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Pollution Control Annual Report 2003-2004

Resource Investigations Department and Wairarapa Division
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 2003 to 30 June 2004. Greater Wellington staff responded to 1,109 environmental incidents during this period, which gave rise to 1,425 individual complaints. This represented a small decline in both incident and complaint numbers when compared to the previous year.

Almost 80% of all complaints occurred in the Wellington City Council and Hutt City Council areas, where the bulk of the region's industrial and residential land use occurs. The most common types of incident that occurred throughout the region were nuisance odour from industrial sites, silt pollution of surface water from subdivision sites, inappropriate disposal of solid waste, uncontrolled sewage discharges to surface waters, and vehicles driving on restricted beaches. There was a significant reduction in odour complaints noted during this period, which is attributed to unsettled weather, our proactive monitoring programme and operational improvements at source.

Greater Wellington's officers dealt with these incidents using a combination of non-statutory and statutory tools. Advisory notices and retrospective resource consents were widely applied, and have proven to be cost-effective and efficient means of addressing minor non-compliance. Formal regulatory activity was taken in response to more serious non-compliance. This included 19 infringement notices, 13 abatement notices, one enforcement order and two prosecutions.

Greater Wellington staff progressed with their shift in priority from reactive to proactive operations, with officer hours being distributed amongst incident response (60%), *Take Charge* (30%) and targeted investigations (10%). Specific pro-active initiatives included visits to service station and motor vehicle repair shop sites via the *Take Charge* programme, permitted activity monitoring and several targeted investigations into environmental impacts and compliance assessment.

A total of 90 new sites were added to the Council's selected land use register during the year, mainly as a consequence of officers identifying sites where hazardous activities or industries are occurring or had occurred in the past.

1. Introduction

Greater Wellington’s Pollution Control Team manages pollution in the western region via a 24-hour, 7-day incident response service, site inspections, and targeted investigations. The objective is to establish compliance with the Resource Management Act 1991 and Regional Plans. The Planning and Resources Department provide a similar function in the Wairarapa.

Pollution incidents include contaminant discharges to air, water and land, hazardous substance emergencies, unauthorised works, and noise emissions in the Coastal Marine Area. Investigating officers evaluate the significance of each incident, determine the optimum action to remedy or mitigate environmental impacts arising, and initiate enforcement action where 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 1,109 environmental incidents were logged by Greater Wellington during this reporting period, which gave rise to a total of 1,425 individual complaints. The geographical distribution of incidents is summarised in Table 1, while the trend in recent years is plotted in Figure 1.

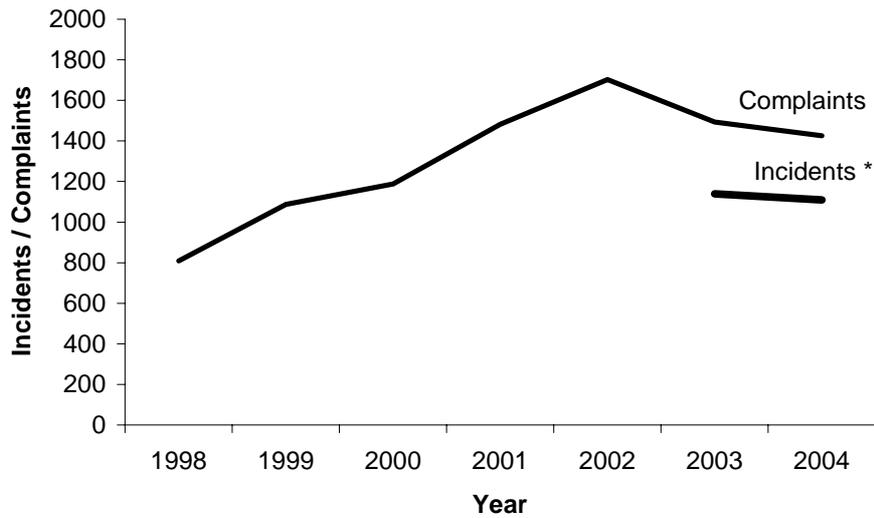
Table 1: Geographic distribution of incidents in 2003/04 (and 2002/03)

	Number of Incidents	Proportion of Total
Wellington City Council	632 (617)	57%
Hutt City Council	234 (214)	21%
Upper Hutt City Council	39 (62)	4%
Porirua City Council	73 (71)	7%
Kapiti Coast District Council	49 (54)	4%
Wairarapa	82 (122)	7%
Total	1109 (1140)	100



Unconsented stream re-alignment works underway in the Mangaroa Stream, Upper Hutt.

