CRACKDOWN ON ILLEGAL DUMPING

Handbook for Local Government







Department of **Environment & Climate Change NSW**



In April 2007, the name of the Department of Environment and Conservation NSW changed to the Department of Environment and Climate Change NSW.

Published by:

Department of Environment and Climate Change NSW 59–61 Goulburn Street PO Box A290 Sydney South 1232

Ph: (02) 9995 5000 (switchboard)

Ph: 131 555 (environment information and publications requests)

Ph: 1300 361 967 (national parks information and publications requests)

Fax: (02) 9995 5999 TTY: (02) 9211 4723

Email: info@environment.nsw.gov.au Website: www.environment.nsw.gov.au

DECC 2008/45 ISBN 978 1 74122 473 3 February 2008

The Department of Environment and Climate Change NSW (DECC) has made all reasonable efforts to ensure that the contents of this document are factual and free of error. However the state of NSW and the Department of Environment and Climate Change NSW shall not be liable for any damage or loss which may occur in relation to any person taking action or not on the basis of this document.

Copyright © Department of Environment and Climate Change NSW.

Printed on 9lives, containing 80% recycled fibre and 20% totally chlorine free pulp and is ISO 14001 certified .

FOREWORD



Crackdown on Illegal Dumping – Handbook for Local Government provides an insight into what motivates illegal dumpers and focuses on ways of minimising the opportunities that give rise to illegal dumping in NSW.

The Department of Environment and Climate Change (DECC) is committed to strong enforcement to deter and punish illegal dumping. Illegal dumping damages the environment and costs the NSW community millions of dollars each year.

Reducing litter and illegal dumping is a key outcome area of the NSW Government's Waste Avoidance and Resource Recovery Strategy. An additional \$18 million has been allocated over five years to strengthen DECC's enforcement and compliance programs as part of the NSW Government's five year City and Country Environment Restoration Program.

DECC is working in partnership with local government to tackle illegal dumping. Support will continue for Regional Illegal Dumping Squads, which have proven to be very successful partnership programs in dealing with illegal dumping on or near the urban fringe of the greater Sydney metropolitan area.

This handbook provides practical advice about developing, implementing and evaluating effective illegal dumping programs that will assist local councils. The Government case studies demonstrate applied prevention techniques that will assist council officers in managing illegal dumping in their local area.

I thank everyone who took the time to contribute to the handbook. I encourage you to read it and help us in joining the campaign to stop illegal dumping.

LISA CORBYN

Director General

lisa Corbyn

CONTENTS

OVERVIEW OF THIS HANDBOOK4
ABBREVIATIONS
SECTION 1.0 UNDERSTANDING ILLEGAL DUMPING
1.1 What is illegal dumping?
1.2 What do we know about the nature and extent of illegal dumping?
1.3 What motivates illegal dumpers?
1.4 What do councils think are effective methods to prevent illegal dumping?
SECTION 2.0 THE REGULATORY FRAMEWORK
2.1 Relevant legislation covering illegal dumping
2.2 The POEO Act
2.3 Illegal dumping investigations
2.4 Deciding on a course of regulatory action
2.5 Environmental planning legislation
SECTION 3.0 ANALYSING YOUR ILLEGAL DUMPING PROBLEM
3.1 Develop an incident database
3.2 Analyse your data
3.3 Presenting your data
SECTION 4.0 ILLEGAL DUMPING PREVENTION TECHNIQUES
4.1 Increase the effort: make access difficult
Lighting
Landscaping, revegetation and beautification
Barriers
4.2 Increase the risks of getting caught
Surveillance
Compliance campaigns
Partnerships
Publicise successes
4.3 Reduce the rewards: deny financial benefits
Free or subsidised waste services
Fines
Require offenders to clean up50

CONTENTS

4.4 Reduce provocations: don't give them a reason to dump	
Efficient and well communicated waste services	
Reasonable waste service costs	
Community pride	
Keep areas free of illegally dumped material	
4.5 Remove excuses: educate and inform the community	
Publicise waste services	
Education programs	
Keep areas free of illegally dumped material	
Signs	
SECTION 5.0 BRINGING IT TOGETHER IN A PROGRAM	1
Step 1: Get a thorough understanding of the problem	
Step 2: Get support from senior management	
Step 3: Engage stakeholders and develop partnerships	
Step 4: Define what you want to do	
Step 5: Develop your program	
Step 6: Fund your program	
Step 7: Carry out and monitor your program	
Step 8: Evaluate your program	
Step 9: Publicise your success	
SECTION 6.0 COMMON ILLEGAL DUMPING PROBLEMS	
6.1 Multi-unit dwellings	
6.2 Bushland	
6.3 Public land	
6.4 Household waste	
6.5 Garden organics	
6.6 Construction and demolition waste	
Illegal landfilling95	
Asbestos	

CONTENTS

SECTION 7.0 MORE INFORMATION	
7.1 Glossary	101
7.2 Training and further learning	105
7.3 Resources	106
7.4 Contacts	110
7.5 References	112
7.6 Index	113
Case Studies	

Case Study 1: Effective crackdown on littering and illegal dumping – Sutherland Shire Council's Heathcote Road Project (Section 4.0 page 46)

Case Study 2: Neighbourhood Clean-Up Blitz, Parramatta City Council (Section 4.0 page 58)

Case Study 3: Application of illegal dumping prevention campaign materials – Kogarah Council and 'Dumping. It's Dumb.' (Section 4.0 page 67)

Case Study 4: Interagency partnership model – RID Squads (Section 5.0 page 80)

Case Study 5: Interagency project led by Sydney Catchment Authority (Section 5.0 page 82)

Case Study 6: Regional partnerships – Hunter Region Illegal Dumping Group (HRIDG) (Section 5.0 page 83)

Case Study 7: Regulating local development – Holroyd City Council's Asbestos Cement Policy (Section 6.0 page 98)

Case Study 8: Using POEO Act powers to check lawful disposal of asbestos – the DECC's audit of asbestos removalists (Section 6.0 page 99)

OVERVIEW OF THIS HANDBOOK

Councils play a crucial part in managing and preventing illegal dumping in their local areas. They are most familiar with local conditions and problems and bear significant illegal dumping clean-up costs.

Local government has a considerable capacity to prevent illegal dumping as a result of its multiple roles in the community. Councils not only regulate illegal dumping incidents after they have occurred, but also have a crucial role in preventing illegal dumping through environmental planning, community education, providing waste collection and disposal services and managing public land.

In 2004, the DEC researched illegal dumping and its effect on local government in NSW. The research identified the need for the DEC's leadership and co-ordination and recommended it develop an illegal dumping prevention guidebook for local government. This recommendation, together with funding received through the City and Country Program, drove the development of the Crackdown on Illegal Dumping handbook.

This handbook draws upon research by University College London into fly tipping in England. It is the first step in working with local government in NSW to crack down on illegal dumping and reduce the subsequent environmental, social and financial costs associated with this criminal activity. The handbook encourages a framework for preventing the illegal dumping of solid waste that focuses on minimising opportunities that give rise to illegal dumping. The DEC has also produced a Multi-Unit Dwelling Illegal Dumping Prevention Campaign Council Resource Kit (2006) to assist urban councils with high density residential populations.

Councils are responding to illegal dumping using a variety of methods with varying degrees of effectiveness*. This handbook is designed to help local government crack down on illegal dumping and its particular causes. It suggests well-designed and well-focused methods that reduce opportunities for illegal dumping by modifying the environment, improving

regulatory action, focusing education messages and improving services. If councils incorporate these methods into their illegal dumping prevention programs they can substantially curtail the illegal dumping of solid waste.

The idea is to make illegal dumping harder and less attractive by using the following illegal dumping prevention mechanisms:

- 1. Increase the effort: make access difficult.
- 2. Increase the risks of getting caught.
- 3. Reduce the rewards: deny financial benefits.
- **4. Reduce provocations:** don't give them a reason to dump.
- **5. Remove excuses:** educate and inform the community.

The information contained in the handbook is advisory in nature, and readers are encouraged to use it to develop procedures and policies to prevent illegal dumping relevant to local circumstances. It is not intended to be read cover to cover, but to instead be a quide whose sections can be referred to when needed.

The handbook is divided into the following:

Section 1.0 defines what is meant by illegal dumping, describes the extent of illegal dumping in NSW, and explains what is known about why people illegally dump.

Section 2.0 provides advice on carrying out illegal dumping investigations and describes the regulatory framework, including relevant offences under the *Protection of the Environment Operations Act 1997* (POEO Act) relating to illegal dumping.

Section 3.0 explores how to analyse data to gain a thorough understanding of the illegal dumping problem as it relates to your local council area.

^{*} In most cases what is considered effective is based on anecdotal evidence rather than illegal dumping data and program evaluation.

[^] This handbook does not cover littering as this dealt with by the NSW Government Litter Prevention Program, which is available at www.environment.nsw.gov.au

Section 4.0 explores how local councils can and have applied the five illegal dumping prevention mechanisms to solve the problem of illegal dumping, and promotes the use of multiple and integrated techniques.

Section 5.0 outlines how to develop, carry out and evaluate an effective illegal dumping program within your council.

Section 6.0 explores common illegal dumping problems experienced by councils and focuses on tailored prevention programs.

Section 7.0 lists more information, including a glossary, resources, contacts and opportunities for training and further learning about illegal dumping and POEO Act powers of authorised officers.

Icon Description



Case studies, marked with an exclamation icon, are included throughout the handbook to illustrate how councils have applied the illegal dumping prevention techniques to deal with local problems.



Examples of work carried out by councils and DECC are marked with a quotation icon.



Snapshots of projects are marked with a camera icon and are intended to quickly present ideas for preventative action.



Question mark icons provide the reader with more information on the topic.

ABBREVIATIONS

ARA Appropriate Regulatory Authority

CALD Culturally and Linguistically Diverse

Closed Circuit Television **CCTV** DCP

DEC Department of Environment and Conservation NSW; in April 2007, the

Development Control Plan

name of the DEC changed to the Department of Environment and Climate

Change NSW (DECC)

DECC Department of Environment and Climate Change NSW

DOH Department of Housing

DPI Department of Primary Industries

EP&A Act Environmental Planning and Assessment Act 1979

EPA Environment Protection Authority constituted by the Protection of the

> Environment Administration Act 1991. In April 2007 the EPA became part of the DECC, however certain statutory functions continue to be exercised in the name

of the EPA.

GPS Global Positioning System

LALC Local Aboriginal Land Council

LEP Local Environment Plan

LGA Local Government Area

MUD Multi-Unit Dwelling

NATA National Association of Testing Authorities

NESB Non-English Speaking Background OH&S Occupational Health and Safety

PΝ **Penalty Notice**

POEO (Penalty Notices) Regulation 2004 **Penalty Notices Regulation**

POEO Act Protection of the Environment Operations Act 1997 (see Glossary)

POEO (Waste) Regulation 2005 Protection of the Environment Operations (Waste) Regulation 2005

RID Squad Regional Illegal Dumping Squad

RTA Roads and Traffic Authority SCA **Sydney Catchment Authority** SOP Standard Operating Procedure

VENM Virgin Excavated Natural Material (see Glossary)

WMP Waste Management Plan

WARR Act Waste Avoidance and Resource Recovery Act 2001 (see Glossary) WARR Strategy Waste Avoidance and Resource Recovery Strategy (see Glossary)

1.0 UNDERSTANDING ILLEGAL DUMPING



1.0 UNDERSTANDING ILLEGAL DUMPING

1.1 What is illegal dumping?

Illegal dumping is the unlawful deposit of waste larger than litter onto land, that is waste materials dumped, tipped or otherwise deposited onto private or public land where no licence or approval exists to accept such waste. Illegal dumping varies from small bags of rubbish in an urban environment to larger scale dumping of materials in isolated areas, such as bushland.

Illegal landfilling, which is waste used as fill material with the consent of the owner or occupier of the land but without the necessary council or DEC approvals, is also considered to be illegal dumping. Demolition and/or excavation waste is often used as fill material for reclamation work, roads, noise mounds and landscaping. Illegal fill material may be contaminated with chemicals or waste, particularly asbestos and other building waste.

Illegal dumping is a constant and highly visible problem in NSW, particularly in local government areas with a high population density.⁵ Businesses and individuals illegally dump to avoid either disposal fees or the time and effort required for proper disposal.

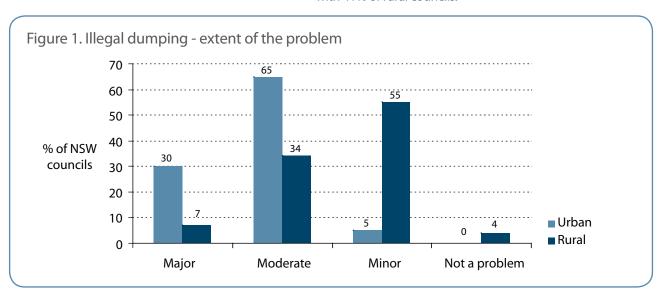
1.2 What do we know about the nature and extent of illegal dumping?

There is limited quantifiable information about the nature and extent of illegal dumping in NSW. Collecting such information poses a challenge because illegal dumping can occur anywhere. And although the majority of councils and many other stakeholders collect some information about illegal dumping, the data is not collected in a consistent way so it can not be used to paint a realistic picture of illegal dumping in NSW.

Perhaps the best attempt so far to define the nature and extent of illegal dumping is in *Illegal Dumping in NSW* ⁵, an unpublished report commissioned by DEC in 2004. The report surveyed 71 NSW councils and interviewed 27 stakeholders. One of the objectives was to collate all existing information held by government agencies, non-government organisations and councils on the nature and extent of illegal dumping. Much of the information in this section comes from this report.

The problem

The extent to which illegal dumping is perceived as a problem by local government is related to population density – urban councils with higher population densities report more annual incidents than rural councils and consider it a greater problem (see Figure 1). The DEC report found that 95% of urban councils believe that illegal dumping (excluding illegal landfilling) is either a moderate or a major problem, compared with 41% of rural councils.⁵



What is illegally dumped?

- general household rubbish
- larger domestic items (for example mattresses, furniture and whitegoods)
- construction and demolition waste including excavation waste and asbestos
- garden organic material
- chemicals and other hazardous waste
- abandoned vehicles, car parts and shopping trolleys.

Environmental costs

- Can degrade the land, including degrading plant and animal habitats.
- Can destroy local bush land, reduce biodiversity value and hinder revegetation.
- Runoff from dump sites may contaminate soil and water sources, such as lakes, creeks and drinking water supplies.
- Dumped items can alter the normal drainage course of runoff and make areas more susceptible to flooding and erosion when waste blocks creeks, stormwater drains and gutters.
- Dumped materials could catch fire either by spontaneous combustion or arson, which can damage property and bushland.
- Illegally dumped items are a lost resource. Many items can be recycled, particularly garden organic material, beverage containers, fridges, computers, tyres and car bodies.

Social costs

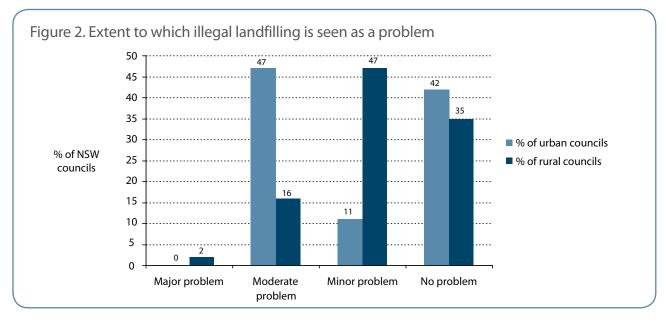
- Reduces aesthetic amenity and deters people from visiting areas where there is frequent illegal dumping.
- Dumped items create physical (protruding nails or sharp edges) and chemical (harmful fluids or dust) hazards for anyone who does visit the site.
- Dump sites attract rodents, insects and other vermin that pose health risks. "Dump sites with scrap tyres provide an ideal breeding ground for mosquitos, which can multiply 100 times faster in the warm stagnant water standing in scrap tyre castings."11
- Thousands of volunteer hours are spent participating in clean up initiatives, such as Clean Up Australia Day, Keep Australia Beautiful and Tidy Towns, at a significant cost to the community's resources.
- Dump sites attract further dumping and other criminal activities, such as graffiti and arson, which
 decrease community pride and further exacerbate the problem.

Financial costs

- NSW local governments are estimated to spend \$10 million a year removing and properly disposing of illegally dumped materials and landfilling. For larger councils, these costs can be as high as \$400,000 annually.⁵
- The community bears the cost of lower property prices because the area is less attractive to prospective commercial and residential landowners.



The DEC report found that illegal landfilling is considered to be less of a problem. Urban councils (47%) considered it a moderate problem, while rural councils were more likely to consider it a minor problem or not a problem at all (see Figure 2).⁵



Quantifying illegal dumping in NSW

As mentioned, reliable data is limited and it is therefore difficult to extrapolate the tonnage of materials being illegally dumped in NSW annually. However, it is estimated that more than 11,000 tonnes of waste are illegally dumped each year in Western Sydney alone.⁸

Corresponding with the perceived level of the problem, the DEC report also found that the annual number of incidents of illegal dumping was significantly higher in urban than rural councils. Urban councils reported from 120 to 1700 incidents of illegal dumping (excluding illegal landfilling) annually. One-third of these recorded between 300 to 400 incidents. Rural councils reported from 1 to 450 incidents of illegal dumping annually, while the majority reported less than ten incidents. Urban councils reported from 0 to 300 incidents of illegal landfilling annually while rural councils reported between 0 and 26 annually.⁵

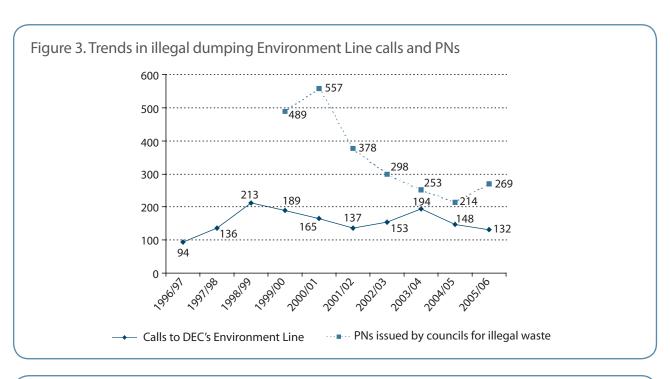
Trends over time

Trends in the levels of dumping and illegal landfilling observed by stakeholders, local councils and authorities are inconsistent. The DEC report reveals that many councils considered dumping levels had not changed over the past five years and approximately equal numbers considered levels had increased as thought they had decreased.⁵

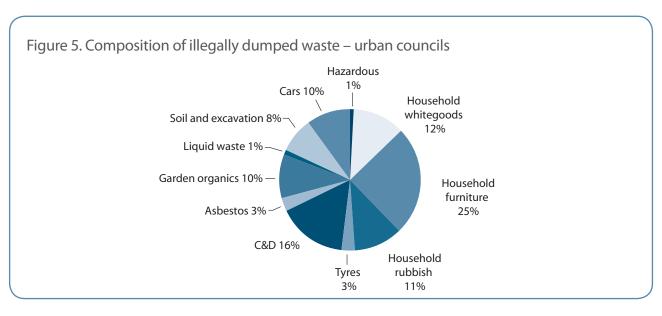
Information from other sources, such as the DECC's Environment Line data, indicate an increase in reports relating to illegal dumping between 1996 to 1999, but a gradual decline from 2000 (see Figure 3). The peak in 1998/99 could be due to the introduction of the Western Sydney RID Squad, which promoted the Environment Line for reporting illegal dumping incidents. The slight rise in 2003/04 could be due to the DEC's 'Is that fill legal?' campaign, which encouraged the general public to report suspected illegal activity. Although the DEC's 'Don't be a tosser' campaign targeted litter, it may have also encouraged the public to report suspected illegal dumping activities through the Environment Line.

Figure 3 illustrates a similar pattern in the number of Penalty Notices (PNs) issued by councils for illegal waste offences, which have more than halved between 2000–2001 and 2004-05, from 557 to 214, with the exception of a slight increase in 2005-06.

However, these figures may not be representative of overall illegal dumping trends over time. The DEC report suggests the trends may indicate councils are adopting a clean up approach in preference to pursuing prosecutions. Although some of these trends were already occurring before regulatory changes were introduced, it is also possible that additional legislative powers influenced the trends observed.⁵





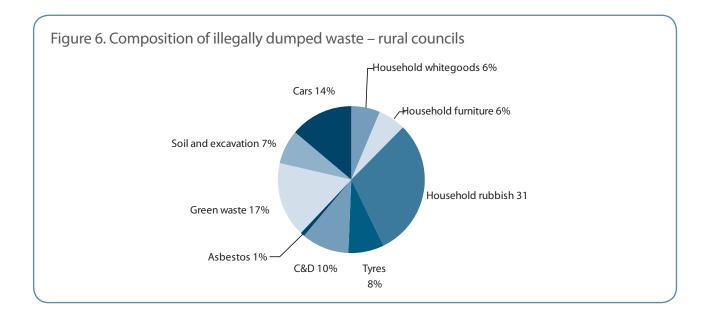


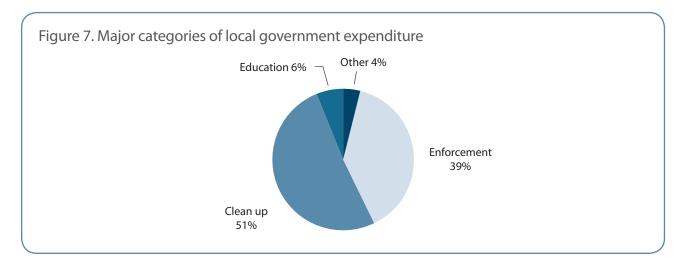


Waste composition

Figure 4 gives an indication of the composition of illegally dumped materials as a proportion of illegal dumping incidents in NSW according to estimates provided by councils in the DEC report. Household waste (consisting of household whitegoods, furniture and rubbish) comprising 44% of total incidents forms the bulk of illegally dumped waste. Other commonly dumped waste types are: garden organic material (15%), abandoned cars (13%), construction and demolition waste (12%), soil and excavation waste (8%) and tyres (6%).5

The nature of the waste mix varies from council to council depending on a range of factors, such as geographic location, demographics and housing types, availability of disposal services and so on. Rural councils, for example, are more likely to have household rubbish, garden organic material, cars and tyres in their waste mix, whereas urban councils are more likely to have household furniture and whitegoods and construction and demolition (C&D) waste (see Figure 5 and Figure 6).







Financial costs

Of the estimated \$10 million that NSW councils spend each year responding to illegal dumping and illegal landfilling, more than half of council expenditure relating to illegal dumping is spent on clean ups, 39% is spent on enforcement while only 6% is spent on education (see Figure 7).⁵ Thus considerable savings would be made if the extent of the problem could be reduced.

As illegal dumping and illegal landfilling are larger problems for urban councils, their overall costs are substantially higher than those of rural councils. Urban councils spend an average of \$1.68 per person while rural councils spend an average of \$0.69 per person. Across NSW, an average of \$1.00 per person was spent by councils on illegal dumping and illegal landfilling.5

On average, urban councils spend \$319,000 annually on illegal dumping and illegal landfilling while rural councils spend \$18,000.5



Where does illegal dumping occur?

Illegal dumping occurs on roadsides, including nature-strips and highways, bushland, laneways, drains, parks, sporting grounds and private property, including vacant lots.

Is illegal dumping a problem in your area?

- Do people have access to convenient waste disposal facilities or services and recycling programs?
- Are residents aware of what services and facilities are available?
- Are stakeholders actively managing an area? What are the levels of surveillance, prosecutions and publicity?
- Are secluded areas of bushland, vacant lots and underused lanes accessible?
- How many residents are transient and lack a sense of connectedness to their community?
- How aware are residents about proper disposal methods?
- How long does your council take to clean up the dumped materials?

