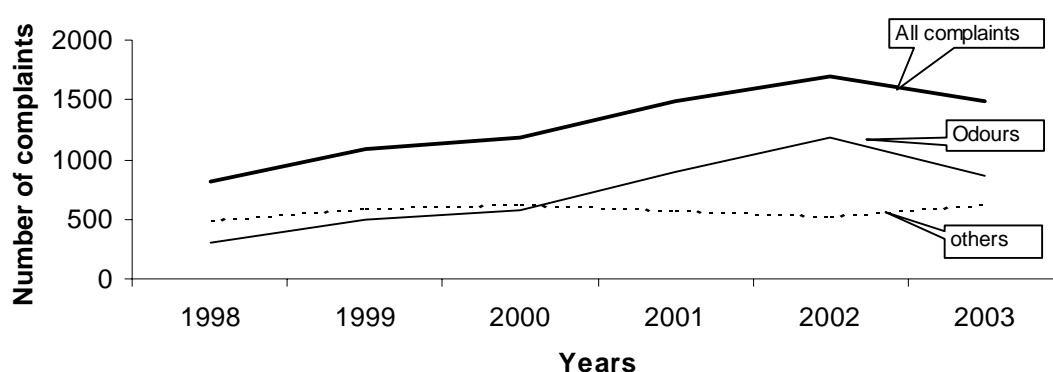
This report summarises the Council's pollution control activities over the financial year 1 July 2002 to 30 June 2003. A total of 1,140 environmental incidents were logged by Greater Wellington during this reporting period, which gave rise to a total of 1,494 individual complaints. The geographical distribution of incidents is summarised in Table 1, while the trend in recent years is plotted in Figure 1.

During this reporting period, Greater Wellington introduced a new database for recording information about pollution events. Records are now based on individual incidents, compared to the previous database which was complaint-based. It has therefore been necessary to estimate incident numbers from complaint data in the old database.

Table 1: Geographic distribution of incidents

	Number of Incidents	% of Total
Wellington City Council	617	54
Hutt City Council	214	19
Upper Hutt City Council	62	5
Porirua City Council	71	6
Kapiti Coast District Council	54	5
Wairarapa	122	11
<b>Total</b>	<b>1140</b>	<b>100</b>

Figure 1: Incoming complaints (1998 to 2003)



### 1.1 Incoming pollution complaints

Table 2 provides a summary of pollution complaints received during this period. The total of 1,494 complaints represents a 12% reduction when compared to the 1,702 complaints received in the previous year.

Table 2: Reported incidents and complaints

	Reported Incidents	Incoming Complaints	% of all Incidents
Odour	520	863	46
Liquid waste	142	147	13
Hydrocarbons	75	77	7
Unconsented works	39	39	3
Solid Waste	32	32	3
Silt	44	45	4
Sewage	50	53	4
Dead Stock	21	20	2
Smoke	21	21	2
Other	196	197	17
<b>Total</b>	<b>1140</b>	<b>1494</b>	



Although odours generated 58% of all incoming complaints, this was less than in the previous year, where 1,179 odour complaints represented 69% of all complaints received. This fall is attributed to the closure of the Asphalt Services New Zealand Limited facility in Tawa.

Complaints about liquid waste, hydrocarbons, solid waste and dead stock were markedly higher than in the previous year. Silt discharges have also been more prominent as a consequence of the recent building boom, with numerous instances of uncontrolled run-off from earthworks at residential subdivisions. An increase in the number of water pollution complaints is attributed to a growing public awareness of urban streams. The growth in complaints about solid waste disposal is largely attributed to a number of non-cleanfill disposal operations on private sites around the Region, often associated with land filling or reclamation.

## 1.2 Incident response

As in previous years, the majority of incidents occurred in populated urban areas. Section 2 of this report provides further detail regarding the type of incidents that were reported in each of the Territorial Authority areas around the Region.

The type of incidents corresponds closely to incoming complaints, with the exception of odour incidents, where there is a tendency to receive multiple complaints about a single odour incident.