Figure 1: Trend in incident and complaint numbers in recent years



* our database does not allow pre-2003 incident numbers to be reliably determined

1.1 Reported pollution incidents

Table 2 provides a summary of pollution incidents dealt with during this period. This data reveals a minor (3%) reduction in incident numbers and a 5% reduction in complaints when compared to the previous year.

Table 2: Reported incidents and complaints 2003/04 (and 2002/03)

	Incidents 2004 (2003)	% of all Incidents	Complaints 2004 (2003)
Odour	478 (520)	43.1%	789 (863)
Liquid waste	135 (142)	12.2%	135 (147)
Unconsented works	68 (39)	6.1%	69 (39)
Sewage	55 (50)	5.0%	55 (53)
Hazardous substance/chemical	53 (27)	4.8%	54 (30)
Silt	52 (44)	4.7%	53 (45)
Hydrocarbons	52 (75)	4.7%	52 (77)
Solid waste	46 (32)	4.1%	46 (32)
Smoke, dust and burning	45 (21)	4.1%	45 (32)
Vehicles	30 (6)	2.7%	31 (6)
Dead stock	28 (21)	2.5%	29 (20)
Natural occurrences	24 (3)	2.2%	24 (6)
Other	43 (160)	3.9%	43 (144)
Total	1,109 (1,140)	100.0%	1,425 (1,494)

Significant increases are evident for incidents involving unconsented works (up 74%), solid waste (up 44%), silt (up 18%), dust/smoke (up 114%), vehicles (up 500%) and dead stock in watercourses (up 33%). The increases for several categories can be attributed to the introduction of our pro-active odour monitoring programme, which has freed-up officers to look for other forms of pollution in the region. However, there does appear to be a genuine increasing trend of incidents involving silt discharges, dumping of non-cleanfill material and vehicles driving on restricted beaches.



Un-consented track construction above the Carey's Gully landfill site, Wellington.

Although hazardous substance incidents appear to have increased significantly, the corresponding fall in hydrocarbon incidents should be noted. The actual variance is negligible, as some 2003 hydrocarbon incidents should in fact have been recorded as hazardous substance incidents.

Odour is the only category that shows a significant decline in incident numbers (down 8%), which is largely explained by fewer calm evenings during the 'odour season' (from March to August for Carey's Gully and from December to May for Taylor Preston). It is also attributed to odour control improvements at the source sites, and possibly a greater tolerance of complainants during our pro-active odour monitoring activities at Carey's Gully and Taylor Preston.

1.2 Incident response

As in previous years, the majority of pollution incidents occurred in populated urban areas, with industrial odours dominating. Section 2 of this report provides a more detailed assessment of the type of incidents that were reported in each of the territorial authority areas around the region.

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

1.3 Response time

A measure of our effectiveness is the time it takes us to respond to incident notifications. Our target response times and actual performance are illustrated in Table 3. Almost all incidents were responded to within the target response time. All exceptions were due to either traffic delays en route to distant sites, or circumstances where officers were responding to other incidents. Overall performance was good, and comparable with the previous year.

Table 3: Response time summary

Response Time Target	Average Response Time	Conformance Level
Red (60 minutes)	41 minutes	90 %
Yellow (24 hours)	8.1 hours	86 %
Blue (30 days)	3.9 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 summarise trends and significant incidents for the region and for individual territorial authority areas.