Who does it?

- Householders who place their unwanted items on the nature strip or back lane in the hope that someone will take them or council will remove them.
- The shop owner who places his or her commercial waste beside or into a public street bin.
- Commercial operators who have been paid to dispose of waste appropriately but who choose to dump waste.
- Businesses and householders who transport and dump their rubbish in other areas.
- Builders and contractors who dump construction and demolition waste or hazardous materials, such as asbestos and chemicals.



1.3 What motivates illegal dumpers?

Household waste

Householders, and to a lesser degree small operators, are likely to dump household waste, such as bags of domestic rubbish, furniture, small appliances, whitegoods, carpets and mattresses.

The DEC study found that councils nominated the unwillingness of offenders to pay and an uncaring attitude as contributing factors, while some considered convenience a factor.⁵ Survey responses overall were similar for urban and rural councils, with the exception that rural councils rated the limited operating hours of, or distance to, a disposal site as relatively important, whereas this was not mentioned by any urban councils.

Many urban councils offer a free pick-up service for larger household waste, such as furniture and whitegoods. So unwillingness to pay may not be such an important factor and may indicate a lack of awareness of such services, or that other factors, such as convenience, may be more important.5

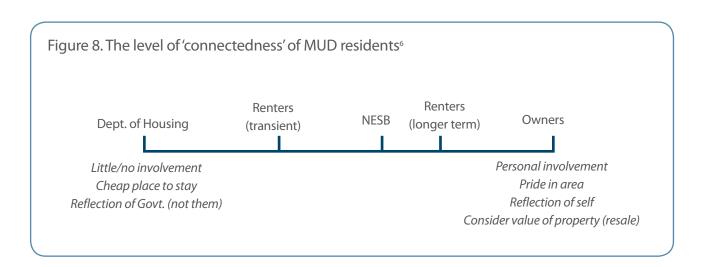
Research has shown that there are some common elements in the reasons why multi-unit dwelling (MUD) residents decide to illegally dump, which may provide an insight into the behaviour of the broader community. 6,10

- No easy disposal options for households because of the garbage tip's opening hours, distance to the tip and lack of council collections.
- No/little storage available to them and other options seen to be inconvenient and expensive.
- There is a lack of community pride, especially with transient residents (ie those living in an area for less than three years).
- It's easy to do it and get away with it (it's not necessarily seen as wrong).
- Living in MUDs gives them anonymity.
- They are unable to pay for collection.
- Poor quality furniture with no re-sale potential.
- Real estate agents do not inform tenants about correct disposal procedures.
- The high frequency of waste services and clean ups encourages people to 'put it out on the street' and it's easy to add to an existing pile.
- Tenants vacating residential properties don't know about available free or low cost disposal services, particularly people from non-English speaking backgrounds (NESB).

The degree to which dumping occurs within MUDs appears to vary according to the level of 'connectedness' that the resident has to their area (see Figure 8).6

Further information

Further information can be found in DEC's (2004) An assessment of attitudes and behaviours amongst multi unit dwelling residents in relation to illegal dumping. (see Section 7.3 Resources under 'Multi-unit Dwellings').





Construction and demolition waste

According to councils, small operators are the most likely source of illegally dumped construction and demolition (C&D) waste, with home renovators being responsible to a lesser degree.5

Urban councils nominated the unwillingness of offenders to pay or cost avoidance as the main reason for illegal dumping of C&D waste, with illegal networks making up the remainder of responses. Most rural councils nominated unwillingness to pay as the main reason, but considered an uncaring attitude and convenience (access to a convenient dumping location) as important reasons.

In urban fringe areas an increase in illegal dumping of C&D waste may be linked to transfer station and landfill fees being introduced or increased.⁵ In urban areas factors contributing to illegal dumping of C&D waste may include:

- rising disposal costs
- location of landfills
- lack of C&D waste recycling facilities
- inadequate compliance with Development Control Plans (DCPs) and Waste Management Plans that promote demolition waste reduction, reuse and recycling.10



Illegal fill material

The DEC study found that the majority of councils believe small operators are mainly responsible for transporting illegal fill material, while many blame householders. Few consider large operators responsible. However, compared with urban councils, rural councils were more likely to identify small operators and less likely to identify householders as transporters of illegal fill material. A few rural councils identified other groups, such as farmers or owners of rural properties, as being responsible. Some stakeholders thought those responsible for large-scale, rural illegal landfilling were organised 'criminal networks' that actively offer free clean fill material to rural property owners. Some believed farmers (or those who pay farmers) landfilled eroded farm gullies and had been storing waste and landfilling on their own land for generations, long before it was illegal.⁵

The DEC report found that both urban and rural councils offered an unwillingness to pay as the main reason for illegal landfilling. Other reasons nominated included convenience, uncaring attitude and organised illegal dumping networks.5

Commercial and industrial waste

According to councils, small commercial operators are most likely to dump commercial and industrial (C&I) waste, including tyres, garden organics, chemicals, paint, grease and oil. Some unscrupulous operators try to dispose of their C&I waste in or beside residential wheel ie bins or council street bins.

Cost, and to a lesser extent convenience, is reportedly the major reason why commercial operators illegally dump.⁵ A survey of businesses and tradespeople in the UK found: "overall, the picture painted is of a system which actually at times made it quite hard to behave honestly and legally. There seem to be few incentives to comply ... and those that did felt disadvantaged competitively."12

What motivates dumpers?

While there is some variation in what motivates dumpers, depending on the type of waste illegally dumped, there are recurring reasons.5

Unwillingness to pay was identified by many councils for all waste types, but particularly for C&D waste and illegal landfill. As many councils, particularly urban councils, provide either free or subsidised collection and disposal of a wide range of household waste types, this perceived unwillingness to pay needs much closer investigation. On further examination, it may be inability to pay for some low-income groups or lack of information about waste disposal options and perceived costs.

Uncaring attitude was mentioned by many councils, particularly in relation to garden organic material and household waste. This attitude may shift if people receive information about the impacts of illegal dumping on the environment and on government resources.

Convenience was nominated by some councils for all waste types. Given the large number of urban councils that provide special waste collection services for household and garden organic material, this may indicate that residents don't know of the existence of such services or how to access them.

Organised networks were noted by many urban councils, which thought this kind of activity was directly related to illegal fill material and C&D waste.

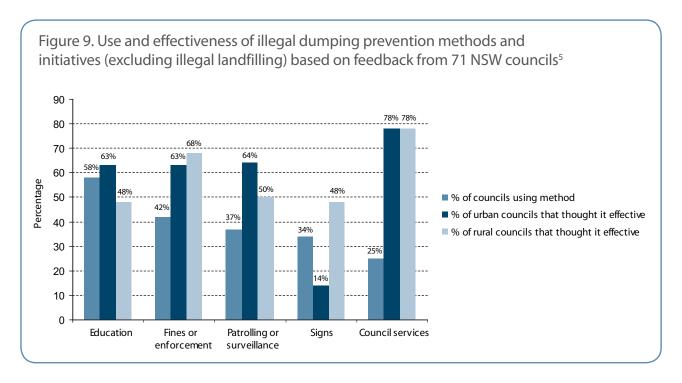
1.4 What do councils think are effective methods to combat dumping?

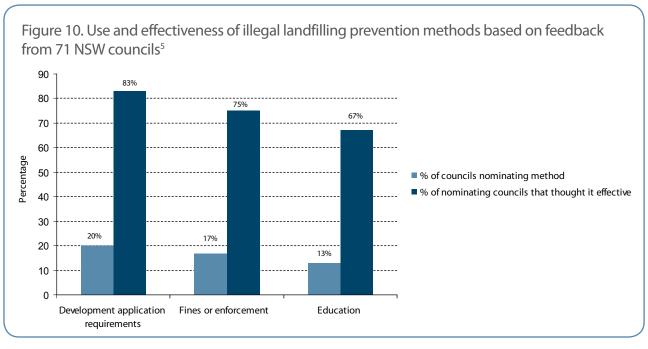
Councils play a crucial part in managing and preventing illegal dumping in their local area. They are most familiar with local conditions and problems and bear most illegal dumping clean up costs.

Councils are responding to illegal dumping using a variety of methods with varying degrees of effectiveness, as summarised in Figures 9 and 10. It is important to note that in most cases what is considered effective is based on anecdotal evidence rather than illegal dumping data and program evaluation.

Most existing and proposed measures used by NSW councils tend to deal with the results of illegal dumping rather than its causes. This is interesting to note as most costs associated with illegal dumping are from cleaning it up, and could be reduced if a greater proportion of resources were allocated to preventing illegal dumping.







The most effective way to prevent illegal dumping is to use a comprehensive approach based on a range of different methods to deal with the problem specific to the area. Unfortunately, what works in one area won't necessarily work in another area, it depends on a number

of factors, including the particular waste type and the geographic location of the illegal dumping. So it's necessary to have a full understanding of the problem – what motivates people, what are the incentives and what causes it – to devise an effective intervention program.

2.0 THE REGULATORY FRAMEWORK



2.0 THE REGULATORY FRAMEWORK

This section describes how to investigate and prosecute illegal dumpers. It outlines enforcement procedures and regulatory action, including prosecution and penalty notices. It also explains the regulatory framework for managing waste and preventing illegal dumping in NSW, including a list of relevant legislation, and focuses on the use of powers under the POEO Act.

It includes a brief overview of the relevant environmental planning legislation.

2.1 Relevant legislation covering illegal dumping

The Protection of the Environment Operations Act 1997 (POEO Act) and the Protection of the Environment Operations (Waste) Regulation 2005 (Waste Regulation) provide the regulatory framework for managing waste and preventing illegal dumping in NSW.

The POEO Act is available online from the NSW Legislation website (see Section 7.3 Resources under 'Legal and Investigations').

Other legislation that can be used to manage illegal dumping incidents includes:

- Environmental Planning and Assessment Act 1979 (and Regulation 2000), which allows orders to be given in certain circumstances for example by a consent authority where there is a breach of development consent. Councils may also bring proceedings to remedy or restrain a breach of the Act (see Section 2.5).
- *Impounding Act 1993*, which allows council officers who have been appointed as 'impounding officers' by their council to impound motor vehicles and abandoned and unattended articles, such as trolleys and skip bins. Cost recovery and offence provisions are available to councils under this Act.
- Local Government Act 1993 (s124) Order No. 22: a local council can order the owner/occupier of land or premises, or person responsible for the waste or for any receptacle or container in which the waste is contained, to store, treat, process, collect, remove, dispose of or destroy

- waste which is on land or premises in the manner specified in the order, provided that it is not inconsistent with regulations made under the POEO Act.
- Local Government Act 1993 (s124) Order No. 22A: a local council can order the owner/occupier of the premises to remove or dispose of waste that is on any residential premises or to refrain from keeping waste on those premises.
- Roads (General) Regulation 2000 (cl11): under this provision it is an offence for a person to place anything on a road (or footpath) that is likely to injure any person or damage any vehicle, or restrict or endanger the use of a road by the public or interfere with public convenience. Also, a person must not allow any liquid or any loose or waste material to escape onto a road.

This handbook focuses on the use of powers under the POEO legislation. The Department of Planning, Department of Local Government and Roads and Traffic Authority may give advice on the appropriate use of other powers.

2.2 POEO Act

The POEO Act:

- Defines 'waste'.
- Identifies responsibilities for regulating waste.
- Provides a range of tools to regulate waste, including environment protection licences, clean up notices, cost compliance notices and prevention notices.
- Contains relevant offences: for example, it is an offence to unlawfully transport or dispose of waste. It is also an offence to breach the conditions of an environment protection licence or fail to comply with a clean up notice or prevention notice.

Under the POEO Act the waste generator is primarily responsible for the assessment and classification of his/her waste. The waste generator, transporter and receiving premises are all responsible for appropriate waste disposal.



The Waste Regulation contains specific provisions relating to waste, including:

- waste levy contributions
- waste tracking requirements for certain wastes transported in NSW and interstate
- immobilisation of contaminants in waste
- special requirements for asbestos and clinical waste
- prohibited use of residue waste for growing vegetation
- transport and storage of waste generally.

Roles and responsibilities

The POEO Act enables certain regulatory responsibilities of the EPA and of local authorities, such as councils, to be carried out through the medium of an ARA. The ARA is the body responsible for regulating particular activities and can issue environment protection notices, such as clean-up notices and penalty notices for these activities. Section 6 of the POEO Act specifies which body is the ARA for different activities.

Local councils are the ARA for illegal dumping unless the activity was part of the carrying on of an activity listed in Schedule 1 of the POEO Act, or the activity was carried out by a public authority or the State. A local council may exercise its powers only in, or in relation to, its local government area (LGA). A council may exercise its powers outside its LGA, provided that the powers are exercised in relation to its LGA. For example, a council may issue a notice to an interstate company that has disposed of waste in the council's LGA.

Authorised officers are people who are appointed by an ARA under section 187 of the POEO Act, and act on its behalf in investigating environmental problems relating to activities regulated by the Act. Local councils can appoint officers and employees of other local councils (as well as their own officers or employees) as authorised officers for the purposes of the Act in relation to its LGA. This is to assist activities under the Act that require crossboundary area or regional action. It is expected that ARAs will commonly appoint a person as an 'authorised officer' and an 'enforcement officer'; however, there may be occasions where an ARA decides it is appropriate to appoint a person as one, but not the other.

Authorised officers have a range of investigatory powers and can issue certain notices under the POEO Act.

The POEO Act provides authorised officers with powers to:

- require information and records (Part 7.3 of POEO Act)
- enter and search premises (Part 7.4 of POEO Act)
- question and identify people (Part 7.5 of POEO Act).

Enforcement officers are people who are authorised under clause 6(2) of the POEO (Penalty Notices) Regulation 2004 (the Penalty Notices Regulation) to issue penalty notices for offences listed in Schedule 1 of that regulation. An enforcement officer can use all the investigatory powers of an authorised officer, but only for the purposes of issuing a penalty notice. The Penalty Notices Regulation enables particular classes of officers or employees of organisations that are not ARAs (ie NSW Police and the Sydney Catchment Authority) to issue penalty notices for particular offences.

Further information

Further information relating to councils' powers to investigate pollution matters under the POEO Act can be found in the DEC's (2006) Powers of Authorised Officers – A quide to your powers under environment protection legislation (see Section 7.3 Resources under 'Legal and Investigations').

POEO Act offences for illegal dumping

The POEO Act provides a number of regulatory tools to prevent illegal dumping.

Table 1 summarises waste offences set out in the POEO Act that can be regulated by councils.

Table 1 shows two levels of penalty notices for the same offence under section 143 of the POEO Act. This does not prevent an enforcement officer from exercising their discretion by issuing the lower level penalty notice even where the more serious category of conduct has occurred.

Section 144AA (1) makes it an offence to supply information, or cause or permit information to be supplied, that is false or misleading in a material respect about any other waste. This offence can only be regulated by the EPA.

Table 1. Summary of POEO Act offences for illegal dumping

Section of the POEO Act	Further information
Section 115: Disposal of waste – harm to the environment	This is the most serious waste offence (Tier 1) and must be prosecuted in Court. A penalty notice cannot be issued for this offence. To prosecute this offence you must prove that a person willfully or negligently disposed of waste in a manner that harms or is likely to harm the environment. Both the person and, if the person is not the owner of the waste, the owner, are each guilty of the offence.
	The maximum penalty for this offence if committed willfully is: - For a corporation – \$5 million - For an individual – \$1 million, or 7 years imprisonment, or both.
	The maximum penalty for this offence if committed negligently is:
	- For a corporation – \$2 million - For an individual – \$500,000 or 4 years imprisonment, or both.
Section 142A: A person who pollutes land is guilty of	This offence focuses on the potential for a 'substance' to cause harm, as opposed to it being a 'waste'. The intent of this offence includes preventing environmental harm from the reuse or recovery of wastes.
an offence	A statutory defence is available if the activity is specifically authorised by an environment protection licence. There are also defences for common agricultural activities, such as the application of fertiliser (sold in accordance with the <i>Fertilisers Act 1985</i>), pesticides (used in accordance with the <i>Pesticides Act 1999</i>) and non-hazardous agricultural waste (including stock feeds made solely from such waste).
	The maximum penalty for this offence is \$1 million for a corporation and \$250,000 for an individual.
	The penalty notice fine for this offence is \$1,500 for a corporation and \$750 for an individual
Section 143: Transport waste to a place that cannot lawfully be used as a waste facility for that	This offence applies to transporters and owners of waste. The offence may be prosecuted in Court or dealt with by issuing a penalty notice. The offence is committed where the transporter takes waste to a place that cannot lawfully be used as a waste facility for that waste. A waste facility includes any place used to store, treat, process, sort or dispose of waste.
waste, or cause or permit waste to be so transported	Examples of situations where a place cannot be lawfully used as a waste facility are set out below:
	Example 1: Waste has been dumped at the place without the landowner's consent. Example 2: Development consent is required to use the place as a waste facility but has not been obtained.
	A transporter cannot use a defence that the landowner (of the place where the waste has been dumped or stored) has verbally told the transporter that the land can lawfully be used for that purpose. A defence for the transporter is only available if the owner or occupier of the land has provided a written notice in an approved form stating that the land may lawfully be used as a waste facility (see Section 7.3 Resources under 'Legal and Investigations').
	If the waste was owned by someone else, the owner of the waste also commits an offence unless he or she can show that the commission of the offence was due to causes over which the owner had no control, and all reasonable precautions were taken and due diligence exercised to prevent the transporter unlawfully disposing of the waste.
	The maximum penalty for this offence is \$1 million for a corporation and \$250,000 for an individual. The penalty notice fine for this offence is \$1,500 for a corporation and \$750 for an individual, unless the waste comprises asbestos waste or hazardous waste (within the meaning of Schedule 1 to the Act), or any other waste greater than 1 cubic metre in volume or 2 tonnes in weight, in which case the penalty notice fine for this offence is \$5,000 for a corporation and \$1,500 for an individual.
Section 144: Permitting land to be used unlawfully as a waste facility	The owner or occupier of land who uses the land, or causes the land to be used, as a waste facility without lawful authority commits this offence. The offence can be prosecuted in Court or it can be dealt with by issuing a penalty notice.
	Examples of permitting land to be used unlawfully as a waste facility are set out below: Example 1: Development consent is required to use the place as a waste facility but has not been obtained.
	Example 2: An environment protection licence is required to use the place as a waste facility but has not been obtained.
	The maximum penalty for this offence is \$1 million for a corporation and \$250,000 for an individual.
	The penalty notice fine for this offence is \$5,000 for a corporation and \$1,500 for an individual.



2.3 Illegal dumping investigations

A council's ability to investigate illegal dumping incidents, issue penalty notices and require clean up action is fundamental to catching and dealing with offenders.

Authorised officers appointed by councils to exercise their functions under the POEO Act have extensive powers of investigation in relation to illegal dumping. There are a number of investigation tasks that can be carried out at both the place the waste was dumped ('on-site') and in the office to catch and deal with offenders.

What to do on-site

Search for evidence

Start by searching for evidence of ownership of the waste, such as package labels, invoices or mail with addresses, names and phone numbers. It is important to observe council's occupational health and safety policy whilst undertaking this task.

If possible, council should inspect the source site where the waste was generated to obtain additional evidence. For instance, illegally dumped tree clippings might be matched to a tree lopping of the same species at the source site. There is also merit in reinspecting the dumped waste, particularly after inspecting the source site, to find new evidence that may have been overlooked the first time.

Identify and talk to witnesses

Identify and talk to potential witnesses, such as occupiers of neighbouring premises. Find out what they observed in relation to the illegal dumping, for example did they notice when the waste was dumped, did they see the person dumping the waste or their vehicle, are there any possible related neighbourhood activities, such as building work or people moving house.

Record evidence

Photograph and record dumping evidence, for example the type and amount of waste, likely method of dumping, dumping location (consider drawing a sketch), premises identification, surrounding land use, potential for harm to the environment, health or property. Take a sample if necessary to identify the material or match it to the source location.

Take care to properly preserve evidence and maintain the chain-of-custody in every step of the investigative process. Council may have to prove in court that the evidence is authentic and was handled properly. Investigation files should contain (where relevant) witness statements, records of interviews, photographs, video recordings, sketches, correspondence, field notes taken contemporaneously, chain-of-custody records and any other pertinent records.

Decide on the clean up option

Decide whether the waste needs to be cleaned up immediately. For instance, if the waste is hazardous or likely to cause significant harm to the environment, people or property, then it should be cleaned up immediately.

Deter other illegal dumpers

Consider the likelihood of others dumping in the same location if the waste is not cleaned up immediately (see Section 4.4).

- Have the dumped waste removed by issuing a clean-up notice (verbally in the first instance where relevant) to the person who is reasonably suspected of causing or having caused the illegal dumping.
- Alternatively, issue a clean-up notice to the occupier of the premises to remove the dumped material.
- Secure and/or render safe the illegally dumped material.

What to do back in the office

Back in the office, council officers can follow up leads obtained from the site inspection and information from witnesses. Examples of leads include company names obtained from witnesses, phone numbers or company names found in the waste, retailers' details on packaging, vehicle registration numbers observed by witnesses, property addresses where waste is dumped or where waste came from, telephone numbers found in the waste and names of persons of interest provided by witnesses.

Resources available to assist councils with their investigations

Company searches

Before taking regulatory action against a business for illegal dumping, the council must determine whether the business is a legal entity, such as a corporation. Regulatory action, such as prosecutions and issuing notices under the POEO Act, can only be taken against a legal entity.

The law recognises two legal entities: an individual and an incorporated body, such as a company, statutory, authority, incorporated association, cooperative or other body corporate. Business or trading names are not legal entities. Online searches of basic details of business and company names and Australian Company Numbers may be carried out on the National Names Index (see Section 7.3 Resources under 'Legal and Investigations').

Property information

Property information provides valuable evidence for illegal dumping investigations. It can help show the 'lay of the land' and offer useful background information that could lead to potential polluters or witnesses. You can get property information from your council's development applications, property files, historical files, aerial photographs, land information system, complaints register, public register (under the POEO Act), electronic record-keeping systems, rates information and any other available records.

In addition, the NSW Department of Lands have established the Spatial Information eXchange (SIX), which is a collaborative working space for government, business and the community to use. The SIX Gateway provides a single entry point through which councils can search, access and use NSW-wide geospatial information and data (in many cases free of charge), such as property and topographic features, aerial photography, cadastral (land tenure) and address details (see Section 7.3 Resources under 'Legal and Investigations').

Internet searches

The internet can be a useful method of finding and/or confirming company and personal details, particularly through the white pages and yellow pages directories. You can use search engines to find company websites and advertising. Individual council websites often include a listing of recently determined development consents.

Vehicle registration searches

The Roads and Traffic Authority (RTA) maintains a database of owners of registered vehicles in NSW called DRIVES. Councils can obtain external user access to the database to look up a registered vehicle owner's details based on the registration number of the vehicle suspected of being involved in an illegal dumping incident (see Section 7.3 Resources under 'Legal and Investigations').

Telephone number searches

Part 13 of the Telecommunications Act 1997 (Commonwealth) allows criminal law enforcement, public revenue and civil penalty enforcement agencies (defined in subsection 282(10) of the Act), such as councils, to make certified and uncertified requests for the disclosure of customer information. This may be useful if a council officer finds telephone numbers in the illegally dumped waste and suspects the owner of that number is the owner of the waste (see Section 7.3 Resources under 'Legal and Investigations').

Record of Interview

Councils can interview people to obtain dumping evidence. Part 7.5 of the POEO Act gives council officers the power to require anyone they suspect on reasonable grounds of knowing about any relevant matters relating to an illegal dumping offence to answer any questions concerning those matters. In many instances of illegal dumping, crucial evidence, such as who, when, what, why and how the material was dumped, can only be obtained by questioning witnesses and/or the suspected offender.