## 1.3 Response time

Responsiveness to incident notification is measured via conformance with target response times, as illustrated in Table 3. Almost all incidents were responded to within the target response time, with all exceptions being due to traffic delays en route to distant sites, or where officers were responding to other incidents. The represents a deterioration in responsiveness when compared to previous years, particularly for 'red' incidents, where the average response time was 27 minutes and the conformance level 98%. This deterioration can be largely explained by a change in our incident database, which changed the emphasis from complaint-based reporting to incident-based reporting. For example, average response time in the old database would be reduced by a rapid response to a single incident that had many complainants.

Table 3: Response time summary

Response Time Target	Average Response Time	Conformance Level
Red (60 minutes)	41.0	90 %
Yellow (24 hours)	8.5 hours	96 %
Blue (30 days)	1.7 days	100 %

## 2. Strategic context

Greater Wellington's Pollution Control activities contribute to the Take 10 targets in the following ways:

- Pro-active monitoring should contribute to a reduction in reported incidents
- *Take Charge* will encourage businesses to implement waste reduction initiatives
- Stormwater investigations and Take Charge visits will help to reduce the incidence of contaminants entering our more polluted surface waters, contributing to a sustained improvement in their quality.

## 3. Regional incident summary

Table 4 provides a breakdown of incident types by territorial authority, while the following sections provide further detail about specific observations, trends and significant incidents.

All Territorial Authority areas in the west of the Region showed a similar pattern, with odour, liquid waste discharges and hydrocarbon releases predominating. Sewage spills, solid waste dumping and un-consented works were also commonly encountered across the Region. However, sewage discharges and incidents involving smoke and odour were significantly reduced in comparison to the previous year. In the Wairarapa, odour and hydrocarbon incidents are less common, whilst smoke from open burning is more pronounced than elsewhere in the Region.

Table 4: Regional incident summary

TYPE	Territorial Authority					
	WCC	HCC	UHCC	PCC	KCDC	WAIR*
Odour	377	95	6	9	18	15
Liquid waste	71	39	8	7	7	10
Hydrocarbons	42	9	5	10	5	4
Silt	21	5	2	9	1	1
Sewage	12	2	1	2	6	9
Solid Waste	13	13	3	2	4	9
Unconsented works	11	5	10	7	4	13
Dead Stock	4	2	5	5	0	5
Smoke	6	7	1	1	1	5
Other	60	37	21	19	8	51
<b>Total</b>	<b>617</b>	<b>214</b>	<b>62</b>	<b>71</b>	<b>54</b>	<b>122</b>

\* Wairarapa Territorial Authorities comprise Carterton DC, Masterton DC & S. Wairarapa DC.

### 3.1 Wellington City

Incidents: 617

Complaints: 962 (1,145 in 2002)

Observations & Significant Incidents:

1. Although odour complaints represented 60% of all complaints received in the Wellington City area, this was less than the previous year's 80%. Incoming odour complaints fell by approximately 400 following the closure of the asphalt plant in Tawa, operated by Asphalt Services New Zealand Limited.
2. Odour complaints for the Carey's Gully site were significantly higher than the previous year, despite there being no substantive change in facilities or activities at the site, or prevailing weather conditions. This increase is attributed to a growing intolerance and networking amongst residents. An odour workshop, involving all operators at the Carey's Gully site and Greater Wellington, was held on 12 June 2002. This generated a number of recommendations for further investigation and plant modification, to reduce the likelihood of offensive or objectionable odours beyond the site boundary. Site operators are currently working through these recommendations.
3. Residential apartment development has led to an increase in the number of odour complaints attributed to existing land uses, particularly in inner city areas.
4. On 8 December 2002, a large quantity of plastic media was discharged into Cook Strait from the Moa Point wastewater treatment plant, via its long sea outfall. The media washed up on several beaches in the area for several months afterwards.
5. On 9-10 June 2003, a combination of heavy rainfall and mechanical failure led to the release of dilute untreated sewage into Lavender Bay from the Moa Point wastewater treatment plant, via its short sea outfall.
6. Earthworks associated with subdivision developments gave rise to numerous discharges of silt-laden surface run-off, affecting associated streams and surface waters.
7. There was a substantial leak of insulating oil from a buried electricity transmission main between Tawa and Johnsonville. United Networks isolated and repaired the leak, and removed all contaminated material.