Table 4: Regional incident summary

TYPE	Territorial Authority					
	WCC	HCC	UHCC	PCC	KCDC	WAIR*
Odour	328	130	0	1	14	5
Liquid waste	82	25	2	10	7	9
Unconsented works	32	10	11	7	4	4
Sewage	24	9	2	7	8	5
Hazardous substance	35	2	1	2	4	9
Silt	33	6	2	9	0	2
Hydrocarbons	37	9	2	1	2	1
Solid waste	18	8	9	7	1	3
Smoke, dust and burning	15	13	2	1	3	11
Vehicle	3	2	2	17	2	4
Dead animals	10	5	1	2	1	9
Natural occurrence	9	4	0	6	3	2
Other	6	11	5	3	0	18
Total	632	234	39	73	49	82

* Wairarapa territorial authorities comprise Carterton DC, Masterton DC & S. Wairarapa DC.

All territorial authority areas in the region showed a similar distribution of incident types, with odour, liquid waste discharges, unconsented works and sewage discharges predominating and silt and hydrocarbon incidents occurring to a lesser extent. Exceptions to this regional profile are discussed in the following sections.

Observed trends that were broadly representative of the region include the following:

- There have been numerous incidents of **surface water pollution** due to vegetation clearance and earthwork activities on hilly sites, typically due to inadequate measures for stormwater, erosion and sediment control. Greater Wellington is currently preparing resource materials and workshops in conjunction with territorial authorities to address this issue.
- There were several instances of **alkaline wastewater inputs to streams** attributed to cement waste. Sources identified included surface run-off from concrete batching plants, concrete cutting and water-blasting of newly laid concrete driveways (to create an exposed aggregate finish).

- **Inappropriate liquid waste disposal** (typically into stormwater drains) remains one of the most commonly occurring incidents across the region. This is often due to the intentional disposal of paint, oil, petrol/diesel or cleaning water into roadside drains, or detergent from large-scale vehicle washing activities, such as occurs at charity car washes and vehicle sales yards.



Mis-use of drain dye turns the Pauatahanui Inlet green at the foot of Postgate Drive.

- **Uncontrolled sewage overflows** were widely reported across the west of the region, largely due to several intense rainfall events during the year which overwhelmed the capacity of sewers and sewage treatment plant.

3.1 Wellington City

Incidents: 632 (617 in 2002/03)

Complaints: 962 (1,145 in 2002/03)

Observations and significant incidents:

- Diesel fuel was discharged into Wellington harbour as a result of a collision between the Inter Islander ferry (Aratere) and a fishing boat (the San Domenico). The subsequent salvage operation was overseen by

Pollution Control and Harbours Department officers to ensure any oil release was contained.

- A contaminant discharge into Little Karaka Bay was caused by a waste discharge from City Council road resurfacing work in Roseneath. A warning letter was sent to the City Council.
- Dilute, untreated sewage was discharged to Lavender Bay on 11 separate occasions via the Moa Point short outfall. Pumping infrastructure at the Moa Point Sewage Treatment Plant has since been upgraded, and Wellington City Council is working to reduce flows to the plant during heavy rainfall events.
- Repeated silt discharges into a stream from bulk earthworks at a residential subdivision development in Happy Valley led to several warnings being issued to Brooklyn Holdings Limited.
- Officers identified an ongoing process wastewater discharge to the Ngauranga Stream, attributed to likely drainage defects at the Taylor Preston site. Investigations and remedial works are continuing in conjunction with Taylor Preston.
- Allied Concrete discharged alkaline stormwater into Happy Valley stream during heavy rainfall. A prosecution has been initiated for this incident.
- Approximately 300 puffer fish were washed up on eastern suburb beaches in April. Although unconfirmed, officers suspect the incident was due to dumping of by-catch from a fishing vessel.
- Although incident numbers rose slightly, complaint numbers fell by 16%. This was due to fewer odour incidents at the Carey's Gully and Taylor Preston sites (incidents associated to these sites tend to generate multiple complaints). Section 6.4 summarises the pro-active odour monitoring programme that has been implemented at these sites.
- The high incidence of hazardous substance incidents compared to other territorial authority areas is largely attributed to incidents associated with the transfer and storage of materials at the Port of Wellington, which represented 30% of reported incidents.



One of around 300 dead puffer fish washed up on eastern suburbs beaches in April 2004.