Investigation notices

Councils and authorised council officers can issue written notices that require a person to provide them with any information or records they need in connection with any matter in relation to their responsibilities or functions under the POEO Act (\$192 and 193 respectively). These notices are useful tools for investigating illegal dumping offences under the POEO Act. They can be used to obtain information and records such as:

- Information: names and contact details of employees, agents and contractors (including subcontractors); working relationships and work functions of these people; property occupier details; written answers to specific questions.
- Records: employment records; training records; driver running sheets; invoices; contracts; waste disposal receipts; company environmental procedures/policies/plans; maps; photographs; validation certificates; reports, for example surveyor reports, technical reports, waste classification reports (excluding voluntary environmental audit documents – see Part 6.3 of POEO Act).

Expert opinion

Council may wish to seek expert opinion in relation to waste offences as the need arises. Liverpool City Council commissioned impact studies and restoration plans for recent waste offences prosecuted in Liverpool Local Court (see examples on pages 25-26). The Magistrate strongly considered these documents in sentencing.

2.4 Deciding on a course of regulatory action

Deciding which tool/s to use under the POEO Act will depend on the circumstances of each illegal dumping problem and the officer's judgement.

There are many factors to consider when deciding on the best course of action in response to a specific dumping incident. Ideally, this will be one that delivers the best environment protection outcomes for both the short and longer term.

Figure 11 summarises the steps in investigating an illegal dumping incident and the regulatory options available to resolve the issue.

When an offence occurs, a number of options are available to councils, including issuing clean-up or prevention notices under the POEO Act, prosecutions, on-the-spot fines and warning letters. It may be helpful for council officers to discuss the statutory options available to deal with illegal dumping with a senior manager or council's legal services.

Sometimes it may be useful to issue clean-up notices and penalty notices or prosecutions in combination. For example, the council may discover some illegally dumped waste and, following investigation, find the person responsible for the offence. The council may choose to issue a clean-up notice to the person in addition to a penalty notice. The council could also institute proceedings for an offence against the POEO Act.

Table 1 provides a summary of the waste offences in the POEO Act for which councils can institute proceedings. See Table 2 for a summary of the enforcement options available under the POEO Act for dealing with illegal dumping. This may help in deciding which instrument is most appropriate given the specific circumstances of the illegal dumping.

Prosecutions

Depending on the circumstances of the illegal dumping incident, and the council's operational policies, it would generally be appropriate to consider prosecutions where environmental harm is significant, or the illegal dumping has been motivated by cost avoidance, and organised or premeditated crime.

Councils may wish to refer to, or adopt, the EPA's (2004) Prosecution Guidelines to assist with deciding whether or not to prosecute. If the EPA or council does prosecute, the case is generally heard before the Land and Environment Court or the Local Court.

Councils involved in successful prosecutions should also consider seeking court orders under Part 8.3 of the POEO Act in connection with waste offences.

Penalty notices

The POEO (Penalty Notices) Regulation 2004 sets out the penalty amount for certain offences under the POEO Act that can be dealt with by way of a penalty notice. Penalty notices tend to provide more streamlined enforcement procedures for many common illegal dumping problems, particularly those which are straightforward and where a small fine may provide an adequate deterrent. Penalty notices should only be issued for minor breaches.

A person issued with a penalty notice for illegal dumping has the right to elect to have the alleged offence dealt with by a court. Therefore, before issuing the penalty notice, councils need to be sure of the facts and collect sufficient evidence.



Figure 11. Suggested enforcement procedure for illegal dumping under the POEO Act

Illegal dumping

Search for ownership evidence in the material.

Identify and talk to potential witnesses.

Photograph and record dumping evidence (for example type and volume of material, likely method of dumping, potential harm to the environment, health or property).

Decide whether the material should be cleaned up or rendered safe immediately.

If practical, secure illegally dumped material with advisory/investigation stickers and tape to deter other illegal dumpers.

Dumper identified?

NO

Check the council's property records for owner, occupier or managing agent of land.

Send a letter or investigation notice (s192 or s193 of POEO Act) to obtain evidence (for example who, when, what, why and how the material was dumped).

Interview persons of interest to obtain evidence.

Depending on evidence, search for property information, vehicle registration, company records, telephone numbers and internet listings.

YES

Collect evidence to prove elements of offence (s115, s142A, s143 or s144 of POEO Act).

Depending on circumstances, issue either:

A letter requiring removal of the material.

Clean up notice s91 of POEO Act.

Dumper ide	entified?
YES	NO
Collect evidence to prove elements of offence (s115, s142A, s143 or s144 of POEO Act).	The landowner/manager to remove the material. Plan and carry out illegal dumping prevention
Depending on circumstances, issue either:	action eg distribute educational material.
A letter requiring removal of the material; or	
Clean-up Notice s91 of POEO Act.	

Materials re	emoved?
YES	NO
Consider prosecution, penalty notice or written warning for the offence.	Consider removing the material and issuing a cost compliance notice under s104 of POEO Act.
	Consider either prosecution or penalty notice for POEO Act offence under s115, s142A, s143, s144 or s91(5).

Materials re	emoved?
NO	YES
Consider removing the material and issuing a cost compliance notice under s104 of POEO Act.	Consider prosecution, penalty notice or written warning for the offence.
Consider either prosecution or penalty notice for POEO Act offence under s115, s142A, s143, s144 or s91(5).	

Figure adapted from Sutherland Shire Council's 'Suggestions of Enforcement Procedure for Illegal Dumping of Household Materials Outside MUDs.'



Example of a local court prosecution by Liverpool City Council for illegal dumping of building and demolition waste in a council park

Offenders and company names have been withheld.

In June 2006, Mr X was hired by an owner builder to carry out demolition and excavation work at a building site in Hurstville. This work generated approximately 120 cubic metres of building and demolition waste. Mr Y transported this waste to Craik Park in Austral in 12 separate loads. Some of the loads were dumped in the park between 2:00am and 3:00am while others were dumped during daylight hours.

A concerned resident reported the illegal dumping in the park to Liverpool City Council. Council found vital evidence in the waste, including letters with contact information. This evidence, plus information obtained during witness interviews with local residents, helped council find the building site in Hurstville. Council matched the characteristics of brick and roof tiles in the dumped waste with those found at the building site. Hurstville City Council provided other evidence, such as the development consent and waste management plan for the building site, and the name of the party responsible for the demolition and excavation work. Records of interview were also made with Mr X, Mr Y and the owner builder.

Information and records provided by waste facilities, in response to section 193 issued by council under the POEO Act, demonstrated that Mr X's claims of lawful waste disposal were false. Council also issued a section 193 notice to Mr X requiring information and records relating to the incident but he did not comply with the notice.

Council initially paid to clean up the waste dumped in the park because it contained asbestos and presented a potential health risk to park users. It cost council \$18,045 to clean up the illegally dumped waste.

Action by Liverpool City Council Liverpool Local Court:

Liverpool City Council prosecuted Mr X and Mr Y for 12 charges each under section 143 of the POEO Act, being the transport of waste to a place that cannot lawfully be used as a waste facility for that waste. Mr X was considered to be the owner of the waste and Mr Y was the transporter.

Mr X was also prosecuted for one charge of failing to reply to the section 193 Notice to provide information and records under the POEO Act.

The Court's decision:

Both Mr X and Mr Y entered a plea of not guilty and the matter was heard over three days. On 13 March 2007, the Magistrate found both Mr X and Mr Y guilty of all charges of illegally dumping the waste and fined them each \$13,200. Mr X also received an additional \$500 fine for not complying with council's section 193 notice to provide information and records. The Magistrate also ordered Mr X and Mr Y to pay council's professional costs of \$14,597 plus the clean up costs of \$18,045.

This court judgement is important, because the owner of the waste was found guilty of illegally dumping waste as well as the transporter.



Example of a local court prosecution by Liverpool City Council for illegal dumping of soil and building waste on private properties in Kemps Creek

Offenders and company names have been withheld.

During October 2006, Mr X transported approximately 2369 cubic metres of soil and building waste and dumped it on two private properties in Kemps Creek. The private properties could not lawfully be used as a waste facility for that waste as development consent had not been obtained.

The first dumping incident came to council's attention via a report from a concerned resident. Council officers observed a tipper truck during patrols of the area, and followed it to the dump site at the second property. Council also obtained vital evidence during records of interview with Mr X (involving an interpreter) and the property

The two dumping incidents occurred in a bushland setting and an endangered ecological community was damaged at one of the properties. Council commissioned impact statements to assess the extent of harm to the environment and remediation plans for each property.

Action by Liverpool City Council in Liverpool Local Court:

Liverpool City Council prosecuted Mr X for two charges (one for each property) under section 143 of the POEO Act, being the transport of waste to a place that cannot lawfully be used as a waste facility for that waste.

The Court's decision:

Mr X entered a plea of guilty to both charges. On 8 March 2007, Mr X was convicted and fined \$7,000 by Liverpool Local Court for each dumping offence. The Magistrate ordered that council's costs of \$3,582 (cost of the impact statements and restoration plans) be shared amongst the transporter and the two property owners, even though the property owners were not part of the court proceedings. The impact statements and remediation plans were strongly considered by the Magistrate in sentencing.

Further to the regulatory action pursued in Court, Liverpool City Council issued clean-up notices to Mr X and the two property owners requiring them to clean up the waste and remediate the affected areas. Council also issued each of the property owners with a \$1,500 fine for permitting land to be used unlawfully as a waste facility contrary to section 144 of the POEO Act.

Further information

- Details of Land and Environment Court published judgments and decisions relating to waste offences under the POEO Act are available from Caselaw NSW.
- The EPA's (2004) Prosecution Guidelines.
- The EPA's (2003) Guidelines for Seeking Environmental Court Orders.
- Procedures for matters heard in a Local Court and the Land and Environment Court are available from Lawlink NSW.

For further details see Section 7.3 Resources under 'Legal and Investigations'.

Clean-up, prevention and compliance cost notices

The principal notices under the POEO Act that may be issued for illegal dumping that are relevant to councils are:

- clean-up notices
- prevention notices
- compliance cost notices.



Clean-up notices

Where council is the ARA, it may issue a clean-up notice requiring a person to take specified clean-up action when it reasonably suspects that a pollution incident has occurred or is occurring (see s91 of the POEO Act). Clean-up notices may be issued when an incident or set of circumstances during or as a consequence of which there is, has been or is likely to be a leak, spill or other escape of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which waste has been placed or disposed of on a premises.

A clean-up notice can be issued to either (or both):

- The person reasonably suspected of causing or having caused the illegal dumping;
- The occupier of the premises at or from which council reasonably suspects that the illegal dumping has occurred or is occurring. The occupier is the person who has the management or control of the premises.

The following actions are examples of what can be required under a clean-up notice. These examples specifically relate to illegal dumping. This list is not extensive and there are many other examples of types of actions that may be required under a clean-up notice.

- Direction to remove waste that has been unlawfully disposed of on land within 48 hours of the direction being given.
- Direction to the owner or occupier of a particular premises to prepare a plan of action for ensuring waste that has been disposed of at the premises unlawfully is dealt with in an environmentally responsible manner.
- Direction to the polluter to remove waste from a premises, classify it in accordance with the Waste Guidelines and dispose of it at a lawful waste facility within one month.
- Direction to the polluter to carry out interim measures to protect the environment from illegally dumped waste such as installation of sediment and erosion controls.

The clean-up action required under a clean-up notice must be reasonable. For instance, councils should provide adequate time to clean up the waste. Councils can assess the reasonableness of their direction by providing a draft version of the notice to the recipient for comment. Councils should consider the comments before preparing the final notice.

Prevention notices

In most instances, clean-up notices are likely to be a better way of dealing with illegal dumping than prevention notices. But prevention notices may be useful in some instances of illegal dumping, such as illegal landfilling where the occupier of the premises is required to put systems in place to prevent dumping from occurring at their premises.

Should the council issue a penalty notice for non-compliance with a clean-up notice or prevention notice, this will cancel the notice upon payment by the offender. If the council wishes to pursue the clean up or preventive action with the offender then it will need to reissue the notice.

Compliance cost notices

Compliance cost notices enable councils to recover the costs associated with monitoring and follow-up action, taken as a result of issuing a clean-up notice or prevention notice for illegal dumping or taking voluntary clean-up action.

Council officers should keep records of time spent on associated monitoring action for all clean-up notices they may issue.

Further information

- Templates and detailed information about notice preparation is available in DEC's (2006) Guide to Notices Under the Protection of the Environment Operations Act 1997.
- Clean-up notices issued by the EPA relating to illegal dumping are located on the DECC's Public Register. Examples relating to illegal dumping can be found by searching the following document numbers: 1063767, 1039133, 1053508, 1051659, 1048155, 1025697 or 1047125.

For further details see Section 7.3 Resources under 'Legal and Investigations'.



Table 2. Summary of statutory instruments for illegal dumping under the POEO Act

Notice	Precondition	When to use	Appeal period and time in effect	Maximum penalty for prosecution	Penalty notice (On-the-spot fine)	Administration fee
Clean-up Notice (s91)	Appropriate Regulatory Authority. Reasonable suspicion that pollution incident has occurred or is occurring.	For quick response to incidents. Clean-up action must be specified in the notice.	No appeal period. Draft notice allowing person to comment should be issued before final. Can be revoked or varied by the ARA.	Corporation \$1million, and for each day the offence continues \$120,000.* Individual \$250,000, and for each day the offence continues \$60,000.*	Corporation \$1,500, individual \$750.*	\$320
Prevention Notice (s96)	Appropriate Regulatory Authority. Reasonable suspicion that activity has been or is being carried out in an environmentally unsatisfactory manner.	To deal with more systemic pollution and waste management problems. Preventive action must be specified in the notice.	Notice comes into force immediately. 21-day appeal period. Can be revoked or varied by the ARA.	Corporation \$1million, and for each day the offence continues \$120,000.* Individual \$250,000, and for each day the offence continues \$60,000.*	Corporation \$1,500, individual \$750.*	\$320
Compliance Cost Notice (s104)	Where the council incurs costs in ensuring compliance with a cleanup notice or prevention notice.	Provides for recovery of compliance costs, including monitoring.	Costs must be paid by due date in notice.	Legal action to recover amount owing.	None	None
Notices to provide information and records (s192 and 193)	Can be used to check compliance with POEO Act and regs. Can also be used in relation to any matter related to the ARA's responsibilities or functions under the POEO Act.	When information or records are needed for an investigation.	Requirement to comply with notice continues until it is complied with, even if a specified time period for compliance has expired.	Corporation \$1million, and for each day the offence continues \$120,000.* Individual \$250,000, and for each day the offence continues \$60,000.*	Section 211 (1) of the POEO Act: corporation \$1,000, individual \$500.*	None
Penalty Notice	An offence against the POEO Act for which POEO (Penalty Notices) Regulation states that a penalty notice can be issued.	Can be used to fine offenders on-the-spot for breaches of s143, 144 of the POEO Act as well as failure to comply with notices or pay notice fees.	Penalty must be paid within 28 days of being served unless the notice is revoked or the offender elects to go to court.	Various	Various	None

Note: * Penalties are issued for non-compliance with the notice.

2.5 Environmental planning legislation

Environmental planning and environment protection legislation (such as the POEO Act) have complementary roles. Both can be used to prevent and respond to incidents of illegal dumping. In some instances, it may be more appropriate for councils to use environmental planning legislation, that is the Environmental Planning and Assessment (EP&A) Act 1979 and Regulations, over the environment protection legislation (ie the POEO Act).

Dealing with illegal dumping incidents after they have occurred is often difficult and resource intensive. Effective illegal dumping prevention strategies can use environmental planning, such as waste management planning for development proposals, to prevent illegal dumping opportunities.

Environmental planning legislation can be applied proactively. As a planning authority, councils can require applicants to prepare waste management plans (WMPs) that include estimates of the quantity and types of waste to be generated by their proposal, and how the waste will be stored, transported and recycled or disposed of lawfully. Conditions of development consent can be imposed that require applicants to submit waste disposal receipts to council to demonstrate compliance. This will increase the developer's perceived risk of getting caught for illegal dumping and prevent such incidents from occurring.

Several councils, including Sydney, Holroyd and Shoalhaven councils, have prepared policies relating to asbestos waste that include special conditions of development consent for the demolition of buildings containing asbestos. Although these are not technically Development Control Plan's (DCPs), such policies set out requirements that should be met and should be consulted where relevant.

Like the POEO Act, environmental planning legislation can also be applied reactively. Councils can take regulatory action, such as orders, fines and prosecutions, where development occurs without or in breach of consent (where consent is required).

Enforcement of environmental planning legislation

To ensure compliance with environmental planning legislation, council officers should carry out regular audits and require submission of records as a condition of development consent for activities of concern, such as lawful waste disposal.

A council can authorise people to enter premises and carry out certain enforcement powers in order to enable it to exercise its functions (Part 6, Division 1A of the EP&A Act). These powers include powers of entry to premises at any reasonable hour in the daytime or at any hour during which business is in progress or is usually carried on at the premises. Once on the premises, those authorised to do so can require any person at those premises to answer questions or otherwise furnish information in relation to the subject of the inspection or investigation. This can include requiring information about waste management and disposal where it relates to the development.

Councils can issue penalty notices (PNs) for breaches of environmental planning legislation. For instance, a \$600 PN can be issued in relation to contravention of section 76A(1) where consent had not been obtained or the development is not carried out in accordance with a development consent. Councils also have the option of using the orders available under the EP&A Act to rectify illegal uses or works.

Section 121B of the EP&A Act enables councils to issue orders to people to do or to refrain from doing a thing specified in that section. For example, a council can order a person to:

- cease using premises for a purpose specified in the order where the premises are being used for a purpose for which development consent is required but has not been obtained (order number 1)
- comply with a development consent (order number 15).

Councils are required to observe the rules of natural justice (the rules of procedural fairness) by following a number of requirements when issuing orders. Councils should give a person notice of a proposed order and should allow the person adequate time to provide comments on the order to council. Council should consider the representations before proceeding to issue a final order. Failure to comply with an order can result in an on-the-spot fine of \$1,500.



3.0 ANALYSING YOUR ILLEGAL DUMPING PROBLEM



3.0 ANALYSING YOUR ILLEGAL DUMPING PROBLEM

Effectively managing and preventing illegal dumping requires a thorough understanding of the problem as it relates to your council area. Prevention methods are very specific in their effect, what works for one problem in one area will not necessarily work for other problems in other areas. Understanding the specific nature of the problem requires understanding the behaviour involved, the people, and, importantly, the context in which the problem occurs. The context includes the regulations as well as the physical environment of the dumping location. It is important to identify how the context provides opportunities for the behaviour to take place since targeting these opportunities will be an important part of reducing dumping.12

3.1 Develop an incident database

Before developing or adapting your illegal dumping database it is important to first ask yourself what information is required, how is this information going to be used and will it tell me if the 'problem' is improving or getting worse? Data collection can be onerous, expensive and time consuming and gathering data for the sake of gathering data is meaningless.

However, there are good examples of data management and utilisation. An example of a database for reporting incidents is shown in Figure 12.

Using collected data Bankstown City Council developed a decision-making process to determine which level of response is required, at the point of customer complaint, to achieve the most effective outcome. The process takes into consideration materials, location and other factors to automatically determine the likelihood of being able to issue a penalty notice or prosecute.

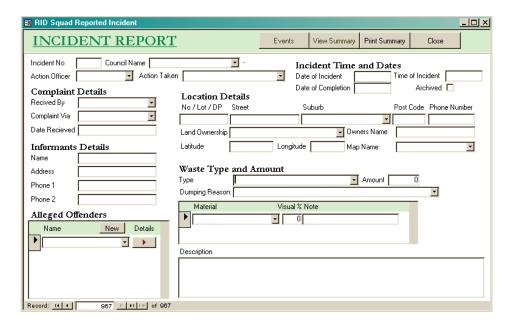
Prevention methods are very specific in their effect, what works for one problem in one area will not necessarily work for other problems in other areas.

Gather your data

- records of incidents (for example, see RID Squad database in Figure 12)
- records of customer complaints
- court matters including prosecution cases and convictions
- penalty notices (PN)
- clean-up notices
- cost of clean up (from depot staff or contractors)
- mapping of hot spots, locations and materials, for example using Geographical Information System (GIS) or Land Information System (LIS)
- ranger patrol records and notes, including site visits to illegal dumping hot spots and interviews with victims, witnesses and offenders (where possible)
- surveillance footage and photographs
- information about illegal dumping from state of the environment reports
- Clean Up Australia Day statistics.



Figure 12. RID Squad Incident Report Database



3.2 Analyse your data

An analysis of existing data will enable you to identify priority issues and areas. It will also allow you to develop a baseline against which all future efforts and progress can be gauged. You can then evaluate your illegal dumping program and find out what's working and what's not, which can inform and streamline future initiatives, and create a cycle of continuous improvement.

Very few councils in NSW collect robust, objective, reliable data for illegal dumping so apart from anecdotal evidence it's difficult to find out what strategies are working effectively.

Further information on how to use this data for an illegal dumping program is included in Section 5.0 'Bringing it together in a program'.

Interpret your data

The nature of the problem

- What material is dumped?
- Where is it dumped?
- Are there any places where it consistently reoccurs (ie hotspots)?
- Is there anything about the dump sites that might make illegal dumping there easy?
- Are there any timing or seasonal patterns?
- Is it a situation in which council could gain an advantage from applying the regulatory system?
- Is the problem constant, or becoming greater or decreasing?
- What do you know about the origin of the waste?
- How was the waste dumped?

The people involved

- What do you know about the offenders?
- Who benefits from illegal dumping and what are the rewards?

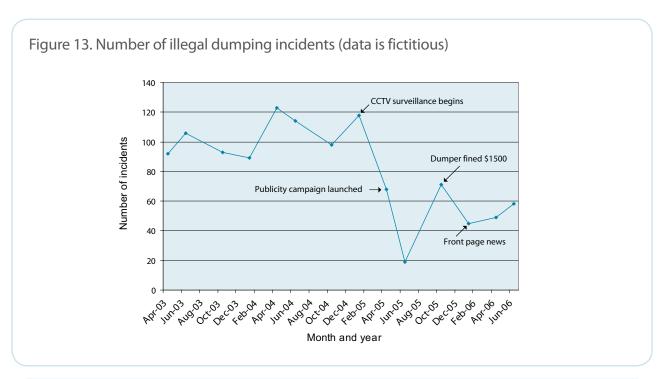
3.3 Presenting your data

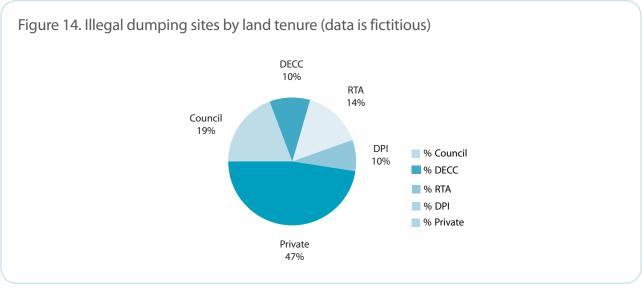
It's all very well to collect information about your illegal dumping situation but it is essential that your database can be mined to provide a story about your illegal dumping situation. Presenting your data in a meaningful way is important in not only helping you and your colleagues to understand the problem but also communicating your illegal dumping problem to other stakeholders.