### **3.2 Hutt City**

Incidents: 214

Complaints: 216 (276 in 2002)

Observations & Significant Incidents:

1. Complaint numbers were 18% less than in the previous year.
2. Nuplex Medismart undertook substantial modifications to their extraction system and constructed a new, taller stack for emissions to atmosphere. These modifications led to a reduction in odour complaints from the surrounding area.
3. There were several instances of wastewater discharges to the Waiwhetu Stream, causing downstream discoloration. Despite ongoing investigations by Greater Wellington and the Hutt City Council, the source of these discharges has not yet been identified due to the size of the contributing catchment.
4. Excavation of a pond reduced the water level in a wetland at Orongorongo station. Enforcement action is currently underway with respect to this incident.

### **3.3 Upper Hutt City**

Incidents: 62

Complaints: 63 (48 in 2002)

Observations & Significant Incidents:

1. The number of incoming complaints increased 30% on the previous year, much of which can be attributed to subdivision development and the growing number of lifestyle blocks being established in the area.
2. There were several instances of works being undertaken without the appropriate resource consent being held.
3. Channel erosion along the Mangaroa River has the potential to expose a closed landfill site at Te Marua Woodyards, which could result in the release of contaminants to the river. Greater Wellington is currently evaluating options to control the risk of contaminant release.

### 3.4 Porirua City

Incidents: 71

Complaints: 71 (72 in 2002)

Observations & Significant Incidents:

1. There was no significant change in the number of complaints received in comparison to the previous year.
2. Extensive Subdivision development in the area gave rise to many incidents involving silt discharges to surface water.
3. There were several instances where vehicles were seen to be driving on protected beaches at Ivey Bay and Titahi Beach.

### 3.5 Kapiti Coast District

Incidents: 54

Complaints: 60 (44 in 2002)

Observations & Significant Incidents:

1. Complaint numbers increased by 36% when compared to the previous year, due to a combination of low rainfall conditions and industrial odours. Over 30% of incidents were attributed to odour from industrial sites affecting adjacent residential properties.
2. Over 10% of incidents were attributed to sewage releases, due to pipe or pumping station failure.
3. Low rainfall conditions led to reduced flow levels in streams, and the issue of water shortage directions for the Waikanae River and Waitohu Stream.
4. A large quantity of clarifier sludge was dumped on land at the Waikanae water treatment plant. This was subsequently removed by Kapiti Coast District Council.
5. Several dogs and seagulls died around the mouth of the Titoku Stream on 30 August 2002. Algal toxins or salmonella were suspected, but the cause could not be confirmed.

### 3.6 Wairarapa

Incidents: 122

Complaints: 122 (118 in 2002)

Observations & Significant Incidents:

1. In September 2002, a Masterton contractor was found to be extracting gravel illegally from the Waingawa River.
2. Significant incidents at farm properties included inappropriate management of dairy effluent and illegal diversion of streams for irrigation purposes.
3. In February 2003, a Masterton land development was found to include the un-consented diversion of a stream.
4. Carterton District Council was found to be discharging sewage to water during summer months, in breach of its resource consent conditions.

## 4. Regulatory action

Greater Wellington's pollution control officers took the following formal enforcement action during this reporting period (note that this is in addition to that instituted by the Consents Management operations in Wellington and the Wairarapa).

Regulatory Action	Wellington	Wairarapa	Total
Infringement Notices	10	6	16
Abatement Notices	10	8	18
Enforcement Orders:	0	0	0
Prosecutions:	1	1	2

This represents a substantial increase in the number of infringement and abatement notices issued in comparison to the previous year, principally in the west of the Region. In the western part of the Region, this is largely due to growing stability in the Pollution Control Team, improvements in odour response, and implementation of the Council's "firm but fair" regulatory ethic. In the Wairarapa, there has been a concerted effort to make farms monitor their water take, with some farms being encouraged to install a meter via the service of an abatement notice.

#### 4.1 Infringement notices

Infringement notices served during this reporting are summarised below.