- A large track was cut above the Carey’s Gully landfill site without appropriate resource consents being obtained. A retrospective resource consent was negotiated with Wellington City Council.

3.2 Hutt City

Incidents: 234 (214 in 2002/03)

Complaints: 216 (276 in 2002/03)

Observations and significant incidents:

- A driver for S&S Water Cartage was witnessed dumping liquid waste into a stormwater sump in Petone. This resulted in service of an infringement notice. The fine was not paid, and this matter has been referred to the District Court in Upper Hutt.
- The source of an objectionable odour affecting a large part of the Woburn area was confirmed to be Unilever Australasia site at Petone. Discharges to air from this site are subject to a resource consent.
- Plant failure at Colgate Palmolive Ltd. in Petone resulted in over 30m³ of soap entering the stormwater system, some of which reached the Petone foreshore. The Company implemented a prompt and effective clean-up, under the supervision of Pollution Control Officers.
- Operator error at the NZ Oil Services Site at Eastbourne resulted in a diesel spill of over 250 litres affecting the Hutt River and coastal marine area. A prosecution has been initiated for this incident.
- Officers attended a fire at the Nuplex hazardous waste treatment facility in Seaview. There was no discharge of hazardous material beyond the site boundary.
- A 400 litre cyanide waste spill occurred at the Mainfreight depot in Seaview. Prompt response by the emergency services prevented any discharge to the stormwater network. Incompatible hazardous substances had also been stored together in transit by road and ferry, leading to subsequent prosecutions being initiated by the NZ Police Commercial Vehicle Investigation Unit.



NZ Fire Service officers decontaminating equipment following a cyanide spill at Mainfreight's transport depot, Gracefield.

- Contaminated stormwater was found to be discharging from Allied Concrete Limited's Belmont site into an adjacent stream. Infringement and abatement notices were issued.

3.3 Upper Hutt City

Incidents: 39 (62 in 2002/03)

Complaints: 63 (48 in 2002/03)

Observations and significant incidents:

- Several unconsented culverts and stream diversions were identified at a subdivision in Whitemans Valley. Officers are working with landowners to obtain retrospective resource consents.
- A driver in Upper Hutt intentionally discharged 70 litres of petrol to the stormwater network after filling his truck with the wrong fuel. The driver was traced and regulatory action is in progress.
- Graham Alexander continued to dispose of non-cleanfill material at his property in Mangaroa. This resulted in an enforcement order being issued by the Environment Court to stop further dumping and remove non-cleanfill material.

3.4 Porirua City

Incidents: 73 (71 in 2002/03)

Complaints: 71 (72 in 2002/03)

Observations and significant incidents:

- The unconsented driving of vehicles on restricted beaches (particularly at Ivey Bay and Titahi Bay) has been a common source of complaint during the year. Regulatory action varied from providing advice, in the case of an accidental breach, through to formal warnings or infringement penalties for repeat offenders.
- Disposal of non-cleanfill material by HRS NZ Limited (contractors) at Kenepuru Hospital led to an advisory notice being served on Mainzeal (project managers) and recovery of costs.
- Repeated silt discharges into a stream and the Pauatahanui Inlet occurred as a consequence of bulk earthworks at the St Ives residential subdivision in Camborne. A resource consent was in place for this activity, and an infringement notice was issued by the Consents Management Department.
- Bulk earthworks at the Sunlink residential subdivision site in Camborne caused repeated silt discharges to the Taupo Stream. A resource consent was in place for this activity, and an infringement notice was issued.

- Multiple unconsented works were undertaken by Landfill Porirua Limited (bulk earthworks, culvert construction and stream diversion). The operator is in the process of obtaining the necessary resource consents retrospectively.
- Offensive odours were confirmed on two occasions from the Spicer landfill at Porirua, and attributed to insufficient cover of deposited waste. Emissions to atmosphere from this site are regulated by a resource consent.