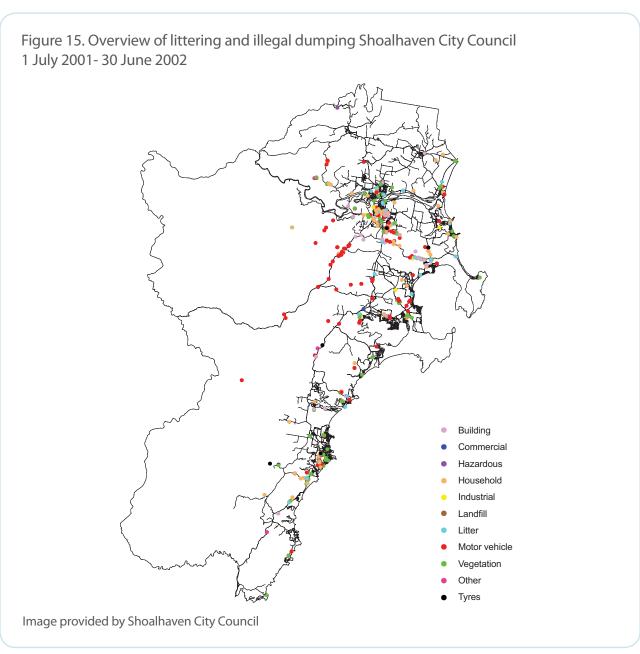
Many councils prepare charts, graphs and maps to present their illegal dumping information. For example, trends over time and the impact of intervention efforts can best be understood by plotting the information on

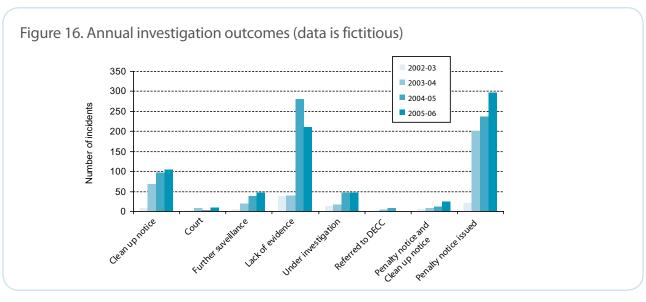
a graph (see Figure 13). The composition of illegally dumped waste can be represented in pie charts, such as Figures 4-6 in Section 1. Charts containing information about common hot spots or land tenure can also help to paint the picture about illegal dumping in your area (see Figure 14).

Illegal dumping incidents can be overlaid on maps or aerial photographs to give an indication as to where illegal dumping hotspots are located, and therefore where efforts should be concentrated (see Figure 15). Aerial photographs can be downloaded at no cost from the NSW Department of Lands' Spatial Information eXchange (SIX) (see Section 7.3 Resources under 'Legal and Investigations').











RID Squad uses a GPS to record and present illegal dumping information

The Western Sydney RID Squad are testing a global positioning system (GPS) navigation device that allows them to link aerial photographs, overlaid with roads and other landmarks, to photographs of illegal dumping sites. By synchronising the time on their digital camera with the time on their GPS device, software (which RID Squad staff have tailored for the purpose, but which is also available on the internet) can be used to generate the image. The software also indicates the direction in which the photograph was taken.

The GPS device has the added bonus that RID Squad staff can program in the co-ordinates of illegal dumping sites they want to return to and the in-built navigator directs them to the site while they are driving – no need for the traditional street directory and hours of officers time spent driving around trying to relocate a site.

Outcomes

- At \$500 \$1000 per unit, the device pays for itself in reducing the time officers spend trying to relocate illegal dumping sites.
- 100% of illegal dumping sites identified during helicopter flyovers have been located on the ground to within 20 metres.
- Greater accuracy in recording before and after shots of illegal dumping sites.
- Managers and other staff have access to on-the-ground information without having to invest time going into the field.

The outcomes of investigations can also be presented in a graph (see Figure 16), which provides useful information about how council is responding to illegal dumping.



4.0 ILLEGAL DUMPING PREVENTION TECHNIQUES



4.0 ILLEGAL DUMPING PREVENTION TECHNIQUES

When researchers at University College London studied the opportunities that give rise to illegal dumping they found that conventional enforcement tactics can sometimes reduce the activity quickly but the effects soon fade without additional preventive measures. Whereas well-designed and well-focused illegal dumping prevention programs can have a substantial and long-term impact on illegal dumping.12

Which techniques councils choose to adopt will depend on the analysis of existing data and information. Importantly, the decision must focus on the mechanism most suited to the problem, for example, increase the effort or reduce the rewards, before going on to select the particular technique that's most likely to trigger it. Too often practitioners jump to the technique before thinking through how it is supposed to work and whether this is likely in the circumstances of the particular problem.

You will then need to monitor how it is done and the outcome to identify the need for any further intervention. This may involve refining the initial response, or if necessary trying something completely different. It may also be necessary to keep an eye on newly emerging problems so that they can be dealt with as quickly as possible. Where appropriate, a combination of mechanisms, if used strategically, can often be more effective.12

Figure 17 summarises the techniques you can use to tackle illegal dumping.

4.1 Increase the effort: make access difficult

In most cases illegal dumping takes very little effort. It can take more effort to dispose of waste legally than to dump it illegally. Councils can change the balance to make it easier to comply with the law and make it harder to not do so. Many areas continue to experience illegal dumping problems after being cleaned up. Effective structural solutions will increase the effort and risk of being caught thereby deterring offenders. Structural solutions can reduce accessibility to popular sites for illegal dumping.¹² A clean up plus introducing signs, lighting, barriers, landscaping or increasing the visibility of a site can contribute to reducing or eliminating continued dumping.

Structural approaches

Councils across NSW have used the following structural approaches, usually combined with a mix of education and regulation.

Lighting

When lighting is used in other crime prevention strategies it can be an effective deterrent in poorly lit or remote areas. This may be useful where dumping occurs under the cover of darkness. Additional lighting increases the visibility of the offender and increases the risk of being caught. The impact of sensor lights has yet to be evaluated.



Solar lights in hotspots

City of Canada Bay Council installed solar lights and signs in a dumping hot spot.

Outcome

The enhanced lighting has deterred dumping in the area and resulted in fewer complaints to the council. Anecdotal opinion is that other known dumping areas near this hot spot are also experiencing less illegal dumping.



Figure 17: The five main illegal dumping prevention mechanisms

1. Increase the effort: make access difficult (see Section 4.1)

- Make access difficult to hot spots using structural approaches, such as:
 - lighting
 - landscaping, revegetation or beautification
 - barriers, such as fences and locked gates, concrete blocks, logs and boulders and earth mounds.

2. Increase the risk of getting caught (see Section 4.2)

- Strengthen surveillance:
 - use surveillance cameras and signs to indicate the area is being watched
 - increase patrols in hot spots
 - assist community surveillance and reporting of suspect activities
 - use aerial surveillance in rural and remote areas.
- Carry out periodic, high-profile compliance campaigns.
- Use partnerships with other councils, agencies and stakeholders.
- **Publicise successes** as widely as possible.

3. Reduce the rewards: deny financial benefits (see Section 4.3)

- Provide and/or promote free or subsidised waste services.
- Issue fines to offenders.
- Require offenders to clean up.

4. Reduce provocations: don't give them a reason to dump (see Section 4.4)

- Provide efficient and well communicated waste services.
- Ensure reasonable waste service costs where possible.
- Foster **community pride** by enhancing the area's aesthetic appeal.
- Keep areas free of illegally dumped material.

5. Remove excuses: educate and inform the community (see Section 4.5)

- Publicise waste services.
- Carry out education programs outlining responsibilities.
- Keep areas free of illegally dumped material.
- Install signs at hot spots with illegal dumping prevention messages.

It is crucial to alter the perceived as well as the actual degree of effort, risk and reward involved.¹²



Landscaping, revegetation and beautification

Landscaping and revegetating a site can indicate it is valued, monitored and used. Simple landscape activities, such as grass cutting and weed removal, can be enough in some areas to suggest that a site is cared for and maintained, which will deter some of the nuisance dumping offenders.

Beautification, such as benches, pathways, picnic tables, murals or flowerbeds, can change a community's perception of a site. Many communities will get involved in and take part in projects that build community pride and can lead to changed perceptions and increased community surveillance, which all contribute to increasing the risk for people illegally dumping.

Barriers

Physical barricades that restrict access are very effective for reducing dumping in areas with a single point of entry, such as lanes, fire trails and private roads. Fences, posts, earth mounds, bollards and rocks have all been used to prevent vehicle access. Each site is unique and therefore deterrents need to be carefully managed and planned. On some sites a single barrier blocking access is all that is required. In some cases offenders may be able to continue to dump over a barrier, but this increases the risk of being caught and may deter the majority of offenders.

Councils used funding from the 2002-2004 Illegal Dumping Clean-up and Deterrence Grants to build a range of physical barriers with varying success. They reported that some sites were difficult to enclose.



Beautification: Woollahra Municipal Council's 'Liveable Lanes' project

Woollahra Municipal Council's 'Liveable Lanes' project was designed to change its community's perception of back lanes as a dumping ground. The council was committed to beautify and improve the look and feel of the area to increase community pride and, therefore, reduce the incidence of illegal dumping. It used a 2002-2004 Illegal Dumping Clean-up and Deterrence grant to clean up dumping hot spots, landscape them and carry out an education campaign to deter future dumping. Minor capital works in the area complemented the educational component.

The council developed its project in an attempt to keep sites clean long after the campaign had finished. A second part of the project focused on a reserve that experienced persistent dumping. It used landscaping works, including new plants for garden beds, to improve the aesthetics of the area and detract dumpers. The new plants were selected to make it difficult to hide bags and other dumped rubbish, as was previously the case. Plants were widely dispersed so that the garden is more open to deter other anti-social behaviours. The council also built a retaining wall to stop bins being dragged through, presented and stored in the garden area.

Woollahra Municipal Council attributes the success of its project to a multidisciplinary team of council staff, including team members from communications, waste section, compliance, outdoor works and management, who collaborated and brought together areas of the project according to their expertise. A broader, more strategic prevention program can bring in representation from much wider sections of council asking for comments on program design, use and evaluation. The project is also a good example of community participation where the council values the community as a partner.

Outcome

The enhancement of the Oswald Street Reserve has provided the most positive results in improved environment. Dumps in this area have decreased and been maintained over a five-month period.



Fences and locked gates

Many councils used illegal dumping clean up and deterrence grants of 2002-2004 to install fences and locked gates.

Some councils indicated that new gates and locks were vandalised almost immediately after installation. Locks were tampered with or gates and fences broken down. For some dumpers, locked gates "just seem to be an invitation to become a vandal as well". Often there was no real alternative to fences and gates and so many councils need to consider vandalism in project planning as either programmed maintenance scheduled for a period of time or as the additional cost of vandal-resistant materials.

At a number of sites vandal-resistant locks, locking bollards and almost indestructible fence materials have been carefully selected.

Concrete blocks

A number of councils reported using concrete blocks to barricade entry to a site. This was described as a 'relatively cheap, inexpensive and effective option'. For many residents though the blocks are unsightly, do not fit in with the natural environment and may incur complaints to council. Some sites had experienced graffiti soon after installing the blocks.



Indestructable fencing materials

Tharawal Local Aboriginal Land Council (LALC) and DECC Parks and Wildlife Division used almost indestructible fence materials at a remote site in Wedderburn to prevent 4WD and commercial vehicles dumping materials. The adjoining landholder (industry) donated railway track and steel rope, which was used to erect a 500-metre fence line.

Outcome

The fence has remained intact and unauthorised vehicles have been kept out.



Fences to protect rural hotspots

Maitland City Council selected a rural style fence to restrict vehicle access at some rural sites.

Outcome

It helped reduce illegal dumping on the sites and restricted access to a small stockpile area for local road reconstruction works. Four of the five fenced sites continued to show little signs of illegal dumping activity 12 months after the project.

Logs and boulders

Logs and boulders used as barriers are seen as consistent with broader environmental principles and are relatively well accepted by the community; however, they do present some problems. Council staff report that logs biodegrade over time and then the barrier is compromised. There are also reports of four-wheel vehicles driving straight over logs: the drivers see them as a part of the natural environment and not as a barrier.

Boulders

Large boulders placed close together will deter many motor vehicles from entering a site. Boulders can be difficult to get and there are potential environmental consequences if they are taken from the natural environment. A project in Queanbeyan obtained donated rocks from a nearby quarry. The machinery required to transport and move suitably sized rocks into place is also generally expensive.

Earth mounds

Earth mounds are more accepted by the community, do not attract graffiti and deter many vehicles used to transport materials for illegal dumping. Working within broader environmental values councils have formed illegally dumped fill material into earth mounds to limit access to sites. Councils have commented that it could be an expensive and time-consuming activity and the continuing maintenance required to rehabilitate the site and establish plants on the mounds can incur additional costs.



Log barriers used by Port Stephens Council

Port Stephens Council used log barriers for a project but had to maintain and replace them for six-months until offenders got the message.

Outcome

Dumping frequency declined over time.



Earth mounds - joint initiative

Wyong and Sutherland councils received co-operation from the RTA when they built earth mounds to limit access to sites.

Outcome

The councils noted, 'sites where more natural methods were used seemed to be accepted more by the local community'.



4.2 Increase the risk of getting caught

The decision to commit an offence is influenced by the perceived risk of getting caught and the perceived benefits from the action ('rational choice'). Motive, opportunity, rewards, cost savings and so on can make the crime attractive. These factors change with different situations and thus a crime that may seem worth the risk or beneficial in one instance or place may not appear so at a different time or place. A perceived increase in the likelihood of getting caught deters some offenders from engaging in criminal activity such as illegal dumping.²

Surveillance

Surveillance can be an extremely effective technique in intelligence gathering, collecting evidence for prosecutions and deterring would-be dumpers. However, it can also be time consuming and expensive. So it's prudent to limit surveillance activities to known hot spots and times when it is most likely to occur. Analysis of your council's illegal dumping data (which may include surveillance data), may reveal that the frequency of dumping incidents varies with the season, day of the week and time of the day. For example, data for Detroit in the US revealed that 72% of dumping occurred between 5:00 pm and 12 midnight on Tuesdays and Wednesdays.¹¹ The City of Greater Dandenong in Victoria found that illegal dumping occurred in two annual peaks - one after winter (spring cleaning time) and the other immediately after the annual hard rubbish collection, most likely by residents who missed the collection. Acting on this surveillance data can be a more effective use of enforcement resources.

Surveillance cameras

Before installing cameras, think about why you are introducing them and how they are intended to work. Cameras have their limitations and can be expensive.¹² For example, the picture quality you get from static, unmanned cameras covering a wide area is often not good enough to identify individuals or read licence plates. But the footage you get from such cameras is still suitable for intelligence gathering. Close-in shots, on the other hand, can miss important events that occur off camera. More permanent pan-and-scan cameras resolve this, but are far more expensive to install, operate and maintain.

Using surveillance cameras to deter potential offenders

You can also use dummy cameras to increase the perceived risks to offenders, but they tend to become less effective with time as dumpers realise the risks of being caught haven't really changed. Using a combination of real and fake cameras can create the perception of widespread surveillance, while presenting a real risk to offenders and keeping council costs down.

The presence of a surveillance camera should normally be sign-posted to deter people from dumping.¹² Where there are specific common hot spots, it is more effective to install a camera that all can see. Where the problem covers more of a general area, such as bushland and roadsides, consider using hidden cameras with signs throughout the area to indicate it is under surveillance. You need to bear in mind the Privacy and Personal Information Protection Act 1998 when conducting hidden surveillance.

Using surveillance cameras to collect evidence for criminal prosecutions

Only officers who are experienced in locating and operating surveillance cameras should use them to collect admissible evidence in criminal proceedings. Consider whether or not the images will assist in proving any particular offence as well as whether or not the location of the camera will place another person, say a nearby landowner, at risk.



Dummy camera trial

Campbelltown City Council produced 13 dummy cameras, a relatively low investment at a cost of \$20 per unit, which was initially effective in deterring illegal dumping.

Outcome

Nine months later the dumpers realised the cameras were fake after one was vandalised. By then however the cameras had paid for themselves many times over in reduced clean up costs.



Generally, you need to locate the camera in a place where it will not be found or damaged but still be able to capture images that will assist in proving the elements of the relevant offence. The officers will need to ensure they have the statutory power to install and recover the camera. They also need to be able to give direct evidence about the following:

- 1. How the camera was installed and removed.
- 2. How it operates, including the manner in which it automatically captures and stores the images.
- 3. Generating a log of the images that have been captured and identifying those images.

All of this evidence will help establish that the images are genuine and have not been manipulated or damaged in any way.

It is important to note that evidence about the manner in which surveillance is conducted may be protected from disclosure, even in criminal trials, by the concept of public interest immunity. This may mean, for example, that any covert techniques or methods that need to remain confidential to ensure appropriate evidence could be obtained in the future can be kept confidential, or that the identity of any person who is not an authorised officer and has assisted in the surveillance (for example, a nearby landowner) need not be revealed.

If a council is thinking of using surveillance cameras to collect evidence, it should obtain legal advice about the processes to be followed to make sure the images obtained can be used in criminal proceedings.

Using surveillance cameras for intelligence gathering

Surveillance cameras can also be used to gather information about locations and times that illegal dumping is most likely to occur. This information can then be used in devising your illegal dumping program.



Closed Circuit Television (CCTV) used by Hornsby Shire Council

Hornsby Shire Council located skip bins on the shore to provide garbage collection to river dwelling residents in one of its suburbs. Illegal dumping by outsiders led to the skip bins overflowing. The council installed two CCTV cameras and signs to monitor and prevent illegal dumping in the skip bins. The cameras transmit to council offices and record 24 hours a day. One camera pans the area and the other has a fixed focus on the skip bin. The council uses the cameras in two ways, the first for monitoring and the second for intelligence gathering. The council relies on the support of the community to report dumping incidents; the recorded images are then viewed for evidence of the incident.

Outcome

The cameras have been a very successful deterrent. Twenty months after installation there were only four illegal dumping incidents that required following up.

Council patrols

Patrolling areas where dumping is likely to occur may lead to catching illegal dumpers in the act, thus increasing the likelihood of successful prosecution. It also serves to increase the perceived risk of being caught.





Patrolling hot spots

The City of Greater Dandenong officers conduct regular patrols, with a focus on known hot spots. Officers wear vests that read 'Litter Patrol' and vehicles are marked with removable 'Litter Patrol' magnetic signs.

Outcome

The presence of patrols with their highly visible yellow and black branding provides a constant visual reminder that dumping is illegal and the area is under surveillance.

Aerial surveillance

Aerial surveillance using helicopters and light planes is a useful way of identifying illegal dumping hot spots in rural and remote areas. This surveillance requires officers to spot potential illegal dumping sites from the air, photograph them and take a GPS reading so that the location can be found again and investigated on the ground. This type of surveillance is important for increasing the perceived risk of getting caught for illegal activities that ordinarily can't be seen from the ground. As aerial surveillance is high profile and of interest to the public make sure it's accompanied by media coverage.

Community surveillance

Councils can encourage residents to report instances of illegal dumping in their local area. Residents should be made aware of what constitutes illegal activity and what information they will be required to provide (for example vehicle registration number, vehicle description, date, time and place where the incident occurred etc). Advertising the council call centre number for reporting incidents combined with a reward system for information leading to a conviction encourages community involvement.11

Right: The Greater Southern RID Squad have produced a flyer with a magnet attached for residents to encourage them to report illegal dumpers.



'Dob in a dumper' scheme

Fairfield, Camden, Gosford, Bankstown and Liverpool councils have introduced schemes to encourage residents to report instances of illegal dumping.

Fairfield City Council has operated the 'Dob in a Dumper' scheme since 1999, which offers a \$300 reward to residents who provide information about a dumping incident that results in a successful prosecution.

Outcome

Fairfield City Council's 2004-05 State of the Environment Report links an increase in the number of reports of dumped rubbish, illegal waste dumping and littering to community awareness of its 'Dob in a Dumper' scheme.





Compliance campaigns

It is important to keep potential offenders guessing about the risk of getting caught. This can be achieved by periodic, high profile compliance campaigns or 'crackdowns' in areas where illegal dumping is prevalent. Crackdowns can be used to emphasise officer presence and increase enforcement action, both of which are intended to make potential offenders think they are more likely than usual to get caught thus enhancing the deterrent effect.9

If you want this to happen, your compliance campaigns should include:

- publicity about successful convictions and the use of covert surveillance (for example surveillance cameras, community surveillance, aerial surveillance).
- messages advertised in hot spots inviting residents and businesses to anonymously report those known to illegally dump waste.
- random inspections of premises, such as:
 - commercial areas and shopping strips to check for a garbage collection service adequate for their needs or at closing times.
 - waste generation sites (for example building and demolition sites) to check compliance with development consent conditions relating to waste disposal.
 - properties where waste is received check for illegal waste storage or disposal activities, for example accepting fill material.
- observations of waste transport vehicles to check compliance with covered loads requirements (clause 49 of the Waste Regulation).
- increased patrols of hot spots.
- partnerships made with other agencies, such as adjoining councils, DEC, RID Squad, NSW Workcover etc.
- desktop auditing of compliance with conditions of development consent relating to submission of waste disposal receipts and compliance with waste management plans.

Planning and executing a compliance campaign can follow the same stages outlined in 'Bringing it together in a program' in Section 5.

Important information for waste transporters and the waste industry



DECC brochure available at www.environment.nsw.gov.au





Case Study 1: Effective crackdown on littering and illegal dumping - Sutherland Shire Council's **Heathcote Road Project**

The Problem

Heathcote Road had been used for decades as a dumping ground for construction, industrial and domestic waste and abandoned vehicles. This caused significant environmental, public health problems and created an eyesore.

Objectives

 Reduce illegal dumping on a 15-kilometre stretch of Heathcote Road (from Holsworthy to Heathcote).

Stakeholders, targets and partners

- RTA
- Councils (Sutherland and Liverpool)
- Australian Army
- Gandangarra Aboriginal Land Council
- WSN Environmental Solutions
- Former Southern Sydney and Western Sydney Waste Boards (now DECC)
- NSW Rural Fire Service

What did they do (objectives)?

The project adopted council's 'inform and then enforce' approach, encompassing an extensive education campaign followed by a focus on enforcement.

- 1. Intelligence gathering: physical surveillance and camera surveillance
 - Council's Environmental Protection Officers maintained surveillance of Heathcote Road over 24 hours and throughout the week to identify illegal dumping hot spots.
 - Council tested a hidden surveillance camera in isolated bushland. The camera had an independent battery power source. The camera surveillance was conducted in accordance with privacy management guidelines published by The Attorney General's Office.
- 2. Building of landscaped mounds as physical barriers
 - This stretch of Heathcote Road consists of many vehicular access points into the bush, which had been used by dumpers. Council in co-operation with the RTA, Liverpool City Council and the Australian Army constructed landscaped mounds to stop vehicle access in this stretch of road.
- 3. Community education/promotion program
 - Council developed a promotional campaign for the residents of the four surrounding suburbs. This included distributing an information pack, which also contained a car pad to help record information should residents witness illegal dumping activities, a fridge magnet, sticker and community newsletter. To directly communicate with residents and encourage greater ownership of the project and outcomes, council organised education face-to-face with resident precinct committees.
 - Heathcote Road residents received an information mail-out from council.

Case study continued...

- A general campaign with media articles and advertisements was directed at Sutherland Shire and Liverpool City residents.
- Twenty-five large permanent reflective illegal dumping signs were installed in the Liverpool and Sutherland LGAs to comply with privacy management guidelines. They also enforced the message to residents and motorists that the area was under surveillance for illegal dumping. This reached motorists who regularly used Heathcote Road, but did not live in the Sutherland or Liverpool council areas, so would not be reached by other means.
- Council used independent community consultation before and after the campaign to gauge the effectiveness of the strategies to reduce illegal dumping.

Funding and resources

The project was funded with significant state and local agency support. Its total cost was \$190,000, with a council contribution of \$60,000 and a \$25,000 grant from the Southern Sydney Waste Planning and Management Board to buy cameras. The remainder consisted largely of in-kind contributions from partner agencies, including the RTA, and industry.

Outcomes

- Continued patrols by enforcement officers have reported a marked decrease in the number of illegal dumping incidents.
- The RTA reported a 96% decrease in the amount of material collected along Heathcote Road during monthly clean up activities over a 12-month period.
- Sutherland Shire Council has a 93% success rate for prosecuting illegal dumping and environmental offences.
- The RTA is saving approximately \$45,000 annually in clean up costs.