Recipient	Location	Offence	Date
Landowner	Orongorongo Station	Diversion of water	16-Dec-02
Territorial Authority	Waikanae	Unconsented sludge disposal	5-Feb-03
Meatworks	Kiwi Point	Odour release beyond boundary	10-Feb-03
Wool testing facility	Kilbirnie	Odour release beyond boundary	6-Mar-03
Quarry operation	Waikanae	Water Shortage Direction breach	28-Mar-03
Engineering Company	Rongotai	Odour release beyond boundary	31-Mar-03
Landowner	Mangaroa	Unconsented track construction	21-Jul-03
Earthworks Contractor	Happy Valley	Contaminant discharge to stream	1-Sep-03
Landowner	Happy Valley	Contaminant discharge to stream	1-Sep-03
Sump Truck Operator	Petone	Contaminant discharge to stormwater system	5-Sep-03
Contracting company	Masterton	Unconsented gravel take	19-Sep-02
Contracting company	Masterton	Diversion of stream	28-Feb-03
Contracting company	Masterton	Discharge to water	28-Feb-03
Timber company	Masterton	Diversion of stream	28-Feb-03
Timber company	Masterton	Discharge to water	28-Feb-03
Dairy farmer	Carterton	Unconsented water take for irrigation	22-Apr-03

#### 4.2 Abatement notices

Abatement notices served during this reporting are summarised below.

Recipient	Location	Offence	Date
Landowner	Orongorongo Station	Diversion of water	16-Dec-02
Landowner	Mangaroa	Unconsented dumping in stream bed	24-Mar-03
Contractor	Upper Hutt	Disposal of non-cleanfill material onto land	24-Mar-03
Landowner	Wainuiomata	Unconsented works in a stream	5-Mar-03
Engineering Company	Rongotai	Odour beyond the site boundary	31-Mar-03
Family Trust	Pukerua Bay	Unconsented works in a stream	31-Mar-03
Landowner	Petone	Disposal of non-cleanfill material onto land	1-Apr-03
Landowner	Upper Hutt	Unconsented dumping in stream bed	1-Apr-03
Landowner	Eastbourne	Unconsented culvert	31-Jul-03
Landowner	Te Horo	Diversion of water	21-May-03
Contracting company	Masterton	Discharge of contaminants to water	20-Nov-02
Territorial Authority	Wairarapa	Discharge of contaminants to water	20-Nov-02
Hotel	Masterton	Discharge of sewage to water	3-Dec-02
Deer farmer	Carterton	Taking of water for irrigation	10-Feb-03
Dairy farmer	Masterton	Unconsented irrigation water take	17-Feb-03
Dairy farmer	Carterton	Unconsented taking of water for irrigation	22-Apr-03
Transport company	Carterton	Discharge of truck wash effluent	18-Jun-03
Timber company	Masterton	Discharge of timber treatment sludge to land.	7-Aug-03

### 4.3 Prosecutions

Prosecutions undertaken during this reporting period arising out of environmental incidents are summarised below:

- Allied Concrete was prosecuted for a discharge of contaminated water to the Ohiro Stream. In lieu of a fine, Allied Concrete donated \$5,000 toward stream enhancement works along the Ohiro Stream.
- Renalls Ltd was prosecuted for a spill of timber treatment chemicals, and was fined \$12,000 for this offence.



#### 4.4 Miscellaneous

Water shortage directions were issued for the Waitohu Stream on 26 February and 22 March 2003. Water shortage directions were issued for the Waikanae River on 22 March and 24 April 2003.

### 5. Take Charge

*Take Charge* is a pollution prevention programme, with the objective of improving environmental performance of small to medium sized businesses across the Region. It involves environmental assessments of an organisation's facilities, activities and management procedures, following which owners/operators are provided with a short report outlining opportunities to improve environmental performance and compliance status.

Site assessments began in March 2003, with 58 service station sites visited during the financial year to 30 June 2003. This was well received by the major oil companies, and revealed a good standard of environmental performance at the majority of sites, although some sites were deficient in their provision for stormwater protection.

### 6. Selected Land Use Register

The Selected Land Use Register records sites where:

- Because of the current of past use of hazardous substances, there is a potential for land to be contaminated, or;
- There is evidence that contamination of land has occurred.

Hazardous activities and industries are defined in draft contaminated sites management guidelines, prepared jointly by the Ministry for the Environment and the Regional Councils. It is understood that the final version of these guidelines will be published in early 2004.