3.5 Kapiti Coast District

Incidents: 49 (54 in 2002/03)

Complaints: 60 (44 in 2002/03)

Observations and significant incidents:

- The death of a dog at Paraparaumu Beach led to investigations into possible sources of poisoning. Potential causes included stings from bluebottle jellyfish, or toxin release from algal blooms. However, results were inconclusive, despite an autopsy being conducted.
- Three separate algal blooms were investigated. On one occasion a poisonous blue green algal bloom killed fish in a stormwater retention pond near a retirement village in Waikanae. Another fish kill was also reported and investigated near the mouth of the Waitohu Stream.
- Numerous large marine worms were washed up onto beaches near Pauatahanui in July 2004, as a result of strong storms. Although large and unsightly, the harmless worms (*Urechis novaezelandia*) were removed by the Kapiti Coast District Council.
- February flooding in the Manawatu resulted in large numbers of onions being washed into coastal waters, and onto beaches along the Kapiti coast.
- A confirmed offensive solvent odour beyond the site boundary of Fluteboard Packaging's factory in Waikanae resulted in modifications to the extract ventilation system.
- Water blasting of a residential asbestos cement roof in Paraparaumu led to minor asbestos contamination of soil at an adjacent site. Sampling by KCDC indicated that there was no significant risk to human health or the environment.
- A fish kill in a Paraparaumu stream remains unexplained, despite an exhaustive study into potential industrial, agricultural and residential contaminant sources in the catchment.

3.6 Wairarapa*

Incidents: 82 (122 in 2002/03)

Complaints: 122 (118 in 2002/03)

Observations and significant incidents:

- Dairy effluent was sprayed onto an adjoining residential property in Carterton, and may have contributed to contamination of the borewater supply. This led to the issue of infringement and abatement notices.
- An illegal overflow from a dairy shed into a stream at Carterton led to an infringement notice being served on the sharemilker.
- An ambient air quality monitoring site has been established downwind of a site in Masterton where treated timber is dried in kilns. Monitoring is being conducted to determine whether discharges from the site have a potential health impact upon the adjacent residential community.

4. Regulatory action

Greater Wellington's regulatory officers took a range of enforcement action during the year, as summarised in Table 5.

Table 5: Regulatory action summary

	Pollution Control	Consents Management	Wairarapa Division	Total
Advisory Notices	63 (0)	5 (0)	0 (0)	68 (0)
Infringement Notices	6 (6)	5 (8)	8 (9)	19 (23)
Abatement Notices	5 (9)	3 (9)	4 (15)	12 (33)
Enforcement Orders	1 (0)	0 (0)	0 (0)	1 (0)
Prosecutions	2 (1)	1(0)	0 (1)	3 (2)

4.1 Informal action

The Environment Division introduced advisory notices at the start of the year as an informal regulatory tool. Advisory notices are issued on-site in response to minor non-compliance, requesting that the recipient take specified action to resolve the matter. They have proven to be an effective regulatory tool, enabling officers to resolve many environmental incidents quickly, without resorting to formal regulatory options. Pollution Control Officers were responsible for almost all advisory notices issued during the year.

A second informal regulatory tool that has proven effective over the last year has been requiring offenders to obtain retrospective resource consents. This approach has been widely applied to situations where no resource consent is held for structures or activities that require them.

* Comprising Masterton District Council, South Wairarapa District Council and Carterton District Council

4.2 Infringement notices

The 19 infringement notices served during this reporting period are summarised in Table 6 below. In the west of the region, infringement activity mainly occurred in response to unconsented works in watercourses, unconsented disposal of non-cleanfill material, and offensive odour emissions. By contrast, infringement activity in the Wairarapa was mainly a consequence of illegal waste discharges from dairy sheds and piggeries, and excessive abstraction of water from a stream.