Essential success factors included:

- Co-operation between a range of different stakeholders working towards a common goal.
- A comprehensive education campaign aimed at both local residents and motorists coming from outside the area, combined with an enforcement regime.
- Investigative persistence and interagency networking.

Further Information

Manager Regulation and Enforcement Sutherland Shire Council Phone (02) 9710 0333



Partnerships

Many measures to reduce illegal dumping require other councils and agencies (for example DEC, Workcover, RTA, Department of Housing, Sydney Catchment Authority, Police etc) to be engaged for their powers and/or their resources. Where this is the case, partnerships need to be developed that encourage other councils and agencies to take action and contribute. When dealing with cross-LGA illegal dumping it can be useful to foster co-operation with neighbouring councils to share intelligence and costs. ¹² For more information see Section 5.0.

Publicise successes

You should consider enforcement as part of a wider reduction program rather than simply a reaction to an illegal dumping incident. Given the difficulty and cost associated with court convictions for illegal dumping, it is crucial to use publicity for the greatest possible deterrence.

Well-targeted publicity should aim to:

- reinforce the general population's understanding that illegal dumping is criminal behaviour
- raise awareness of the extent of penalties that can be imposed
- reassure residents that effective action is being taken to deal with such problems
- encourage reporting and identification of other offenders
- deter others from offending, through the example of prosecution and embarrassment because of the publicity from committing such offences.¹²

An example of a Liverpool City Council media release used to publicise a successful prosecution follows.



Example of a media release by Liverpool City Council on 19 March 2007.

'Council winning the fight against illegal dumpers'

Liverpool City Council is winning the fight against illegal dumpers, prosecuting more than five offenders this month.

Fines ranging from \$1,500 to \$28,000 have been issued for a range of offences, including dumping 283 cubic metres of soil and building waste material in Kemps Creek. One offender dumped 120 cubic metres of building site waste containing asbestos in 12 separate piles in Craik Park, Austral.

Clean-up notices were issued for all of the affected sites, with some offenders ordered to conduct a remediation of the site due to the degradation of the land caused by the illegal waste.

"Council is winning the war against illegal dumpers," said Liverpool City Council's Corporate Manager Services, David Tuxford.

"Our illegal waste crew and response unit is dedicated to the task of identifying offenders and cleaning up Liverpool's streets.

"Illegal dumping is a serious offence and, as our recent successes have shown, offenders will be caught and prosecuted," Mr Tuxford said.

Mr Tuxford said Liverpool's rural areas were a hot spot for illegal dumping because of the large amounts of open space and acreage property sizes.

Example continued...

"Regular patrols are conducted throughout Liverpool, including the rural areas, as part of council's Clean Streets Program," Mr Tuxford said.

"I encourage people to report illegal dumping by phoning council on 1300 36 2170. Your identity will be protected and you will be helping council to find and prosecute the offenders."

Liverpool City Council residents are entitled to two free collections of general household waste each year. Scrap metal and whitegoods can also be collected free, and will be recycled.

For trade and building waste, contact council on 1300 36 2170 for a copy of a waste management information kit, DCP 46 for builders, developers and home owners. This contains a recycling directory with the relevant contact details of where you can dispose of waste correctly and legally in Western Sydney.

For more information phone 1300 36 2170 or visit www.liverpool.nsw.gov.au

When pursuing prosecutions, councils can seek to have the court order the defendant, as a general deterrent, to publish his or her conviction in a chosen media outlet, for example the Sydney Morning Herald, local newspaper, industry journal etc. An example follows of a publication order sought and granted for a case prosecuted by the EPA (names have been withheld).

Some offenders have suggested that the publicity they received following a prosecution for illegal dumping was less welcome than the fine they received, and put them off doing anything like that again.

Example of a publication order sought and granted for a case prosecuted by the EPA

Pursuant to Part 8.3 of the Protection of the Environment Operations Act 1997 (NSW).

[Company Y logo]

On 21 April 2005 Company Y and a Mr Y (a Director of the Company) were convicted and fined \$40,000 and \$20,000 respectively in the Land and Environment Court of New South Wales for transporting waste to a place that could not lawfully be used as a waste facility for that waste. This is an offence against section 143(1)(a) of the Protection of Environment Operations Act 1997 (NSW). The offences involved the unlawful transport of between 1310-1661 tonnes of predominantly building and demolition waste to premises at Phoenix Park. The disposal of the waste at the premises was unlawful because there was:

- (a) no environment protection licence issued by the Environment Protection Authority of the New South Wales for the waste facility;
- (b) no development consent from the local council (X Council); and
- (c) no approval from the Minister administering the Water Management Act 2000 (NSW) for a structure adjacent to a levee bank designed to prevent flooding from a tributary of the Hunter River.

Company Y and Mr Y were prosecuted by the Environment Protection Authority and were ordered by the Land and Environment Court to place this notice in the Newcastle Herald and Waste Management and Environment magazine.



4.3 Reduce the rewards: deny financial benefits

A major motive for illegal dumping is to avoid the costs of legitimate disposal. For businesses generating large amounts of waste, such as builders and demolishers, the financial rewards from illegal dumping can be substantial.¹²

Waste transporters can also save a lot of money by illegal dumping. Individual householders may wish to avoid the costs and effort of taking their waste to a waste facility.

Free or subsidised waste services

Where economically viable, councils should consider providing free or subsidised waste disposal options for recyclable waste (see Section 4.4). This would make legal waste disposal cheaper and reduce the perceived benefits of illegal dumping to the offender.¹²

Fines

Fines are designed to reduce the rewards of illegal dumping to the offender. Under the POEO Act, the penalty levels are significant. For instance, a breach of section 143 of the POEO Act by an individual attracts a minimum on-the-spot fine of \$750 (see Section 2.2) and a maximum court penalty of \$250,000. Similarly, administrative fees associated with clean-up notices and prevention notices issued under the POEO Act reduce the rewards from illegal dumping.

Require offenders to clean up

Probably the most significant potential reward from illegal dumping is removed by making the offender pay to clean up the illegally dumped waste. Clean up costs can vary depending on the type, volume and location of the waste, and whether special equipment or labour is needed to carry out the task. However, the financial burden of cleaning up would equal (at least) any benefit that was initially gained from the illegal dumping.

4.4 Reduce provocations: don't give them a reason to dump

Householders are more likely to be motivated to illegally dump if they perceive that council's waste collection and disposal services are not efficient or poorly communicated. Householders and businesses may also be provoked if they consider waste disposal costs to be unreasonable. Individuals may also feel provoked to illegally dump in areas that are not aesthetically pleasing, ie contain dumped waste, graffiti, weeds etc, as they feel their contribution will not make much difference.

Methods to reduce these provocations include efficient waste collection services that meet community needs and providing information detailing where else you can dispose of waste including reuse and recycling. Council policies or procedures relating to waste management that take more time or effort to comply with or are seen to unnecessarily penalise people increase the likelihood of dumping.

Efficient and well communicated waste services

Ensuring the householders' waste collection and disposal services meet the demand may reduce provocation. This might include providing larger waste receptacles or, in areas where high-density housing limits the available space for additional bins, increasing the frequency of collection. Council might also consider whether there is a need to provide and/or promote services for other waste types. Resident surveys and bin audits are useful methods of assessing whether current services meet their demands.

Effective communication about waste collection and disposal services, to explain why they are needed and how they work, is important to reduce the level of frustration for individuals. Frustrated individuals pose an increased risk of illegal dumping.

Household waste

When householders need to dispose of an item they may consider the options and decide to illegally dump. For example, if council kerb-side clean up day is not soon enough, and the items cannot be reused (for example through a charity centre) or stored, the easiest option is to dump them on the footpath. For further information about what motivates people to illegally dump see Section 1.3.

Smart building design

Residents may feel that their options for doing the right thing are limited by poor building design. People living in multi-unit dwellings (MUDs) have highlighted a lack of on-site storage space for unwanted items. Adequate space can allow temporary storage until transport or options like council kerbside clean up days occur. If this is a requirement in council planning policies it could minimise reasons for illegal dumping. For more information see Resource NSW's (2002) Better Practice Guide for Waste Management in Multi-Unit Dwellings (see Section 7.3 Resources under 'Multi-unit dwellings').

Council kerb-side clean up or hard waste collection services

The kerbside collection of bulky household waste (inert materials such as metals and whitegoods, unwanted household appliances, lawnmowers, tin and scrap iron, non-recyclable garden organics, old toys and unwanted furniture, excluding construction and demolition waste) is particular to urban areas.

It is unclear whether kerb-side clean up or hard waste collection services actually reduce illegal dumping.

Nevertheless the service is provided by many councils in response to community demands for disposal of this type of waste, and with the expectation that it will reduce illegal dumping.

The most common patterns are a scheduled zone-based service, an on-demand service or a mixture of these. Ondemand services may be fee-based or free of charge. Each model is a compromise between a council's willingness to provide the service and supplying flexible and responsive services to residents when they need them.

A 1999 audit found that of 25 councils surveyed, 19 were using a zone-based (or mixed) collection service compared with six using on-demand. Although the average volume per household was higher in the ondemand collections the participation rate was lower. Zone collections had a significantly higher percentage of unacceptable materials placed out for collection.

A lack of baseline data on illegal dumping means there has been no direct analysis to assess whether a particular kerbside collection model contributes to or reduces illegal dumping. Table 3 provides a summary of the advantages, disadvantages and implications of the common types of hard waste collection services.

Table 3. Council waste collection and disposal services

Zone-based service	An annual domestic waste collection calendar typically includes the dates for each zone (group of streets) to be serviced. Residents identify the zone in which they live. Some councils also do follow-up notification throughout the year, either directly to households or via newspapers.
For	 scheduling works, labour and resources is predictable for the council can promote a 'spring cleaning' attitude and reduce the accumulation of wastes that may otherwise be dumped allows residents to plan their activities around known collection dates
Against	 collection dates may not meet the needs of individuals encourages people in adjoining areas to add to people's material placed out for collection long presentation times affect the streetscape tends to increase the total volume presented as residents search for items to include does not coincide with the end of leases in rental homes makes education and promotion more complex
To be most effective	 promote the areas covered two weeks before collection advertise the service to the occupier or tenant rather than the property owner widely distribute information on collection dates, including to real estate agents include information on lawful disposal of materials council will not collect ensure rangers, compliance or waste education staff have standard letters in council vehicles to advise on the spot if waste is put out on the street for collection when it should not be
Example of a council that uses this service	In 1999, Fairfield City Council changed from an on-demand service to a three-monthly scheduled service because it found that people in the street would add to the individual's materials placed for collection.



On-demand service	These are run in a variety of ways.
	Residents place a call to council or its contractor to notify they have materials for collection.
	The service may be offered as a number of free collections annually for each household or on a fee-paying basis.
	Customers can request the service by phone, in person or via the web.
	In some cases councils issue stickers for residents to place on the items to differentiate them from illegal dumping.
For	• residents use it less often, which produces lower volumes overall
	• the service is more uniform, and it's simpler and easier to inform people about it
	• waste piles on the street are restricted
	• waste piles remain for less time
	• reduces how often people put waste out on the street for collection when they should not
	 customer service staff can emphasise what materials are acceptable and advise on options for unacceptable materials
Against	additional customer service staff are needed to co-ordinate it
	• if residents do not conform to council directions they can be suspected of illegal dumping
	• collectors may reject some items, which then get dumped
	• people unwilling/unable to pay may dump anyway
To be most effective	• customer service staff inform callers about alternatives for unacceptable materials
	• customer service staff can explain why some items are unacceptable
	• inform residents that items will be listed on the sticker and ensure they include all items
	• the following information is sent to the residents with the authorisation sticker:
	- a list of items nominated for collection
	- materials accepted for collection
	- alternative disposal for unwanted items
	- illegal dumping penalties
	- that the wording on the sticker is to partially deter other people adding to the pile,
	which may risk the waste not being removed; and
	- wording on stickers indicates that ONLY the registered items will be collected,
	and gives the phone number for more collection services
Example of a council that uses this service	Liverpool City Council has a 1300 number to book on-demand collection services. The resident must provide two weeks notice. Council forwards a sticker to the resident to identify the materials as authorised for collection.

Table 3. continued...

Combination service: urban	Some councils supplement a zone-based scheduled service with an on-demand collection to provide a flexible and responsive service to residents.	
For	 combines the benefits of seasonal clean-out promotions with residents' immediate needs for disposal services may help prevent or reduce illegal dumping 	
Against	 potential to increase overall volumes requires significant administrative support more costly to provide higher level of confusion for residents 	
To be most effective	needs a significant amount of promotion and education	
Example of a council that uses this service	North Sydney Council has a scheduled service supplemented with an on-demand service. The council's waste contractor will only collect piles registered with the on-demand service. The council reports that neighbours see the registered pile and put their own waste out. They then call council the next day when their waste is not collected. This results in council having to pick up what are now illegally dumped materials.	
Combination service: rural landfill vouchers	Some councils provide this service to rural residents to dispose of hard waste as it assists in preventing illegal landfilling or illegal dumping. It is usually supplied as a voucher to ratepayers for free disposal at a landfill, which provides flexibility and can be traded or shared as the resident chooses.	
For	help prevent illegal landfilling or illegal dumping residents can use the service when it suits them	
Against	 some people have attempted to duplicate the vouchers items that are refused at the landfill, such as chemicals and fridges, can be seen dumped on the way out 	
To be most effective	 make the vouchers difficult to duplicate through choice of paper or printing technique provide information at the landfill about lawful disposal options for unacceptable items and the penalties for illegal dumping place a sticker on, or record, unacceptable materials before resident leaves landfill 	
Example of a council that uses this service	Cessnock, Singleton and Lismore council's use this system. Singleton Council staff report they have been using the voucher for about six years; it is in addition to the other service. The community have given it a positive response but staff note that a downside is some people don't have transport. Cessnock City Council reports an annual uptake of 80% of the vouchers.	



Effective communication about household waste services

The more effort required to identify and find proper disposal options, the greater the provocation to dump. For example, home renovators may not know how to lawfully dispose of waste that they only occasionally generate, particularly those wastes not accepted through the regular council waste collection services.

Consistent communication is essential to ensure clear understanding and reduce illegal dumping as a consequence of misunderstanding or provocation. Communication about waste services needs to clearly state what service is offered; what the resident stands to gain; and what is expected of the resident.

There are many ways that councils can communicate waste collection and disposal services to their residents. Some examples include:

- Clearly communicate the options, contact numbers, opening times and wastes accepted at the local disposal centres on council's annual domestic waste management calendar.
- Landfill staff who provide information on alternative reuse or disposal location if the waste cannot be accepted at the landfill.

Council websites can be used to list lawful waste disposal locations for different household wastes and alternatives to waste disposal. For example, Liverpool City has a web page about 'where to dispose of material properly'. Manly has posted an 'A to Z of unwanted items disposal alternatives'. Wingecarribee's general waste and recycling web page has numerous links to the local resource recovery site.

Give special consideration to tailoring communication strategies about waste services for short-term tenants and people from culturally and linguistically diverse (CALD) backgrounds. Compared with owners and longterm tenants, these groups are less likely to be able to nominate the hard-waste collection services as an option for disposing of unwanted items.6

In addition to the measures listed in Table 3 (column 'To be most effective'), Table 4 below suggests some general methods and content for communicating with residents about council's kerb-side clean up or hard waste collection services.

Table 4. Communicating with residents about council's kerb-side clean up or hard waste collection services

How to communicate	What to communicate
use pictures and community languages to explain waste practices	rules on what can be put out, information on what will not be collected and why
ensure information is available and accessible for those in short tenancies	 details of local waste management facilities location, cost, materials accepted details of alternative disposal options for materials not accepted in the collection and for recycling centres and charities
tell people about the alternatives	
tell people why some items cannot be collected	
send the notice of council clean up dates with reminders two weeks before it will happen	
a help line for questions on specific items	

Commercial and industrial waste

Avoiding the costs of using legitimate waste disposal facilities emerged as a strong motive for illegal dumping. The tight margins that many tradespeople work with and the competitive market mean they are extremely sensitive to cost (this includes time to transport waste to a facility). For further information about what motivates people to illegally dump see Section 1.3.

Council commercial and industrial waste collection services

Few councils provide a collection or disposal service for commercial and industrial waste. One example is Fairfield City Council, which collects inert or solid waste from shopping centres, restaurants, offices, factories, schools, hospitals and government offices. Council's service reportedly provides an effective way of managing commercial waste, ensuring that the LGA stays clean and free from garbage. Council advertises that the service is reliable and competitively priced for customers, with all monies earned going back to community services.

Effective communication about these collection services

As previously mentioned, few councils provide waste collection or waste disposal services for the commercial sector. Because of this most councils also do not distribute information about these services. The lack of information was emphasised by tradespeople surveyed in the UK as a cause of frustration and increase in the tendency to illegally dump.¹²

The UK research highlighted the lack of information about local commercial garbage tips. 12 Small businesses often work in areas they are unfamiliar with, particularly when it comes to waste disposal service options and facilities. This puts them at even more of a disadvantage.

Education and information campaigns require co-ordination and co-operation between different sections within councils. A typical co-ordination effort for an enforcement and education campaign, such as Hurstville City Council operates, would involve setting up an illegal dumping task force made up of representatives from the compliance, waste management and education sections of council.



Hurstville City Council's Commercial Illegal Dumping Education and Awareness (IDEA) Program

A high incidence of illegal dumping around commercial premises in Hurstville LGA and frequent complaints led to the development of the commercial IDEA program. The complaints were mainly about the untidiness and smell of commercial bins, the untidiness of commercial premises, the amount of materials dumped around commercial premises and the amount of materials dumped in car parks.

The project's aim included awareness raising through educational materials and signs and also to provide assistance with waste and recycling services. An important priority was to establish that all commercial premises had a garbage service that could adequately deal with their waste generation.

The program also provided information about the council's commercial services, where else to obtain commercial garbage or recycling services and who to call if they had bin-related problems. During shop visits the council staff took the opportunity to inform people about illegal dumping and penalties.

Outcomes

900 businesses were visited in the program, and illegal dumping was reduced by 33%.



Construction and demolition waste

Where council does not provide a collection or disposal service for a particular type of waste, such as construction and demolition waste, it is important that information be provided detailing where else it may be disposed of legally. Many residents and businesses see their local council as the primary source of information about local services, including waste disposal. Providing this information, even if council does not run the service, may help remove the frustrations that provoke illegal dumping as well as removing excuses by assisting compliance.

Council's waste education officers and building inspectors should consider conveying information to local builders relating to lawful disposal locations for C&D waste. The DECC's website includes information relating to appropriate disposal locations for asbestos waste (see Section 7.3 Resources under 'Asbestos waste')

Councils could compile a list of local landfills and transfer stations that can lawfully accept construction and demolition waste and provide it to local builders to reduce provocations to illegally dump. Alternatives to the disposal of waste (eg lawful recycling or reuse facilities) could also be listed.



DECC brochure available at www.environment.nsw.gov.au

Reasonable waste service costs

Individuals are more likely to dump their waste if they consider the cost of disposal to be unreasonable. Councils can offer or promote waste collection and disposal services, as well as alternatives to the disposal of waste, that are free or subsidised to reduce provocations for dumping.

Recycling drop-off and reuse centres, community garage sales, free green waste collection and mulching services, kerb-side clean up or hard waste collection (discussed above) are examples of low-cost solutions for residents wishing to dispose of unwanted items. Councils may wish to participate in or promote the services of other recycling programs for waste generated in their local government area to reduce provocations for illegal dumping. These can be found at Planet Ark's *Recycling Near You* website, which provides recycling information for most types of waste for each local government area (see Section 7.3 Resources under 'Recycling, reuse and alternatives to disposing of waste').

Recycling drop-off and reuse centres

Some councils provide drop-off centres at their landfills or transfer stations where residents can take and leave, generally for free or reduced charges, unwanted recyclable household items, such as white goods and green waste. Many private landfills and transfer stations also provide this service. For example, Blue Mountains City Council offers its residents a free drop-off at its two waste management facilities for small recyclables, scrap metals, used car batteries, gas bottles and engine oil and a reduced charge for separated garden prunings. They also operate a reuse centre at one of the facilities that allows residents to leave items such as furniture and anything they think someone else could use.

The DECC is working with local councils to provide drop-off centres for old or leftover chemicals found around the home under the Household Chemical Cleanout scheme. Under this scheme, weekend drop-off centres are organised throughout the Sydney, Hunter and Illawarra regions where residents can leave their unwanted household chemicals for free. (see Section 7.3 Resources under 'Recycling, reuse and alternatives to disposing of waste').



Community garage sales

Individuals may feel inclined to drag unwanted items to the front of the house in the belief that someone else might want the item. This encourages imitation by others who may think that the person may be responding to notice of a council clean up. Councils may be able to counter this behaviour by assisting community garage sales that enable people to dispose of, or even sell, unwanted items to others. Manly Council advertises that residents can hold 'street garage sales' if they apply to close the road.



North coast councils' Second-Hand Saturday

Second-Hand Saturday is an annual north coast event involving the co-ordination of neighbourhood garage sales across the region (Byron, Ballina, Clarence Valley, Lismore and Richmond Valley councils) to sell second-hand goods between residents in selected streets. Under this scheme, residents can register the address of their garage sale and it is listed for free in the local paper on the day, and they are also entered in a prize draw.

Outcomes

The 2005 event resulted in:

- Approximately 60 tonnes of material changed hands on the day, which kept it out of council landfills.
- About 30% of the people holding garage sales reported that their awareness of reuse had increased, with 65% indicating that their awareness was the same.
- The majority of participants highlighted social benefits from participation and others also emphasised environmental and economic benefits.

Green waste collection and free mulching

Many metropolitan councils are now providing residents with a free separate garden waste bin. Garden waste is generally collected and taken to a special processing facility to be turned into compost. City of Ryde Council also provides a free mulching service for residents for tree prunings and vegetation.

Community pride

Councils can encourage community pride by enhancing an area's aesthetics, such as removing graffiti quickly, maintaining council land like footpaths and assisting community clean up, beautification and art projects. Creating pride of place may reduce provocations for illegal dumping, as dumpers will think that their behaviour might be noticed. People are more likely to treat neighbourhoods that look nice with respect.





Case Study 2: Neighbourhood Clean Up Blitz, Parramatta City Council

What was the problem or issue?

A group of residents who make up the Noller Park Committee in South Parramatta were fed up with the amount of litter and rubbish being dumped and the lack of community pride in their area.

Stakeholders, targets and partners

Parramatta City Council, residents and the Noller Park Committee.

What did they want to achieve (objectives)?

During a meeting with the Parramatta City Lord Mayor the residents suggested joining forces with Parramatta City Council to trial a one-day Neighbourhood Clean Up Blitz as an innovative way to tackle those problems.

How did they do it?

They door-knocked the area advising of the upcoming event and encouraging people to take part. They also co-ordinated volunteers on the day to ensure the whole south Parramatta area was covered.

Before the day, the council carried out a number of activities to improve the condition of the area, including painting all the seats, repairing potholes in roads, repairing damaged signs, removing trip hazards from footpaths, graffiti removal, general parks maintenance, resurfacing cricket pitches, installing new footpaths and removing trolleys and rubbish.

On the day council staff and residents collected dumped rubbish and junk mail, tidied up nature strips, cleared fallen branches and removed dumped shopping trolleys.

Funding and resources

All participants on the day went into the draw to win cinema tickets and gift vouchers worth \$50 from a hardware store. The first 40 people to register received a free T-shirt. The council supplied participants with gloves, vests, sunscreen and garbage bags and held a barbeque lunch for everyone involved after the blitz. All participants also received a calico bag full of goodies and useful information on positive things they can do for the environment, as well as a native tree.