The focus of this year's work was to verify the location of sites where hazardous industries or activities have occurred, and to improve functionality of the Selected Land Use Register. There are currently 1,501 sites recorded on the register, and this number is increasing as we become aware of more of these sites.

Greater Wellington commissioned a survey to determine background concentrations of common pollutants in five different soil types in the Region. The results show that the concentrations of heavy metals in these soils are generally low when compared with other regions that have undertaken similar work. However, there were a few surprising results that will be further investigated in the coming year.

## 7. Hazardous waste collection

During the year 2002 to 2003, contractors employed by Greater Wellington visited 209 rural properties, from which they collected a total of 9.5 tonnes of unwanted chemicals. Of this, 3.6 tonnes were exported for disposal, and 3.9 tonnes were disposed of in New Zealand. The balance of 1.7 tonnes was re-issued for re-use.

Greater Wellington funded the development of a mobile hazardous waste reception facility; a HAZMOBILE. This is made available to Territorial Authorities in the Region to use when they undertake hazardous household waste collections in their cities and districts.

## 8. Summary

A total of 1,140 environmental incidents were logged by Greater Wellington during this reporting period, which gave rise to a total of 1,494 individual complaints. This represents a 12% fall in the number of complaints received in the previous year. This reduction is attributed to the closure of an asphalt manufacturing facility in Tawa, that had been a major source of odour complaints in previous years.

Almost half of all complaints received were attributed to industrial sources of odour, with discharges of liquid waste and hydrocarbons to surface waters being the next most commonly reported incidents. Odours were the most common sources of environmental incidents in Wellington City, Hutt City and on the Kapiti Coast.

The recent boom in residential subdivision development has led to numerous instances of water pollution, due to inadequacies in sediment control during site earthworks, particularly in the Porirua City area.

There was a substantial increase in regulatory activity during this reporting period when compared to the previous year, with the issue of 16 infringement notices, 18 abatement notices, and 2 prosecutions. This does not signal a deterioration in environmental quality, but is more a reflection of officers actively implementing the Council's "firm but fair" approach to non-compliance.

The *Take Charge* pollution prevention programme began in March 2003. It was implemented by focusing upon specific industry sectors, with service stations being the first focus group. A total of 58 service stations had been visited by the end of this reporting period.

An increasing number of inquiries are now being received for information held in the Selected Land Use Register. Enquiries are received from the public, developers and property advisors, typically prior to purchase or development of property. Information on the Selected Land Use Register is made available to all Territorial Authorities in the Region, to ensure that proposed development of listed sites adequately addresses actual or potential site contamination.

A hazardous waste collection service was facilitated by Greater Wellington during the year, and collected a total of 9.5 tonnes of unwanted agricultural chemicals from rural properties around the Region.

## 9. Direction for 2003-2004

The Pollution Control Team will continue to pursue a shift in operational emphasis from incident response to pollution prevention, although it is important to emphasise that this does not mean the withdrawal of an incident response capability. It is anticipated that Pollution Control Officers will spend an increasing proportion of their time on *Take Charge* assessments and targeted investigations in the future.

Despite the drop in complaint numbers this year, it is anticipated that odour complaints will continue to rise substantially over the coming year. Despite rapid response to the majority of incoming complaints, there have been few occasions where Greater Wellington's officers have been able to confirm offensive or objectionable odours. It is therefore proposed to investigate more cost-effective approaches to the way we deal with odour complaints.

The Pollution Control Team is proposing to expand its informal regulatory tools, by the adoption of advisory notices and a procedure for the issue of retrospective resource consents. Both are seen as effective tools for addressing minor non-compliance, where the responsible party is willing to co-operate with investigating officers. This approach is seen to be consistent with the Council's stated "firm but fair" regulatory ethic.

The *Take Charge* programme will continue during the next financial year, during which time all service stations in the Region will have been visited, and the programme focus will shift to panel beaters and vehicle repair shops. There will also be scope to conduct *Take Charge* assessments of other industrial facilities on an as-needs basis.

It is anticipated that Ministry for the Environment will publish three Contaminated Site Management Guidelines in 2003. The Council will review its Contaminated Site Strategy in accordance with the guidance.