Table 6: Infringement notices issued

Recipient	Location	Offence	Date
Kiwi Contractors	Wellington	Unconsented works in stream	01-Sep-03
Roger Price	Wellington	Unconsented works in stream	01-Sep-03
T & T Landfills	Wellington	Deposition of non-cleanfill material	02-Apr-04
T & T Landfills	Wellington	Deposition of non-cleanfill material	02-Apr-04
Orica Chemicals	Wellington	Deposition of contaminants into stream	24-Jun-04
NZ Fish Products Limited	Lower Hutt	Discharge of contaminants to air	28-Nov-03
S&S Water Cartage	Lower Hutt	Discharge of wastewater to stormwater.	08-Sep-03
Nuplex Environmental	Lower Hutt	Discharge of contaminants to air	15-Aug-03
Keith Max	Upper Hutt	Illegal tracking and roading	21-Jul-03
Steam and Sand Limited	Porirua	Discharge of contaminants to air	24-Dec-03
Hamish Wells (Developer)	Kapiti Coast	Deposition of contaminants into stream	14-May-04
Contractor	Masterton	Discharge of wastewater into stormwater	05-Mar-04
Dairy Farmer	Carterton	Discharge of dairy effluent to water	03-Oct-03
Dairy Farmer	Carterton	Discharge of dairy effluent to land	03-Oct-03
Dairy Farmer	Carterton	Discharge of dairy effluent to water	03-Oct-03
Dairy Farmer	Carterton	Discharge of dairy effluent to land	03-Oct-03
Pig Farmer	Carterton	Discharge of piggery effluent to land	27-Jan-04
Dairy Farmer	Carterton	Discharge of piggery effluent to land	27-Jan-04
Dairy Farmer	Carterton	Taking of water for irrigation	04-Mar-04

Of the 19 infringement notices served, 17 recipients have paid the infringement fine. S&S Water Cartage failed to pay its fine despite a reminder notice, and this matter has been referred to the District Court for debt recovery.

4.3 Abatement notices

The 12 abatement notices served during this reporting period are summarised in Table 7 below. In the west of the region, they were issued in response to a variety of illegal activities, including unconsented works in watercourses, discharges of untreated sewage and sewage effluent, foreshore disturbance and stream diversion. The slight fall in the number of Abatement notices issued is attributed to the introduction of advisory notices and retrospective resource consents discussed in section 4.1 above. In the Wairarapa, activities leading to abatement notices included the dumping of copper chrome arsenate (CCA)

sludge onto land, dust discharges from a timber treatment site, and dairy shed effluent discharges.

During 2004, Greater Wellington received two appeals against abatement notices served in 2003. The abatement notice issued to Chatham Island Seafoods Limited to remediate a wetland was upheld by the Environment Court and works are currently in progress to reinstate the wetland. The abatement notice issued to a Carterton deer farm was also upheld in the Environment Court, but has since been appealed to the High Court.

Table 7: Abatement notices issued

Recipient	Location	Offence	Date
Timber Treatment Company	Masterton	Discharge of waste to land	7-Aug-03
Richard Henderson (Contractor)	Upper Hutt	Disturbance of the Coastal Marine Area	22-Aug-03
Colin Dallas	Porirua	Disturbance of the Coastal Marine Area	22-Aug-03
Roger Price	Wellington	Unconsented works in stream	1-Sep-03
Wellington City Council	Wellington	Discharge of waste effluent to water	5-Sep-03
Dairy Farmer	Carterton	Discharge of dairy effluent to land and water	24-Sep-03
Dairy Farmer	Carterton	Discharge of dairy effluent to land and water	24-Sep-03
Anglian water International (NZ) Ltd,	Wellington	Discharge of waste effluent to water	6-Nov-03
Roger Price	Wellington	Unconsented diversion of stream	8-Dec-03
Sawmilling Company	Masterton	Discharge of contaminants to air	23-Feb-04
Capital Carpet Cleaning	Wellington	Discharge of waste water	22-Mar-04
Akatarawa Salvation Army Camp	Upper Hutt	Discharge of effluent to land	21-Jun-04



Unconsented culvert and crossing installed on the Ohariu Gorge, Wellington.

4.4 Enforcement orders

An enforcement order was served on Mr Graham Alexander of Mangaroa, for continued disposal of non-cleanfill material to land without a resource consent to do so. The enforcement order required a cessation of further dumping, and removal of all non-cleanfill material.

4.5 Prosecutions

Two prosecutions were initiated this year. However, these were withdrawn following evidence that both sites had committed to substantial infrastructure improvements to prevent a recurrence.

KCDC received a suspended sentence for breaching the consent to take water from the Waikanae River on 30 April 2003.