The Lord Mayor's Community Spirit Budget provided funding. The Noller Park Committee provided a great amount of support for the event, both before and on the day.

Outcomes

- 57 local residents participated
- 2.1 tonnes of waste collected
- a great sense of community spirit and community pride
- the development of a close relationship between the council and the community.

The blitz is an excellent example of community participation where the council values the community as a partner. The council and the community continued to work together after the blitz to maintain the area in its improved condition. The council also encourages residents to 'Dob in a Dumper' by reporting illegally dumped rubbish and taking notes of details that could lead to prosecution, such as the number plates of cars seen illegally dumping rubbish.

Further Information

Manager Environment and Health Parramatta City Council Phone (02) 9806 5000

Keep areas free of illegally dumped material

Councils should consider the likelihood of others dumping in the same location if the waste is not cleaned up immediately. Subsequent dumpers rationalise their behaviour on the grounds that what they have dumped makes very little difference overall.

The responsibility to clean up illegally dumped waste rests with the person reasonably suspected of causing or having caused the illegal dumping ('the polluter') and/or the occupier of the premises. The ARA under the POEO Act has the power to issue clean-up notices to either or both of these parties to require that they clean up the illegally dumped waste (see Section 2.4 for more information).

Clean up of illegally dumped material on public land

In 2006, the DEC surveyed 17 urban and rural NSW councils and found that public land is one of the most common areas affected by illegal dumping. Public land (eg parks, bushland, forests, roads, railway land, Crown land etc.) is under management or control of state or local government agencies (ie the 'occupier').

Under the POEO Act, council is the ARA for illegal dumping activities on public land (excluding Commonwealth land) where the polluter is not a public authority (see Glossary for the definition of public authority), the premises are not licensed and scheduled activities or scheduled developed works are not being carried on at the premises.

In many cases of illegal dumping on public land, the polluter cannot be located despite thorough investigation by the ARA and therefore the occupier is responsible for the clean-up action. The occupier may be council, NSW Maritime, RTA, Department of Lands, DECC (National Parks Division), Forests NSW, State Rail etc.

The following four steps should be taken by occupiers of public land to clean up illegally dumped waste where the polluter cannot be located.

Step 1 – Assess the illegal dumping incident

Occupiers of public land will need to deal with the waste that has been dumped on their land and bear the cost of disposal.

Start by recording information about the incident. It is useful to record the who, what, when, where, why and how in relation to the incident and report it to the ARA for investigation.

Assess whether the dumped material poses harm to public health or the environment. For instance, does it contain hazardous waste (eg unknown chemicals, asbestos, clinical waste etc.) or is it in a sensitive location (eg waterway, endangered ecological community, cultural heritage item etc.)

Assess the dumped waste for any OH&S risks. You should contact the Fire Brigade for assistance with Step 2 if hazards are present and they can render the material safe.

Step 2 - Secure the waste

Occupiers of public land should make sure the waste cannot escape or be interfered with. It may be necessary to erect a temporary sediment fence, cover the waste with plastic, place a warning sign on it and/or wrap it with tape indicating that possible hazardous materials are present and that entry is prohibited.

As well as protecting people and the environment until the waste can be removed, this will ensure that the evidence is left intact for any investigation.

If hazardous material is identified in the waste, such as asbestos, consider whether the local fire authority needs to be called for HAZMAT response and to secure the hazardous waste.

Step 3 – Clean up the illegally dumped waste

Some key considerations for clean up action include:

- Before starting, check with the ARA that they have all the evidence they need for any subsequent investigation.
- Make sure that the proposed clean up measures safe, environmentally sound and cost-effective.
- Ask for assistance from others if you need it (eg fire authority, clean up contractors).





Securing dumped waste - Liverpool City Council

Liverpool City Council covered stockpiles that contained potential asbestos material with plastic to secure evidence and protect the public. A sediment fence was also installed to control movement of the material during wet weather.



- Check the criteria for the Environmental Trust's Emergency Pollution Clean-up Program to see if grant funding can be sought for analysis, temporary storage, clean up contractors and disposal etc. (see Section 7.3 Resources under 'Clean up of illegally dumped waste').
- Notify adjoining landowners or agencies with a vested interest in the land (if appropriate).
- Consider whether the illegally dumped material could be recycled (eg car bodies, timber, bricks, concrete, tyres, green waste etc.).

Clean up works may be undertaken by a council work crew if this in accordance with council's OH&S policy and training requirements. Otherwise, councils can engage waste removal contractors. Information about clean up providers can be found in:

 Yellow Pages® directory under Rubbish Removers and Asbestos Removal and/or Treatment. ■ The DECC's HAZMAT Register, which contains information about providers that offer resources, equipment, products and advice to minimise the environmental effects of hazardous materials incidents (see Section 7.3 Resources under 'Clean up of illegally dumped waste').

It is important to check that your contractor has properly disposed of the waste. You can do this by asking for a copy of the waste disposal receipts.

Step 4 – Prevent it happening again

Use techniques outlined in this handbook to stop illegal dumpers from returning.

4.5 Remove excuses available to offenders: educate and inform the community

Those who dump illegally may find it easy to rationalise and find excuses for their behaviour, as shown by the attitudes of household waste dumpers described in Section 1.3. To remove excuses you need a range of techniques, including advertising waste collection and disposal services, educating to assist compliance, keeping areas free of waste and displaying signs.¹²

Publicise waste services

About 89% of the community respondents to a DEC survey of MUD residents said there was a need to educate people about what they can do with used household items, suggesting that they will be open to information about local waste collection and disposal services.6

These community members wanted: advance notice of council clean up dates, with a reminder about two weeks before; rules on what you can put out and when to do so; and information on what to do with materials that will not be collected and a helpline for questions on specific items. They also wanted details of the local waste management facility – its location (with map); the cost of using it; what materials it will accept and details of alternative disposal options (such as recycling centres and charities).

Effective advertising, marketing of and communication about waste collection and disposal services will make residents and businesses aware of services that are available to them, thereby removing this as an excuse for illegal dumping. Communication about services should include what's happening, why it's happening, and what help is available. Getting the community onside is critical to the success of such services.

See Section 4.4, which has more details in the subsection called 'Efficient and well-communicated waste services'.

Education programs

An essential way to remove excuses for illegal dumping is to educate residents and businesses about their responsibilities relating to lawful waste disposal. Local government has a vital role in educating its local community and helping community action. Education about illegal dumping should aim to make residents and businesses aware of their responsibilities and the dangers of illegal dumping.

Although councils consider education to be an effective technique to prevent illegal dumping, education accounts for about 6% of total local government expenditure on illegal dumping (see Section 1.4).5

It is important to be very clear about who is your target audience before embarking on an education project. Deciding who is your audience will be important for which avenues of communication you might use, and also how you present your message. For more information about running a community education project, councils may wish to refer to the EPA (1997) What we need is a community education project. (see Section 7.3 Resources under 'Education').

Householders

Because dumping is widespread (and in many areas is considered by its residents as socially acceptable around MUDs) it detracts from any real sense of it being illegal. Some participants in the DEC's survey of MUD residents were aware that fines could be issued, but they were quite vague about them. Indeed none of the participants could think of anyone they knew who had been fined for dumping material on the street, and nobody could recall hearing of anyone else having been subject to them.6

Table 5 summarises the findings of the DEC's survey of MUD residents.⁶ It presents the attitudes, educational objectives and advice on how to convey information to the various categories of MUD residents about what they should do with used household items. The educational objectives for other target groups should be developed with an understanding of that target group's current knowledge, attitudes and opinions and practices concerning the issue.



Table 5. Illegal dumping education objectives for MUD residents

Target group	Attitudes	Educational objectives	Survey respondents advice on how to convey the information
Owners	They recognise illegal dumping as an issue, in terms of property values and safety, and try to conform.	Information to maintain/ increase awareness and reinforce behaviour.	Do use laminated information cards, not with rates notices (as they only paid attention to the bill), but through a separate mail-out or letterbox drop. Don't use local libraries, the Internet or radio and newspaper advertising to spread information.
Renters (long-term)	They know it is wrong, but see it as convenient, and rationalise that it is recycling. Know about fines, but do not think that they are enforced.	Highlight that dumping is not socially acceptable behaviour. Improve awareness of disposal options.	Do ask real estate agents to provide the information when tenants move in and move out. Do use posters in common area notice boards and information in local directories. Don't rely on a letterbox drop as they may move in later and miss it.
Renters (short-term)	They have limited connection to the area and neighbours and are less likely to see it as a problem. They feel that it is OK to dump as other people also do it.	Use information kits to let new tenants know about their disposal options. Outline correct behaviour and reinforce that dumping is not socially acceptable.	Do ask real estate agents to provide the information when tenants move in and move out. Do use posters in common area notice boards and information in local directories. Don't rely on a letterbox drop as they may move in later and miss it.
Public housing residents	They see it as the only real alternative and their perception is 'proper' disposal is expensive.	Inform them of the full range of available disposal options.	Do use commercial radio or newspaper advertisements. Do make direct contact. Don't use letterbox drops as could be dismissed as junk mail. Don't use the Department of Housing's community meetings as very few attend. Don't use newspapers issued by the DOH as very few read them.
CALD/Non-English speaking residents	They see it as a socially acceptable behaviour. Feel that councils are responsible for cleaning up illegally dumped rubbish.	Outline correct behaviour in community language. Improve awareness of disposal options by word of mouth.	Do distribute information in cultural/community centres, ethnic media, bilingual educators and temples or other places of worship. Don't rely upon the telephone interpreter service.



Education tools for local projects

Many councils are using printed material to inform targeted residents when officers respond to a dumping complaint. The messages can focus on regulation or education and may typically include:

Regulation message:

'This material has been illegally dumped and is under investigation. It is subject to fines of up to \$750.'

Education messages:

'This material has been illegally dumped. The person should have taken it to [insert details of landfill or transfer station] or called council on [insert phone number] to book a collection.

'If you know who illegally dumped this material please call council on [insert phone number].'

Table 6 summarises how different forms of printed material, such as stickers, posters, enforcement tape, postcards and standard letters, can be used in urban areas for dumped waste.

All councils can use the DECC's set of education tools through the 'Dumping. It's Dumb' resource kit. Although they are targeted at MUD residents, the resources can be applied more broadly to dumping by other households. Many resources in this kit are translated into Spanish, Italian, Greek, Arabic, Chinese, Vietnamese, Korean and Macedonian, the eight most widely spoken community languages in Sydney. Some materials are multilingual (see Section 7.3 Resources under 'Multi-unit dwelling')





Table 6. Education resources to use on-site for illegally dumped waste in urban areas

Education tool	Use	Purpose	Example
Stickers	Place on dumped items or doors of suspected MUD. Encourage community support through residents placing stickers on fences in back lanes.	Low resource intensive activity for officers. Maximises education message to all passers-by. Indicates the council's awareness and response to the dump (increases perceived risk of being caught). Reduces additional reports of the dump to the council's call centre. Reminds people about the unlawfulness of the activity. Instructs on appropriate behaviour. Applies social pressure to the offender to remove items.	Stickers are used by the following councils: Kogarah Manly Ku-ring-gai Ryde Willoughby.
Posters	Put up in building foyer. Laminate and put up in bin bays. Put up in back of house for businesses.	Acts as a preventative message. Is a reminder of appropriate actions. Can provide solutions and alternatives.	Manly and Waverley councils mailed posters to body corporate and strata managers. Posters are less likely to be hung if mailed but it's a more efficient use of officers' time.
Enforcement tape	Tape off dumped items.	Low resource intensive activity for officers. Greatest education message to all passers-by. Indicates the council's awareness and response to the dumping incident (increases perceived risk of being caught). Reduces additional reports of the dumping to the council's call centre. Reminds people about the unlawfulness of the activity. Instructs on appropriate behaviour. Applies social pressure to the offender to remove items. Reduces the likelihood of more dumping at that location.	Ku-ring-gai and Ryde councils leave tape on for a week for greatest exposure. Marrickville Council officers use tape only in situations they investigate. Hornsby Shire Council reports positive comments from the community. It has led to roughly a 25% reduction in dumping around MUDs.

Table 6. continued...

Education tool	Use	Purpose	Example
Postcards	Place in letterboxes or under doors of nearby residents or entire street (include all letterboxes of a MUD).	Can tailor distribution. Mass distribution in hot spots or concentrate on a small number of properties. Indicates the council's awareness and response to the dump (increases perceived risk of being caught). Reduces additional reports of the dump to the council's call centre. Can encourage anonymous reporting. Reminds people about the unlawfulness of the activity. Instructs on appropriate behaviour. Applies social pressure to the offender to remove items. Removes excuses from potential offenders.	Kogarah Council used multilingual postcards. Marrickville Council has two types of cards: one generic the other more personal so the occupier's address can be written on it.
Standard letters on council letterhead	Where there's suspicion of the illegal dumping offender: Officers carry them in the vehicle and complete details (eg description of item dumped, location etc) before placing in the resident's letterbox. Where seeking information or support for a specific incident: • placed in letterbox of body corporate • posted to strata manager • posted to real estate agent.	Indicates the council's awareness and response (increases perceived risk of being caught). Reminds people about the unlawfulness of the activity. Instructs on appropriate behaviour. Applies pressure to the offender to remove items.	Leichhardt Council's letter takes a 'no blame' approach and informs about potential regulatory action. It reports a high percentage of removal following letters. Hornsby Shire Council finds most strata managers cooperative and are also keen to stop dumping. Bankstown City Council uses a standard letter and its officers hand write the materials dumped and the date inspected.



Other educational resources are available to educate householders, including brochures about the dangers of accepting illegal fill material onto their land and safely disposing of asbestos waste (see 'Resources' in Section 7.3). Councils can distribute these brochures as part of compliance campaigns involving householders to inform them of their responsibility for lawful disposal and the dangers involved when doing the wrong thing.

Making the most of your education tools

Form partnerships to assist with developing and distributing educational materials.

Make the council's actions more transparent and publicise prosecutions, or outcomes of investigations into a dumping incident.

Personalise communication where possible, for example include the occupant's name and address. Specify the materials dumped and the location.

Leave stickered and taped items in place for a number of days to promote the education message.

Direct door knocking can have a more effective response than anonymous printed materials (council's illegal dumping SOP could identify when this should happen).

Integrate education with compliance and enforcement efforts to make the compliance field staff's time more effective. For instance, when 'walking the beat', particularly in public places and commercial areas, get actively involved in education, building rapport, explain what the compliance officers do and the purpose for the patrol, and remind people of their responsibilities while using public spaces.



Case Study 3: Application of illegal dumping prevention campaign materials - Kogarah 'Dumping. It's Dumb.'

What was the problem or issue?

Over 42% of Kogarah Council's residents live in multi-unit dwellings (MUDs). Kogarah Council employs a full-time waste operations officer and a waste education officer to deal with the constant problem of illegal dumping. Concerted effort using enforcement tape and stickers around and on dumped material successfully reduced illegal dumping in the last five years but after several years it needed a boost, which the 'Dumping. It's Dumb' material supplied.

Stakeholders, targets and partners

The council's illegal dumping program was directed at all MUD residents, but particularly:

- renters, especially short-term renters
- Chinese language speakers, who represent almost 12% of residents
- Arabic speakers, another significant CALD population in Kogarah
- public housing residents.

The program mainly focused on MUDs where there were dumping events during the pilot. The general awareness for the wider community was also included.

Other stakeholders included:

- Kogarah Council officers
- bilingual educators
- local Department of Housing (DOH) officers
- local real estate and strata agents.

What did they want to do (objectives)?

- 1. To reduce the volume and frequency of illegal dumped material around MUDs.
- 2. To increase knowledge and awareness and improve behaviour in the community to prevent illegal dumping around MUDs.

How did they do it (actions)?

Launch and Display

Kogarah Council launched the 'Dumping. It's Dumb' pilot program at its 2005 Australia Day celebration with a display featuring a trailer packed with items typically dumped outside MUDs. All the waste team and bilingual educators were on hand to talk about dumping and alternative waste disposal options.

Stakeholder Involvement

During the pilot, council staff contacted the Department of Housing and local real estate and strata agents to discuss the issue, and provided them with 'Dumping. It's Dumb' materials that could be passed on to tenants or placed in buildings they managed.

Targeted Awareness-Raising Activities

The council's waste officer hand-delivered over 60 'Dumping. It's Dumb' posters to MUDs in the area, with the aim of placing them on foyer notice boards. Over time the officer has built rapport with MUD residents and established a contact person in many of the blocks of units. Establishing rapport is one of the factors you need for a successful partnership with your community.



General Awareness-Raising Activities

The council ran an advertising campaign about illegal dumping in the local newspaper, The St George Leader, and on local buses, as well as a platform billboard at Kogarah Railway Station during March and April. It also advertised in the Chinese newspaper, Sing Tao, and left multilingual postcards at the Rockdale Migrant Centre for distribution.

Enforcement Actions

The council also began targeting MUDs where rubbish had been dumped on the kerb, by placing large 'Dumping. It's Dumb' stickers on the dumped materials, and placing its 'Under Investigation' letter and 'Dumping. It's Dumb' postcards in each MUD letterbox.

Funding and resources

All the 'Dumping. It's Dumb' campaign materials for the pilot, including advertisements, were adapted to the council's needs. They had Kogarah Council's logo, phone number for information on clean ups and collection services, and the address of the local waste management centre in Rockdale.

Kogarah Council's illegal dumping program had a strong emphasis on educating residents who speak languages other than English. The pilot program used the following materials:

- standard letter in English to residents of a MUD where rubbish has been dumped advising that the incident was 'under investigation'
- education postcards in English
- enforcement postcards in English, Chinese and Arabic
- 'Dumping. It's Dumb' stickers large and small
- the council's 'Under Investigation' stickers
- enforcement tape
- A3 and A4 posters (put up in foyers and bin bay areas)
- advertisements: English and Chinese newspapers; billboard at Kogarah railway station; buses.

Outcomes

Overall, 61% of dumped rubbish was removed by the offenders within two days of the council's action.

Poster delivery proved to be time-consuming, particularly where security buildings did not allow entry to foyers. Developing a good rapport with the contact person in each unit block helped with placing the posters in foyer areas.

In future, Kogarah Council suggests laminating the small posters for use in bin bay areas where unwanted household items are often dumped.

The waste field officers' local expertise was used to decide which bilingual postcards to distribute to appropriate unit blocks. In future, Kogarah Council will print multilingual rather than language-specific material so it can be read by as wide a range of residents as possible.

More information

Waste Education Officer Kogarah Council Phone (02) 9330 9400

Education tools for broader community education campaigns

Successful community education campaigns rely upon using the right language and consistent messages, which need to be repeated frequently. A successful education campaign relies upon your council's credibility (you either have it or you will need to build it).

The following campaign resources are available to all councils from the 'Dumping. It's Dumb' MUD resource kit:

- real estate template letter
- strata manager template letter
- how to use mass media to promote a campaign or main messages:
 - press advertisements*
 - billboard advertisement
 - bus back advertisement
 - bus shelter advertisement
 - radio live reads*
 - media releases, including one from the mayor
 - sample text for web sites, newsletters, newspapers
 - editorials, fliers.
- * Materials are translated into Arabic, Chinese, Greek, Italian, Korean, Macedonian, Spanish and Vietnamese.

The following councils run broader community education campaigns relating to illegal dumping, which your council could refer to for ideas:

- Liverpool City Council runs media articles in rural newspapers about illegal landfilling.
 The council attends annual community and rural forums to inform people about illegal dumping and illegal landfilling.
- Fairfield City Council places advertisements in community language newspapers.
- Manly Council's website has an illegal dumping page that promotes its goal to reduce dumping, penalties that apply and alternative disposal for unwanted materials.
- Both the Western Sydney and Greater Southern RID Squads use local media to publish successful prosecutions.
- Both Hawkesbury and Wollondilly councils have used the local papers to place advertisements about penalties and to promote successful prosecutions.

■ The DEC's joint advertising campaigns with various councils relating to dumping in bushland and illegal landfilling (see Section 6.2 and 6.6).



Hornsby Shire Council places advertisements in its local media to discourage dumping in bushland areas.

Businesses

As with householders, businesses use the excuse that they were not aware of their responsibilities when it comes to waste disposal. These excuses can be removed through targeted education efforts either on an LGA basis or in conjunction with other councils or agencies. Businesses are likely to feel removed from their waste management responsibilities in cases where subcontractors have been engaged to collect or remove their waste and may not be aware of the need to exercise due diligence.

The DECC has developed print-based education resources for businesses, including waste transporters and waste generators, ie builders and developers (see Section 7.3). Councils can distribute these brochures as part of compliance campaigns involving these businesses to inform them of their responsibility for lawful disposal and due diligence expectations.



Like householders, businesses may respond better to personal contact, such as site inspections, than anonymous printed materials. Integrate education with regulatory efforts to make council officers' time in the field more effective. For instance, when council officers inspect premises, whether it is a food shop, factory or building site, they could be actively involved in the education of businesses by explaining lawful waste disposal requirements under the POEO Act and/or environmental planning legislation.

A brochure 'Know your responsibilities: managing waste from construction sites' has been recently developed by DECC to raise awareness of the responsibility of the construction industry to ensure that waste from their construction sites is taken to a place that can lawfully receive it.

right: DECC brochure available at www.environment.nsw.gov.au





Social research - 'Waste Management and the Construction Industry'

The DECC recently surveyed 314 builders, demolishers and project managers in the Sydney, Hunter and Illawarra regions to find out the current awareness about waste management responsibilities and benchmark industry practices. The research will assist understanding this target group and devising educational tools and methods of delivering education projects.

The key findings of the social research4 were that two thirds (66%) of respondents had never been asked by any authority to provide details about how waste was being managed on a construction site. Seventy per cent (70%) of respondents were concerned about managing waste from construction sites with 84% currently checking that waste is taken to a lawful place. Over three quarters of respondents (77%) had prepared a waste management plan and two thirds (66%) had requested copies of waste disposal receipts from subcontractors. However less than a quarter of respondents (24%) had conducted audits of contractors who manage waste on their behalf.

More than half of the excavation and demolition companies surveyed thought illegal dumping was very or quite common (58%) compared to builders (35%) or project managers (38%). When asked "which authorities would you report illegal dumping to", three quarters (75%) of respondents identified local councils and 55% mentioned DECC. When asked about the likelihood of a waste transporter being caught and fined for illegal dumping, 64% responded that it was unlikely or very unlikely. Similarly 58% of respondents thought it was unlikely for an owner of waste to be caught and fined for illegally dumping waste. This research shows that the perceived risk of being caught and fined for illegally dumping is low.

For more information contact the DECC's Waste Operation Section on 131 555.

Keep areas free of illegally dumped material

In some circumstances, particular hot spots are so often dumped on that they come to be seen by some as a legitimate 'unofficial' tip. By removing illegally dumped materials immediately where they occur on council land, and making efforts to ensure the occupier promptly removes dumps when they occur on non-council land, the excuse that it is legitimate to dump can be removed.

Where 'unofficial' tips continue to occur, council can distribute leaflets in the immediate area to point out that this is unacceptable, why it is unacceptable, and what legal means to dispose of waste are available. Installing warning signs in the area will also post instructions that illegal dumping is not permitted (see next section about signs).

The steps that should be taken by occupiers to clean up illegally dumped waste on their land (where the polluter cannot be located) are presented in 'Keep areas free of illegally dumped material' in Section 4.4.

Signs

When it comes to content and context, signs can take a number of forms. There is the regulatory approach, intended to inform people about fines, the unlawful activity of dumping and surveillance, or there is the civic pride perspective that promotes the values of the site or benefits to the users. Signs that may tap into civic pride include those that do not even focus on dumping as an activity, such as the wording used by bushcare groups. In almost all cases, evidence of how signs affect behaviour is at best anecdotal. It is likely that only law abiding, nuisance dumpers and those justifying the action of dumping as socially acceptable in that location will take any notice of signs. Assessing whether people will respond to a particular sign should be tested, for example through a focus group, before commissioning and putting up signs.