Greater Wellington chose not to initiate a prosecution for repeated overflows of dilute, untreated sewage into Lavender Bay from the Moa Point treatment plant. This was in response to a formal commitment from both Wellington City Council and its contractor (United Water International) to implement a range of actions to address defects identified, and minimise the risk of future such discharges.

5. Take Charge

Take Charge is a pollution prevention programme launched in March 2003, the objective of which is to improve environmental performance of small to medium sized businesses across the region. It provides a voluntary environmental assessment of participant's facilities, activities and management procedures, following which they are provided with a short report outlining opportunities to improve environmental performance and compliance status.

A total of 170 sites were assessed during the financial year, of which 60 were service stations and 109 were motor mechanics. A detailed assessment was also conducted at a Wingate foundry. A study of all businesses in the Seaview/Gracefield area was also carried out under the *Take Charge* programme (see section 6.2 below).

6. Targeted investigations

Greater Wellington staff undertook permitted activity monitoring and several special projects during this period, the most significant of which are outlined below.

6.1 Permitted activity monitoring

6.1.1 Subdivision silt control

A review of incident statistics confirmed that water pollution attributed to small subdivision development was increasing across the western region. Liaison with territorial authorities and developers revealed the main contributing factors were:

- Development of steeper sites
- Inadequacy of erosion and sediment control provisions
- Reduced regulatory scrutiny
- Accidental or intentional release from sediment control structures

These issues were presented in a paper to the NZ Water & Wastes Association conference in Rotorua, and communicated to the Environment Committee on 12 August 2004. Staff are currently addressing this issue via resource materials and a series of workshops for territorial authority officers and developers.



Uncontrolled site erosion by stormwater run-off at the Aotea Block subdivision site, Porirua.

6.1.2 Roading and tracking

A review was conducted of eight major tracks constructed on private land in the west of the region. All involved extensive vegetation clearance and earthworks, but complied with permitted activity rules in the Regional Soil Plan. Photo profiles were prepared for each track to illustrate the scale of works and associated environmental impacts, so that the adequacy of these controls can be assessed when the Soil Plan is reviewed in the future.

6.1.3 Septic tanks

Work was initiated in conjunction with all territorial authorities in the region to develop a regional septic tank database. This information will be used to develop a GIS layer, which can be overlaid on other data such as groundwater vulnerability and surface water quality, in order to target future permitted activity monitoring activities.

6.2 Special projects

6.2.1 Stormwater contaminant inputs to the Waiwhetu Stream

Pollution Control Officers undertook a risk-based assessment of stormwater contamination sources in the lower part of the Waiwhetu Stream catchment. This centred upon the Gracefield industrial area, and was intended to identify and prioritise potential sources of heavy metals, hydrocarbons, organics and particulates. This resulted in a series of GIS overlays, which identified several priority sites for further investigation. The study also identified several instances of non-compliance with regional rules, most of which have subsequently been addressed. Findings were presented to the Environment Committee on 24 June 2004.

A further study was conducted into contaminant residues in selected kaimoana species (mussels and eels) in the Waiwhetu Stream. This identified

concentrations of DDT, dieldrin, cobalt and lead that significantly exceeded guideline values. Findings were presented to the Environment Committee on 12 August 2004 (report 04-437).

6.2.2 Proactive odour monitoring

Officers from Greater Wellington have been monitoring at Carey's Gully and Taylor Preston Ltd., to better understand the relationship between site activities, odour emissions, and complaints in the surrounding community. Although the weather has not generally been favourable for this programme, some significant observations have been made. A report will be presented to the Environment Committee when the first year of the programme concludes in November 2004.

6.2.3 Odour workshop

Greater Wellington staff presented a workshop to the Environment Committee, which addressed the management of long-standing odour problems at Carey's Gully, Taylor Preston and the Seaview industrial area. Attendees were provided with a historical context, the technical aspects of odour dispersion and measurement, operational practices and proposed actions to reduce the incidence of complaints.