Almost all councils that received illegal dumping deterrence grants in 2002-2004 used signs to inform their communities about illegal dumping. In general, signs were used to inform people that dumping was unlawful and the fines applicable. Some councils (for example Camden and Maitland) encouraged the community to 'dob in a dumper' to the council. On many occasions, councils put up signs to coincide with their clean-up activities so as to have the most effect on future behaviour.

Proper placement, wording and maintenance are needed for effective signs. There is mixed information about how effective the signs were that were part of the deterrence grants. A number of councils reported the signs were vandalised within days of being put up, whilst others indicated they were very successful.

An effective sign must be readable, link to the offences and penalties for dumping, appeal to the better nature of the potential dumper and promote a community pride/ownership message.

Gosford City Council reported: "The dumpsites that could not be made secure and [where] signage was the only deterrent suitable, these sites began to have illegal dumping [reoccur] soon after being cleaned up." In contrast the Greater Southern RID Squad reports the signs it has put up are an effective deterrent. But signs remain an important way to remove excuses for offenders.

For rural and remote areas particularly, signs may serve as a handy educational tool. Councils can advertise the annual cost to council and rate payers of illegal dumping at a dumping hot spot. Or demonstrate the outcomes of an illegal dumping prosecution by putting up a weather-resistant copy of a newspaper article that describes the cost to the offender.





5.0 BRINGING IT TOGETHER IN A PROGRAM



5.0 BRINGING IT TOGETHER IN A PROGRAM

The illegal dumping prevention techniques detailed in Section 4.0 will be more successful if used as part of a comprehensive or integrated illegal dumping program, rather than isolated initiatives. Successful illegal dumping programs are also founded on strong leadership, co-operation between partners, learning from past efforts and publicising success. This section outlines how to develop, carry out and evaluate an effective illegal dumping program within your council.

Figure 18: Nine steps to planning your illegal dumping prevention program





Step 1 Get a thorough understanding of the problem

Examine your current situation, including an evaluation of previous and current efforts to address illegal dumping (see below). Section 3.0 has further information about how to do this, including understanding the nature of the problem and who is involved.

Examine your past and current efforts:

- existing programs or previous efforts to prevent illegal dumping
- methods used to monitor or measure illegal dumping and any trends observed
- previous or current clean up efforts, such as community volunteer clean up days
- communication of illegal dumping prevention to the community
- efforts that have been successful or unsuccessful and why.11

You may also want to research what other councils have done. You could draw upon the case studies in this handbook.

You may wish to hear from potential stakeholders at this stage (see Step 3). This is a good opportunity to gauge their level of interest and whether they would like to be involved throughout the development of your program.

Step 2 **Get support from senior** management

Senior management support is essential for adequate funding, access to equipment, staff and the allocation of essential resources.

Present the information you've gathered in Step 1 to senior management, including case studies on what has worked for other councils with a similar profile to your own, highlighting the overall savings that can be attributed to preventing illegal dumping.

Consider developing a small pilot study to tackle illegal dumping as part of an existing budget. If the pilot is successful, you can use the results to get support for a wider, integrated and adequately funded illegal dumping program.

Informing and gaining the support of the elected members of your council is also a priority. Submit a briefing note to councillors and/or make a presentation at council or committee meetings about illegal dumping and the need for action. You can also get more support for illegal dumping prevention programs when your council's state of the environment report recognises that a problem exists. Findings from state of the environment reports are often integrated into council's forward planning processes, such as council management plans, corporate and business plans and associated expenditure plans.

Step 3 **Engage stakeholders and** develop partnerships

Involve stakeholders in the development of your illegal dumping program as early in the process as possible as this will ensure they take ownership of the program and are therefore more likely to support and promote it. Stakeholders may also have additional insight into the problem and, through previous experience, may have a more realistic idea of what will and won't work on the ground.

How you interact with your stakeholders will vary depending on how you have defined your program. Find out how your stakeholders want to be involved and how they are prepared to work with you. For some stakeholders face-to-face meetings will be necessary, for others phone or e-mail will be all that's required.



Working with partners

Working in partnerships has advantages and disadvantages. They can also be hard to forge. You need to bear the following general principles in mind:

- Focus on mutual priorities.
- Identify exchange opportunities.
- Respect the priorities of partner organisations and try to work out how you can align your work and theirs.
- Don't expect trust from the outset, try to build it.
- Develop informal working relationships with those in partner organisations as well as formal ones
- Avoid meetings that serve no clear purpose.
- Share credit where partnership activities yield significant benefits, it will reinforce commitment to partnership activities.
- Sideline individuals who tend to disrupt partnership activities.
- Adapt to the ways your partner agencies work where at all possible, for example in data collection and sharing, working hours and terminology.
- Consider staff exchanges/placements where possible to pick up on skills and ways of working in partner organisations.
- Engage directly in collaboration where possible.12

Agency partnerships

Partnerships need to be developed that encourage other councils and agencies to take action and contribute. Measures to reduce illegal dumping may require other councils and agencies (eg DECC, Workcover, RTA, Department of Housing, SCA, Police etc.) to be engaged for their powers and/or their resources. When dealing with cross-LGA illegal dumping, it can be useful to foster co-operation with neighbouring councils to share intelligence, costs and promote a consistent message for broader community issues.

There are many examples where, much to the frustration of council staff, partnerships and co-operation have not succeeded. This can be due to the high staff turnover in some organisations that makes continuity difficult. One council resolved this problem by having a memorandum of understanding (MOU) signed by the agency and each time a new staff member is contacted the council officer refers him or her to the MOU and the history of co-operation.



Joint education campaign

The City of Canada Bay Council targeted an education campaign developed with the local chamber of commerce. The campaign consisted of flyers delivered to the surrounding businesses and residents in the area and the council's law enforcement officers also went on regular and highly visible patrols of the area. The project's successful outcomes were partly attributed to getting support from the local chamber of commerce.

Community partnerships

Members of the community are central to illegal dumping: they are victims, perpetrators, reporters, witnesses, intelligence sources and potential clearers and controllers. Rather than seeing them solely as customers of council services they may also be seen as potential sources of solutions whose cooperation should be cultivated.12

Consider inviting community organisations, chambers of commerce, business operators, land managers, government agencies and real estate agents to cooperatively develop programs to prevent illegal dumping in target groups.

Necessary factors for success:

- visibility of council activity, followed by promotion of what is occurring and why
- programs that emphasise community concerns and values, for example petty crime, health impacts, fire risk, local neighbourhood amenity and community pride
- consistency is evident
- establish rapport.



Partnerships with business

Councils commonly work with businesses to address environmental compliance and pollution reduction but not many councils have set up partnerships with businesses to address illegal dumping problems even though a working relationship and good rapport could bring mutual benefits to business and council. As noted in Section 6.1, successful working relationships between Waverley and Parramatta councils with real estate agents and strata managers can help promote appropriate waste management practices and prevent illegal dumping. The community structure in rural areas seems to contribute to rangers and compliance staff forming partnerships and developing a good rapport with businesses. Generally it takes time to get business on side and establish credibility.

Necessary factors for success:

- business needs to see mutual benefits
- council needs to be consistent
- take time to build rapport: businesses need to be able to put a name to a face, and rangers need to have a visible presence
- an MOU can be useful
- find the right contact person.

Establishing a steering committee

Establish a steering committee to oversee the direction of your illegal dumping prevention program. Ideally your steering committee will include a cross-section of both internal and external partners and at least one senior manager from council to champion the cause.

A steering committee should include a project co-ordinator who makes sure:

- the make-up of the steering committee is clear and organises meetings
- an illegal dumping program is co-ordinated (see Step 4)
- the roles and responsibilities of members are clear
- your program's progress is monitored
- progress is reported to other steering committee members and senior management.

Working with partners

The following people within councils have an essential part to play in preventing illegal dumping:

- Strategic planners should consider the potential illegal dumping opportunities resulting from development phases (ie construction and operation). Council should develop planning instruments or polices that provide a consistent approach to waste management and therefore prevent illegal dumping.
- Development planners should consider potential illegal dumping during the development application phase for new activities.
- Development control officers have an important role in investigating and regulating activities carried out in breach of planning legislation, such as breach of development consent or failure to obtain consent.
- Managers and elected members of council have an important role as decision makers in many planning and regulatory matters.
- Environmental health officers, rangers and compliance officers have an important role in investigating illegal dumping incidents and taking regulatory action.
- **Environment and waste educators** have an important role in educating the community about preventing illegal dumping and helping community activity.
- Public land (asset) managers should collect information about dumping hotspots, characteristics, clean up costs and potential offenders. They should identify and trial solutions in open space areas under council's care, control or management.
- Waste collection service staff should collect information about illegal dumping hot spots, characteristics, clean up costs and potential offenders. They should also assess the efficiency and relevance of the waste collection services provided.

External partners may include:

- Department of Environment and Climate Change NSW (including Parks and Wildlife Division)
- other councils
- Department of Primary Industries (Forests NSW)
- Department of Lands
- Sydney Catchment Authority
- Roads and Traffic Authority
- Police Force
- Aboriginal Land Councils
- landfill operators
- private landowners
- community groups
- Department of Housing
- residents
- educational institutions
- real estate agents
- ethnic communities
- local businesses or chambers of commerce
- charities.



Step 4 Define what you want to do (your program's objectives)

After you have defined your current situation and identified problem areas (Step 1), you should work with your stakeholders to clearly define what you want to do (your program objectives). Your program objectives should be SMART so you can evaluate the program effectively.

> Specific Measurable **Achievable** Realistic **Timely**

What you will measure, who will be recording it, how and when are all part of the evaluation.

Step 5 Develop your program

An effective illegal dumping program needs to be well directed at the specific problem at hand. This involves understanding the problem – what drives it, encourages it and helps it - to identify what might stop it. Only after a thorough analysis of the problem (Step 1) should you devise a prevention program.

When developing your illegal dumping program you should consider how its components would work together to:

- 1. increase the effort for the potential offender
- 2. increase the risks to the potential offender
- 3. reduce the rewards to the potential offender
- 4. reduce provocations of potential offender
- 5. remove excuses available to offenders.

When you devise your program's educational component and its goals, you must identify the target groups and consider their attitudes and behaviour. The DEC's study found the most effective illegal dumping prevention program uses an integrated approach, that is a range of different techniques, including information, education, surveillance, prevention and enforcement, signs which can include council services, to deal with a problem specific to the area.5

Setting priorities

Consider the technical, economic and environmental feasibility of your proposed techniques. Further information about assessing the feasibility of each technique can be found in the EPA's (2000) Profits from Cleaner Production – A Self-Help Tool (see Section 7.3 Resources under 'Project planning').

Step 6 **Fund your program**

As noted, only 6% of the illegal dumping budget for councils in NSW is typically spent on education. A shift in your council's internal expenditure between clean up, enforcement and education could be considered during the pilot of your program. The cost recovery from PNs issued in a stronger enforcement program can offset some of the costs. Cross-council partnerships to target common problems or groups can share the financial burden.

Over the next five years, \$80 million in new urban sustainability grants will be available to fund local programs. This includes campaigns to prevent litter and illegal dumping that:

- Effectively develop partnerships between councils, local businesses, community organisations and householders.
- Clearly focus on environmental priorities identified in local state of the environment reports and sustainability plans.
- Complement other funding programs and local government investments. For example, when a council uses new powers in the *Local* Government Act 1993 to generate funding for stormwater projects.
- Are developed in co-operation with local catchment management authorities (CMAs).

For more information see Section 7.3 Resources under 'Funding'.

Partnerships or funding programs may also be available through other agencies, such as CMAs and the Premier's Department.



Step 7 Carry out and monitor your program

Putting your program into practice should be relatively straightforward if you have planned it well. For it to work well you need to:

- 1. Ensure that all stakeholders and/or partners know their roles and responsibilities.
- 2. Stick to the project's timeline and budget.
- 3. Monitor it constantly. Monitoring can act as an early warning system and alert you to problems. This allows you to deal with them early without putting the whole project at risk.
- 4. Be prepared to vary the project plan when circumstances require it, such as noticing indications the project is not working as anticipated. Flexibility in the project can also add value, and allow you to capitalise on unforeseen opportunities.

Step 8 **Evaluate your program**

You need to evaluate your illegal dumping prevention program to decide whether it's doing what you want it to do (objectives are being met or are on track to being achieved) and how future efforts could be more effective.

You need to answer the following questions:

- Did your illegal dumping program achieve its objectives?
- What was done well?
- What problems did you encounter?
- Was the project completed on budget?
- Was the project completed on time?
- Was the project cost effective?
- Were the stakeholders appropriate? Should you involve additional stakeholders in the future?
- What could be done better next time?
- Where should you focus future illegal dumping efforts?

You will need a thorough analysis of your pre-program data compared with your recent data to answer

these questions. Good evaluation developed early in the program planning will include conducting questionnaires, focus groups or stakeholder interviews.

Your evaluation could produce four kinds of knowledge, which can be included in your report:

- 1. Findings: evidence about the program's process, performance, output or outcomes.
- 2. Conclusions: bringing numerical and verbal information together to identify what has been learned.
- 3. Value judgements: state whether the conclusions indicate 'good' or 'bad', and their extent (for example effective, ineffective; efficient, inefficient; appropriate, inappropriate).
- 4. Recommendations: advice about what program management, the council or other stakeholders could do next, given what has been learnt from the evaluation.

For more information relating to program evaluation read DEC's (2004) Does Your Project Make a Difference? (see Section 7.3 Resources under 'Project planning'). This will assist all program managers to evaluate their efforts more completely and obtain a detailed view of whether the project has been successful.

Step 9 Publicise your successes

Don't sell yourself short – share information about your successes. Publicising program results and/or progress is also necessary for continued support from senior management, councillors and the community, and to maintain co-operation between stakeholders. The US EPA suggests that "prevention programs must be recognised as co-operative efforts, and successes need to be shared with all parties involved to validate their participation, gain additional support and allow others to benefit from lessons learned".11

Further information about working with the media and community education can be found in Section 4.5. Information about publicising successful prosecutions can be found in Section 4.2.





Case Study 4: Interagency partnership model – RID Squads

What was the problem?

Illegal dumping is a particular challenge to councils located around the urban fringes of Western Sydney and the South Coast/Southern Highland areas.

Stakeholders, targets and partners

Councils, DECC, SCA and the local community.

What did they want to do (objectives)?

- encourage a more strategic co-ordinated approach to dumping incidents
- investigate incidents and taking action against offenders
- organise clean ups
- track down illegal landfills
- identify changes and trends in illegal dumping across a regional area
- deter and educate community members about illegal dumping.

How did they do it (actions)?

DECC and partner councils and agencies have formed two RID Squads to solely focus on and tackle the problem of illegal dumping:

- Western Sydney RID Squad (WSRID)
 - established 1999
 - represents Liverpool, Fairfield, Penrith, Bankstown, Holroyd, Baulkham Hills councils and DECC.
- 2. Greater Southern RID Squad (GSRID)
 - established in 2004
 - represents Eurobodalla, Shoalhaven and Wingecarribee councils, the Sydney Catchment Authority and DECC.

Both the WSRID and GSRID operate across member council boundaries to investigate and enforce breaches of NSW regulations on illegal dumping and illegal landfilling. The squads patrol, investigate dumping incidents, conduct special operations, issue notices and educate the public. They also carry out media promotion, erect signs and attend events to raise community awareness.

RID Squads operate under a management committee consisting of representatives from each participating council and the DECC. All partners sign a co-operative agreement. Each participating council delegates authority to the squad; this increases mobility across local government boundaries and allows prosecutions of offenders who cross boundaries. The squad structure enables flexible hours that contribute to innovative measures of surveillance, intelligence gathering and deterrents, such as the surveillance of suspicious transporters/waste contractors.

The squads specialise in investigations leading to on-the-spot fines and clean-up notices for minor offences. Serious offences are referred to the relevant council or the State Government for prosecution. Incidents of littering, illegal dumping and illegal landfilling are reported to the RID Squad or spotted on patrol. If investigations identify offenders, RID officers issue penalty notices, which result in the offender cleaning up the illegally dumped waste.



Case study 4. continued...

Funding and resources

The RID Squad model is unique because it combines the resources of local councils with the support of State Government authorities. All parties to the agreement contribute financially. One council hosts and manages the squad and provides administrative support for daily operations and reporting.

Outcomes

The benefits of the RID Squads include:

- supplements the councils' regulatory staff so that more time can be allocated to illegal dumping
- fast incident response
- valuable source of data on illegal dumping trends and history in the area
- enforcement resource with specialist skills and experience in investigating illegal dumping
- high-profile deterrence/education role
- resources to follow up notices.

Western Sydney RID Squad

Between July 2004 and June 2006 WSRID:

- responded to more than 90% of incidents within 24 hours
- investigated 2528 incidents involving 11,250 tonnes of waste
- issued 47 clean-up or pollution prevention notices
- issued 713 penalty notices
- conducted seven special operations, including one helicopter surveillance operation
- issued penalty notices worth \$169,582.

Greater Southern RID Squad

Between March 2004 and June 2006 GSRID:

- investigated over 2556 illegal dumping incidents
- issued 296 penalty notices
- issued over 40 clean-up notices.

Please note, the two RID Squads operate within different parameters in areas of different population densities, so it is inappropriate to draw comparisons between these statistics.

Three GSRID projects highlight the benefits of a dedicated squad:

- 70% reduction in illegal dumping in an area of Moss Vale was achieved from clean up and fencing done in a partnership between the GSRID, State Rail and a local community group. The total cost of the project was \$13,000 with \$8,000 provided by State Rail.
- GSRID co-ordinated removal of 44 dumped motor vehicles at no cost to the landowners or council from a portion of vacant land in Erowal Bay. Operation Illegal Landfill led to the removal of 290 tonnes of waste and six PNs and six clean-up notices issued to the value of \$14,200.

Further information

Director Local Government and Resource Recovery Department of Environment and Climate Change NSW Phone (02) 8837 6000





Case Study 5: Interagency project led by Sydney Catchment Authority

What was the problem or issue?

Damage to water quality within Sydney's drinking water catchments caused by a range of activities, such as illegal waste dumping, land cleaning, and unauthorised activities, such as trail bike riding within the Special Areas that are located around the Sydney Catchment Authority's (SCA) dams.

Stakeholders and partners

The SCA maintains partnerships with agencies within the Sydney drinking water catchments, such as NSW Police, local government, Department of Environment and Climate Change NSW (DECC) and the Greater Southern Regional Illegal Dumping (RID) Squad.

What did these agencies want to do (objectives)?

Consolidate partnerships with other regulatory agencies to pursue monitoring, regulation and compliance activities to promote more effective compliance programs.

How did they to it (actions)?

- education: publication of brochures, maps and posters
- deterrence: fencing, barriers and gates and regulatory/advisory signs
- enforcement: regular patrols, including an aerial surveillance, mobile surveillance cameras and joint enforcement operations with the NSW Police.

A strong emphasis on surveillance and intelligence gathering is applied to develop strategies and plan targeted programs.

Funding and resources

The SCA's grants and incentives program funds activities that protect catchment lands. For example, financial assistance was provided to the NSW Police to purchase two trail bikes to assist in joint operations to prevent illegal access in the Special Areas. SCA have also funded the Greater Southern RID Squad and are funding training workshops for local councils within the SCA's catchments to enhance staff skills in areas such as compliance and investigation.

Outcomes

The SCA has seen significant value and positive improvements on-the-ground through partnerships and working in co-operation with others, such as the police and local government.

More information

Manager Compliance Sydney Catchment Authority Phone (02) 4725 2100



Case Study 6: Regional partnerships – Hunter Region Illegal Dumping Group (HRIDG)

What was the problem or issue?

Councils and agencies in the Hunter region, NSW, were tackling illegal dumping and related issues independently and on an ad hoc basis.

Stakeholders, targets, partners

The DECC, Hunter councils (9), Department of Lands, Department of Primary Industries – Forests NSW, NSW Rural Fire Service, Hunter Water Corporation, NSW Police, Energy Australia, WorkCover NSW, Hunter-Central Rivers Catchment Management Authority and the Department of Corrective Services

What did they want to do (objectives)?

Establish a Hunter stakeholder group to develop and agree to a co-ordinated, cohesive and integrated approach to illegal dumping and related issues. The group would also communicate, share ideas and in-kind resources in an organised and formal manner, and pursue support for regionally-based projects.

How did they do it (actions)?

The Waste Management Association Australia (Hunter Group) identified illegal dumping as a priority issue for action. The Cessnock City Council and the DECC, which are members of the WMAA, met and discussed a strategic approach to developing a regional illegal dumping group. The DECC offered funding and in-kind support for an initial meeting and workshop to find out how much interest and commitment there was for a regional program.

The Cessnock City Council and the DECC invited regional stakeholders (government, industry, community, private sector) to a workshop to gain a better, shared understanding of the nature of the problem of illegal dumping in the region, and people's experiences in that regard. Workshop topics included who-does-what, current issues/problems, current programs (what works/what doesn't) and where-to-from-here? Approximately 50 people attended the half-day workshop, where there was consensus to develop HRIDG. Members nominated on the day.

HRIDG has since developed its terms of reference, a three-year regional program, a regional data-gathering project to establish better baseline data and data collection methods, and will continue to communicate and share information. HRIDG provides reports to the NSW Premier's Department Regional Coordination Management Group (Hunter RCMG) as part of its sustainable and collaborative whole-of-government approach.

Funding and resources

Membership of HRIDG is voluntary. HRIDG meets quarterly and its projects currently attract in-kind support with some financial assistance from the DECC. HRIDG pursues grant opportunities for nominated programs as they arise.

Outcomes

- Communication and awareness of each organisation's illegal dumping programs ideas, funding, resources and learning.
- A better understanding of the information collected by HRIDG member agencies.

Further Information

Illegal Dumping Programs Officer Sustainability Programs Division (Hunter) Department of Environment and Climate Change NSW Phone (02) 4908 6800



6.0 COMMON ILLEGAL DUMPING PROBLEMS



6.0 COMMON ILLEGAL DUMPING PROBLEMS

DEC surveyed 17 NSW councils from urban and rural areas in July and August 2006. A number of common illegal dumping locations or 'hot spots' emerged from the survey responses, including:

- multi-unit dwellings (MUDs)
- bushland
- public land (for example, laneways, roads, freeways, reserves, public property, crown land, catchment land, railway land, easements).

Councils also indicated that a number of illegally dumped waste types were common and/or problematic including:

- household waste
- garden organics
- construction and demolition waste, including:
 - illegal fill material
 - · asbestos waste.

This section will give councils a greater understanding of these common hot spots and waste types, how the problems can be tackled and what other councils are doing in response.

6.1 Multi-unit dwellings

What is the problem?

Many councils have long faced the problem of illegal dumping around multi-unit dwellings (MUDs). 14% of householders surveyed admitted to having illegally dumped.⁶ There are opportunities to reduce the number who are tempted or who do dump.

The results from social DEC research into the attitudes and behaviours about illegal dumping amongst multi-unit dwellers can be summarised as a lack of effective education from councils.6 Further information can be found in Section 1.3.

Most councils usually attempt to improve streetscape amenity by removing the illegally dumped material as quickly as possible. Councils are recognising they need to initiate a community education-based response as the only long-term and viable solution to the problem.



How can it be tackled?

now can it be tackled?			
Mechanism	Technique		
Reduce the rewards	 Provide and/or promote free or subsidised waste services (p.50) Issue fines to offenders (p.50) 		
	■ Require offenders to clean up (p.50)		
Reduce provocations	 Provide efficient and well communicated waste services (p.50) 		
	■ Ensure reasonable waste service costs (p.56)		
	■ Keep areas free of illegally dumped material (p.59&71)		
Remove	■ Publicise waste services (p.61)		
excuses	 Carry out education programs outlining responsibilities (p.61) 		



Detailed information about tackling illegal dumping around MUDs can be found in DEC's (2006) Multi-Unit Dwelling (MUD) Kit (see Section 7.3 Resources under 'Multi-unit dwellings').