7. Selected Land Use Register

The Selected Land Use Register records sites where:

- Because of the current, or 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 Ministry for the Environment guidelines. A total of 90 new sites were identified during this reporting period, bringing the current listing of sites in our Selected Land Use Register to 1,591 sites. Sites were mainly identified as a consequence of implementing the *Take Charge* programme at industrial sites around the region.

Work continues to determine background concentrations of common pollutants in soils around the region. Results continue to show that the concentrations of heavy metals in soils of the Wellington region are generally low when compared with other parts of the country where similar studies have been done.

The Ministry for the Environment released new guidelines for the management of contaminated sites toward the end of the financial year. Greater Wellington has subsequently developed a series of workshops to help territorial authorities in the region to understand the implications of these guidelines, and establish formal means for information sharing.

A total of 147 requests were received enquiring whether specified sites were listed on the selected land use register. The majority of information requests came from prospective purchasers or their agents.

8. Miscellaneous

Greater Wellington staff have facilitated a regional pollution prevention officer's forum, designed to share information and resources between regulatory agencies involved in pollution control. This group has grown rapidly, and has provided the foundation for closer operational ties between Greater Wellington and territorial authorities in the region. Another initiative to enhance co-operation between the regional council and territorial authorities has been the development of memoranda of understanding with respect to pollution response activities, which is underway and expected to conclude by early 2005.

Staff have also worked hard to improve internal communication and information sharing during the year.

9. Summary

Greater Wellington continued with its shift toward a more pro-active approach during the last year, principally via targeted investigations and *Take Charge* assessments. This approach has improved our awareness of pollution issues in the region, and identified multiple instances of non-compliance that would not have come to our attention via complaints from members of the public.

We responded to 1,109 environmental incidents during the last financial year, which gave rise to 1,425 individual complaints. This represented a small decline in both incident and complaint numbers when compared to the previous year. Incidents that occurred throughout much of the region included silt pollution of surface water from subdivision sites, inappropriate disposal of solid waste, uncontrolled sewage discharges to surface waters, and vehicles driving on restricted beaches. There was a significant reduction in odour complaints noted during this period, which is attributed to unsettled weather, our pro-active monitoring programme and operational improvements at source.

Almost 80% of all complaints occurred in the Wellington City Council and Hutt City Council areas, where the bulk of the region's industrial and residential land use occurs.

Officers dealt with these incidents with a combination of non-statutory and statutory tools. Advisory notices and retrospective resource consents were introduced at the start of the year. Both were widely applied, and have proven to be cost-effective and rapid means of addressing minor non-compliance. Formal regulatory activity was taken in response to more serious non-compliance, and included the following:

- 19 infringement notices
- 13 abatement notices
- 1 enforcement order
- 2 prosecutions

In accordance with its stated direction for the last financial year, the Pollution Control Team progressed with its shift in priority from reactive to proactive operations. Targeted investigations were conducted into:

- Environmental performance at service station and motor vehicle repair shop sites (via the *Take Charge* programme);
- Silt control at residential subdivision sites;
- Sources of stormwater contamination in the Gracefield industrial area, and;
- Characterisation of odour sources and impacts at the Carey's Gully and Taylor Preston sites.

A total of 90 new sites were added to the Council's selected land use register during the year, mainly as a consequence of Pollution Control Officers identifying sites where hazardous activities or industries are occurring or had occurred in the past.

10. Direction for 2004-2005

We will continue to pursue a shift in operational emphasis from incident response to pollution prevention, with a long term objective to effectively distribute our workload between incident response (60%), *Take Charge* (20%) and targeted investigations (20%) by 2006.

It is considered likely that the number of non-odour incidents will continue to rise during the next financial year, as a consequence of pro-active monitoring initiatives, targeted investigations, and greater information sharing with territorial authorities and other regulatory agencies in the region.

Specific initiatives planned for the coming year include the following:

- Working with territorial authorities to improve the control of silt discharges from residential subdivision sites;
- Catchment-based water quality investigations to identify and prioritise sources of sewage and industrial wastewater contamination in the more polluted watercourses in the West of the region;
- Finalisation of memoranda of understanding with all territorial authorities in the western part of the region regarding roles and responsibilities for pollution incident response.