A number of councils have trialled a combination of broad community education with education and enforcement activities directed at MUDs. Education programs and initiatives are most effective if they are tailored to the specific audience and build rapport with the community. A number of councils suggest they have more success with personally addressed mail on council letterhead than standard letters written to the householder. It would appear the content of the letters might have a significant effect on the take-back rate,

for example, Marrickville Council has two enforcement postcards, a generic one for general suspicion and a more direct one where the address is hand written for more apparent incidents. Campbelltown City Council regularly sends letters and information to strata managers and real estate agents who then pass the letters on to residents.

Councils have had success by building relationships with members of the local community. For example, Kogarah, Waverley and Marrickville councils report that having someone in a dedicated field operations position who builds on local knowledge and establishes rapport with MUD residents and real estate agents is invaluable.



Hornsby Shire Council issues prevention notice to DOH

Hornsby Shire Council has tried a variety of approaches. In one instance issuing a prevention notice directly to Department of Housing resulted in a quick response to cleaning up the items. This has since been followed up by DOH putting up a fence along the MUD property boundary.

Outcome

Over the last six months illegally dumped materials have stayed on the inside of the fence.

Leichhardt Council issues clean up notice to building owners

Leichhardt Council will bypass the managing agent if there are repeated dumping incidents and write to the building owner issuing a clean-up notice. The council does this in areas with a high turnover of tenants, and places the onus on the property owners to make sure their managing agents co-operate and give better service.

A high percentage of the illegally dumped materials are removed.

Hornsby Shire Council's MUD survey in Epping

Hornsby Shire Council has surveyed MUD residents in Epping about waste management issues, including recycling and junk mail. Illegal dumping was raised by the residents.

Outcome

The council has developed a newsletter talking about the issues raised. It will be appealing to real estate agents and body corporates to self-regulate in the near future. There are plans for a community field day/expo in a few MUDs to build rapport and educate residents in pilot areas.

Hurstville City Council targets strata managers and conduct patrols

Hurstville City Council's rangers report that visible patrols have a significant impact on minimising illegal dumping. They also phone the strata managers directly and advise them of the fines.

Outcome

The typical response is that the strata manager quickly removes the items.





Bankstown City Council focus testing when developing campaigns

Bankstown City Council used focus testing when it developed its illegal dumping campaigns. There were two important findings from focus testing that the council used to develop its resources:

- 1. the only common theme across all ethnic groups was their family and children came first; and
- 2. because many cultures don't respond or have regard for cartoons or drawn images all materials use photographs.

Outcome

Tell the story or message using photographs.

Waverley Council's 'Tenants' Survival Guide'

Waverley Council recognised that new residents are often unaware of the council's specific waste presentation requirements. So in 2002, in addition to street signs, investigation tape and enforcement activities, Waverley Council produced a 'Tenants' Survival Guide'. The information pack contained the council's standard illegal dumping postcard, local contacts for rubbish removal, council's waste management program and other information about living in the area, such as timetables and emergency contact numbers. The council devised a standard clause to be inserted into the tenancy rental agreement that was provided to the agents. The kits are distributed by participating local real estate agents as part of the property leasing process, thereby tapping into existing networks and processes. A new resource is being developed for agents to distribute when tenants give notice, as a reminder of services available and what is expected of tenants.

Outcomes

Early feedback from agents, on the new resource for exiting tenants, has been positive and it is likely to be well used. The council has learnt it has to maintain relationships with agents over time. This includes making sure they are well stocked with kits and checking that they are still distributing them. It's also necessary to review contents and keep them up-to-date.

Parramatta City Council's 'It Comes Back to You' campaign – MUDs

In Parramatta City Council's 2001 community survey, illegal dumping was the top environmental issue raised by the community. The council used a 2002 grant to fund a campaign called 'It Comes Back to You', which concentrated on MUDs.

Stakeholder interviews and site inspections identified the most commonly dumped items in multi-unit areas. Council then tailored its education program to deal with the issues raised.

A marketing consultant developed promotional material for the campaign, including a brochure, posters, magnets, stickers, tattoos, newspaper advertisements and bus shelter posters. As well as English, the brochures, posters and advertisements contained information in Arabic, Chinese and Korean, the four most commonly spoken languages in the Parramatta LGA.

The council dropped an education kit with a covering letter signed by the Lord Mayor, a brochure and fridge magnet in the letterboxes of 14,000 residents living in MUDs in the target area. They provided information kits to 1200 body corporates, 160 managing agents and strata managers and distributed posters to put up in offices and on common community notice boards in multi-unit blocks.

Outcomes

The council's cleansing team, which is responsible for the removal of dumped wastes, reported a decrease in illegal dumping immediately after the letterbox drop, mail-out, public displays and activities.



6.2 Bushland

What is the problem?

NSW councils identified bushland, parks and sporting grounds to be one of the main areas where people dumped construction and demolition waste, green waste, household waste and car parts (including tyres), particularly in rural council areas. 5 Further information about what motivates dumpers can be found in Section 1.3.

Illegally dumped waste is unsightly in bushland. It can also damage Aboriginal cultural heritage items and sites and endanger ecological communities. The greatest damage is caused to the bushland while dumping and removing the waste. Illegally dumped waste also requires considerable time and money to remove, which would be better spent on conservation. Rubbish also attracts more rubbish and a piece of bushland can suddenly become a known place to dispose of waste illegally.3



Copy of advertisement placed in Western Sydney community newspapers during 2004 and 2005



Parramatta City Council's 'It Comes Back to You' campaign bushland

Between 2002 and 2004, Parramatta City Council's 'It Comes Back to You' campaign had a component that tackled illegal dumping in and around bushland reserves.

The council distributed an education kit to residents adjoining bushland with a covering letter, a brochure and a fridge magnet. Residents were urged to consider the alternatives to illegal dumping and read the information contained in the brochure about illegal dumping and how it damaged the environment and public space. The fridge magnet gave an Illegal Dumping Hotline for residents to report dumping in their area.

The campaign included clean up days in six illegal dumping hot spots involving residents whose homes were next to bushland reserves. It also ran a mascot-naming competition to engage the local community in identifying with local wildlife and bushland and engender a sense of responsibility to reduce the impacts associated with illegal dumping.

Before the clean up efforts, the council recorded details of the type, volume and location of waste and took photographs at each of the bushland hotspots.

Outcome

After the campaign the number of incidents of illegal dumping in the bushland reserves decreased.

How can it be tackled?

Mechanism Technique Increase the ■ Make access difficult to hot spots effort using structural approaches (ie lighting, landscaping, revegetation or beautification and barriers) (p.37) Increase the ■ Use surveillance cameras and risk signs to indicate the area is being watched (p.42) ■ Increase patrols in hot spots (p.43) Assist in community surveillance and reporting of suspect activities (p.44) Carry out periodic high-profile compliance campaigns (p.45) Use partnerships with other councils, agencies and stakeholders (p.48 & 74) ■ Publicise successes as widely as possible (p.48) Reduce the ■ Issue fines to offenders (p.50) rewards ■ Require offenders to clean up (p.50) Remove ■ Keep areas free of illegally excuses dumped material (p.59 & 71) ■ Install signs at hot spots with illegal dumping prevention messages (p.71)

The most effective methods seem to be removing rubbish when it appears and putting up barriers to prevent further access. Councils can use their Bushland Plans of Management or Open Space Plans to increase community valuing of bushland areas and finding ways of making it harder for offenders, such as limiting access points. Clearing the illegally dumped waste through Clean Up Australia Day or other targeted clean up campaigns can debunk the excuses offenders make.

Bushcare and Landcare volunteers

Involving the community in bushcare programs is also likely to increase the perceived risk of being caught. Volunteers are likely to closely observe areas where they have concentrated their efforts and report suspicious behaviour.

Bushcare and Landcare consist of community-based volunteers assisted by government (often local government) and non-government organisations (NGOs) working to rehabilitate and preserve bushland. Involving people in bush regeneration in their local reserve or behind their houses could help reduce the degrading impacts of illegal dumping on the edges where urban areas meet bushland.1

Ku-ring-gai Council runs successful bushcare/bushland programs and has around 700 volunteers supported by a bushcare officer, bushcare trainers, an interpretive officer and 19 professional bush regenerators.1

Increased patrols and surveillance

Increased patrols by park rangers, council officers or other law enforcement will also increase the perceived risk of being caught.

Addressing illegal dumping at Queens **Lake State Conservation Area**

In late 2005, widespread illegal dumping was uncovered at the Queens Lake State Conservation Area, south of Port Macquarie. At the time, rangers and field staff noted during their patrols of the park that the problem was escalating. Old cars, tyres, mattresses, fridges and other whitegoods, as well as garden waste that may have been destined for a council tip, were reportedly left alongside the roads leading from the park. As a result the DEC Parks & Wildlife Division (PWD) took a stand against dumping rubbish in national parks and asked the community to help catch people who commit this offence.

Outcome

PWD staff worked with the police to locate a number of people responsible and successfully prosecuted them.



6.3 Public land

What is the problem?

DEC's 2006 survey found that public lands (such as laneways, roads, freeways, reserves, public property, crown land, catchment land, and easements) are common illegal dumping hotspots.

Illegally dumped items are likely to include household rubbish, electrical appliances, construction and demolition waste (including asbestos, soil and excavation materials) garden organics, cars and vehicle parts.

Addressing illegal dumping on public land is challenging because the dumpers are diverse – residents, tenants, backpackers, home renovators, traders, small construction and demolition operators, waste operators etc. – and some travel across LGAs to dump. Further information about what motivates the dumpers can be found in Section 1.3.



How can it be tackled?

Increase the effort

■ Make access difficult to hot spots using structural approaches (ie lighting, landscaping, revegetation or beautification and barriers) (p.37)

Increase the risk

- Use surveillance cameras and signs to indicate the area is being watched (p.42)
- Increase patrols in 'hot spots' (p.43)
- Assist in community surveillance and reporting of suspect activities (p.44)
- Carry out periodic high-profile compliance campaigns (p.45)
- Use partnerships with other councils, agencies and stakeholders (p.48 & 74)
- Publicise successes as widely as possible (p.48)

Reduce the rewards

■ Issue fines to offenders (p.50)

Reduce provocations

- Require offenders to clean up (p.50)
- Foster community pride by enhancing the area's aesthetics (p.57)
- Keep areas free of illegally dumped material (p.59 & 71)

Remove excuses

■ Install signs at 'hot spots' with illegal dumping prevention messages (p.71)

Because the types of illegally dumped items differ and the motivations of the dumpers vary so widely, it is crucial that you fully understand the nature of your specific problem (see Section 3) before you devise ways to prevent illegal dumping on public land.

You will need to separately examine each public land 'hot spot' and develop a strategy that will address the five illegal dumping prevention mechanisms (see Section 4).

Working with stakeholders

When you are trying to work out a way to deal with illegal dumping on public lands you should work closely with the relevant landowner, occupier or other stakeholders.

Further information about working with partners can be found in Section 5, Step 3.

Clean up illegally dumped materials

Cleaning up illegally dumped material may deter future dumpers and allows rangers to better target the source of subsequent dumping incidents. Many NSW councils use clean up activities as part of a comprehensive approach to deal with illegal dumping. Further information about clean up on public land can be found in Section 4.4.

Blacktown City Council co-ordinates an 'Adopt a Road' program where sponsors guarantee to clean a 1-2 km stretch of road for two years in return for an 'Adopt A Road' sign with the family, group, club or business name at the beginning and end of the adopted stretch of road.



Maitland City Council's 'Our Environment Our Responsibility' campaign

Maitland City Council's 'Our Environment - Our Responsibility' campaign, which was funded through a grants program, cleaned up public land containing illegally dumped materials and used the local media to promote a 'Dob in a Dumper' campaign to encourage community surveillance.

Outcomes

The campaign has helped reduce illegal dumping activities not only at the five sites targeted as part of the campaign, but also within the council area.

6.4 Household waste

What is the problem?

The illegal dumping of household waste is a major problem for NSW councils. On average, household waste comprises nearly half of illegal dumping incidents.5 Consequently, NSW councils spend a significant amount of their clean up budget on its removal. Illegal dumping of household waste reduces the aesthetic appeal of public places and can destroy local bushland, reduce biodiversity value and hinder revegetation.



Some household waste is illegally dumped when there is a special need to dispose of particular goods or materials (such as to replace whitegoods or renovation waste), while other household waste is dumped when ordinary collections of routinely produced waste do not meet the particular householder's needs. 12 The latter is more prevalent in rural councils where nearly onethird of illegal dumping incidents consist of household rubbish (excluding furniture and white goods)⁵ (see 'Waste Composition' in Section 1.2 for further details).

Carrying out education campaigns targeted at householders is also effective in reducing illegal dumping of household waste. Effective communication programs require an understanding of the target audience so that education material can be tailored for maximum effectiveness. DEC's (2006) Multi-Unit Dwelling (MUD) Kit contains useful information for urban councils on how to do this (see Section 7.3 Resources under 'Multi-unit dwellings'). Rural councils can spread their message by tapping into existing community networks. For example, information can be distributed at agricultural shows and other community events. The local newspapers and radio stations will also be suitable ways to promote illegal dumping prevention messages.

How can it be tackled?

Increase the ■ Increase patrols in hot spots (p.43) risk Assist in community surveillance and reporting of suspect activities (p.44) Use aerial surveillance in rural and remote areas (p.44) Reduce the ■ Provide and/or promote free or rewards subsidised waste services (p.50) Reduce Provide efficient and well provocations communicated waste services (p.50) ■ Ensure reasonable waste service costs where possible (p.56) ■ Keep areas free of illegally dumped material (p.59 & 71) Remove ■ Publicise waste services (p.61) excuses Carry out education programs outlining responsibilities (p.61)

Reducing provocation by providing an adequate and well-publicised waste collection service is one of the most effective ways to reduce illegal dumping of household waste. A national survey of householders in the UK found that while 1% admitted to having illegally dumped in the previous year, this is just onequarter of those who had said they'd been tempted to illegally dump. The UK study concluded that the waste disposal facilities and the norms prohibiting illegal dumping are sufficient to lead almost all people to dispose of their waste lawfully and responsibly.¹² Further information about effective waste collection services and alternatives to waste disposal can be found in Section 4.4.



Eyes in the Sky - Aerial surveillance

DECC, SCA and the Greater Southern RID Squad conducted a joint helicopter surveillance exercise called Eyes in the Sky to identify sites of potential illegal dumping activity. Suspected sites were photographed from the sky in the Wingecarribee, Shoalhaven and Eurobodalla council areas. The bird's eye view meant new illegal dumping sites could be identified that would otherwise be impossible to locate on the ground. At the time of publication, RID Squad officers had begun on the ground investigation and enforcement actions.

Outcomes

- Identified 31 sites of potential illegal dumping activity, many of which consisted of household waste in bushland settings.
- Investigations and enforcement actions are pending.
- Created significant interest from the local press, including two newspaper articles and several announcements on local radio.



6.5 Garden organics

What is the problem?

Illegal dumping of garden organics introduces seeds and stems to the bushland or other land, which may become established as weeds and degrade the conservation value of the area. It also introduces nutrients to the soil and provides ideal conditions for the dumped plants and seeds to grow. Moreover, the sheer bulk of the rubbish smothers and breaks native plants.3 Illegal dumping of garden organics can also increase rates of arson or bushfire.

Some people illegally dump lawn clippings and garden prunings in bushland because it's convenient, particularly those living adjacent to vacant land, parks, bushland, creek lines and other natural areas where dumping has become habitual, and they are not concerned with its effect. Some do it out of ignorance and some do it because they think composting is good for the bush or they believe they are doing something helpful for the environment by providing 'mulch'.

How can it be tackled?

Increase the Assist in community surveillance risk and reporting of suspect activities (p.44) Reduce the ■ Provide and/or promote free or rewards subsidised waste services (p.50) ■ Issue fines to offenders (p.50) ■ Require offenders to clean up (p.50) ■ Provide efficient and well Reduce provocations communicated waste services (p.50)■ Ensure reasonable waste service costs where possible (p.56) ■ Foster community pride by enhancing an area's aesthetics (p.57)■ Keep areas free of illegally dumped material (p.59 & 71) Remove ■ Publicise waste services (p.61) excuses Carry out education programs outlining responsibilities (p.61)

Sutherland Shire Council Bushcare Group

Sutherland Shire Council has a strong and active community voluntary bushcare scheme. A common approach for areas experiencing dumping of garden organics has been to have a bushcare group (existing or establishing a new local group) become active on the site. The group removes illegally dumped materials and rehabilitates and revegetates the site. Over a period of time this process attracts curiosity and interest from those witnessing the activity and changes to the site. The bushcare groups enter the site with a no-blame attitude.

Bushcare signs and an information flyer distributed in a letterbox drop complement the site activities. The flyer outlines the issues and impacts of garden organics and is intended to 'bust myths'. It also promotes the activities and the positive outcomes of revegetation on site. The expectation is that once the site is cleaned any existing perpetrators are under more scrutiny from their neighbours.

Outcomes

Bushcare groups build community stewardship. If there is a recurrence of dumping the perpetrator tends to get dobbed in and council can then issue a clean-up notice or PN.

Promoting the site's values and local amenity, as well as an increased risk of rodents and fire, and other such human health impacts, are also likely to make people change their behaviour.



6.6 Construction and demolition waste

What is the problem?

Illegal dumping of construction and demolition (C&D) waste can degrade the environment by polluting waterways, destroying vegetation and contaminating land. It can also present a serious risk to human health, as the waste may be hazardous and contain asbestos.

The scale of dumping of C&D waste in NSW is considerable. The DEC study indicated that C&D waste can comprise as high as 55% of total incidents of illegal dumping in urban councils and 83% in rural councils.⁵ Typical dumping grounds for C&D waste in rural council areas include bushland, parks and sporting grounds, while urban councils have a much greater problem with dumping on vacant lots and roadsides.

Further information about what motivates the dumpers of C&D waste can be found in Section 1.3.

How can it be tackled?

Increase the Make access difficult to 'hot spots' effort using structural approaches (ie lighting, landscaping, revegetation or beautification and barriers) (p.37) Increase the Use surveillance cameras and risks signs to indicate the area is being watched (p.42) ■ Increase patrols in hot spots (p.43) Assist in community surveillance and reporting of suspect activities (p.44) Use aerial surveillance in rural and remote areas (p.44) Carry out periodic, high-profile

compliance campaigns (p.45)

■ Publicise successes as widely as

Issue fines to offenders (p.50)

■ Require offenders to clean up (p.50)

Use partnerships with other

councils, agencies and

possible (p.48)

stakeholders (p.48 & 74)

Reduce provocation

Reduce excuses

- Keep areas free of illegally dumped material (p.59 & 71)
- Publicise waste services (p.61)
- Carry out education programs outlining responsibilities (p.61)
- Install signs at 'hot spots' with illegal dumping prevention messages (p.71)

Investigation and prosecution of offenders is perhaps one of the most effective ways to tackle illegal dumping of C&D waste. Publicise successful prosecutions to increase the perceived risk to potential offenders.

Apply a consent condition requiring evidence of waste disposal on development consents issued for demolition under the EP&A Act, and enforce it. Further information can be found in the 'Illegal Landfilling and Asbestos' sub-sections below.

Remove the excuses of home renovators by working with real estate agents and building materials suppliers to distribute information to new home owners about disposing of home renovation waste.

Reduce provocations through prompt clean up of illegally dumped C&D waste to discourage further offenders.

Remove excuses by carrying out high profile compliance campaigns.

Joint campaign targeting C&D waste



DECC, Baulkham Hills Shire Council and Western Sydney RID Squad undertook a joint campaign to crack down on illegal dumping of C&D waste Baulkham Hills Shire Council. The campaign involved inspections of C&D sites to check for lawful disposal of waste, advertisement in the local press, and the distribution of the DEC's Avoiding the dangers of accepting fill on your land brochure to rural residents.

Reduce the

rewards



Illegal landfilling

What is the problem?

Illegal landfilling uses waste as landfill with the consent of the owner or occupier of the land but without the necessary council or DECC approvals. It is often demolition and/or excavation waste used for site works. such as dams, roads, noise mounds and landscaping.⁵

NSW councils identified illegal landfilling, particularly on private property in rural and semi-rural areas, as a common problem in the DEC's 2006 survey. When landfilling occurs illegally, there is little regard that the illegal fill material could be contaminated, or for compaction standards, changes to the overland flow of water, sediment and erosion control, destruction of Aboriginal heritage items, damage to threatened species and so on. Anecdotal evidence suggests that some large-scale illegal landfilling in rural and semirural areas happens because business operators offer 'clean fill' to property owners, sometimes at no cost or a reduced landfilling cost. Often this material is not suitable for landfilling and contains contaminants such as asbestos.5

How can it be tackled?

There are a number of regulatory instruments available. These include the POEO notices and offences, development application provisions, council planning instruments and development consent conditions (development control plans and planning certificates).

Development applications

Under the POEO Act, if any waste is taken to a site that is not a lawful waste facility, the site owner/occupier, the person who transported the waste and the original owner of the waste can each be prosecuted. Councils must not permit any landfilling without first considering whether or not an environment protection licence for a waste facility is required under schedule 1 of the POEO Act.

If a development application involves landfilling with material other than virgin excavated natural material (VENM) councils should find out if it's an integrated development assessment (IDA) application. Even roads, dams, foundations for buildings or flood relief mounds built for agricultural land use or infrastructure may still require a licence if they are in the Sydney metropolitan area and use waste other than VENM.

It is common practice to use the term 'clean fill' in council development consent conditions to describe the type of material that can be brought on site to construct infrastructure, fill gullies, build dams etc. The definition can vary between councils. Sometimes 'clean fill' is not defined at all. The variation in definitions makes it difficult to determine whether a licence under the POEO Act is required. It can also lead to unlawful waste disposal when developers are operating in more than one local government area but assume a common definition of the material approved as 'clean fill'.

DECC recommends that council planning instruments and development consents use the statutory definition of VENM for 'clean fill'. This would eliminate current ambiguities about the composition of 'clean fill' and whether or not an environment protection licence is required. Note that the DECC may approve other waste derived material as suitable fill material from time to time.

If a council is willing to allow a site to accept fill material other than VENM, it needs to consider whether a licence under the POEO Act is needed, and the consent should state the specific material that can be imported, for example concrete, bricks, broken tiles and so on.



Copy of advertisement placed in local newspapers in the Baulkham Hills LGA in 2006



Planning instruments

Councils can prepare Development Control Plans (DCP) to make more detailed provisions with respect to development so as to achieve the purpose of their Local Environment Plan (LEP). Councils can include site waste management and minimisation standards in their DCPs for developments, and require that applicants submit a Waste Management Plan (WMP) for their proposal.

WMPs are important tools in preventing illegal dumping. They force applicants seeking development approval from both council and accredited certifiers to nominate recycling or disposal sites. Council can then check the legality of these sites and strengthen consent conditions by requiring proof of the actual destination of the construction and demolition waste (for example providing council with waste disposal receipts).

Monitoring and enforcement

Where development consent allows landfilling, consent conditions should require proof that the imported material complies with development consent (for example providing council with validation documents or receipts from the waste transporter stating the nature and quantity of the material imported). A concerted effort to enforce the conditions about both the importing and exporting of waste from development sites should increase the level of compliance.

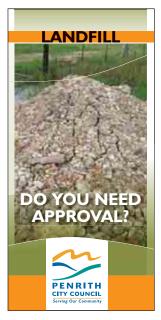
If illegal landfilling occurs, councils should gather evidence from the landowner or occupier about who was responsible for transporting the waste and where the waste originated. Regulatory action can be taken under the POEO Act to require the responsible party (preferably the polluter) to take clean-up action at the premises.

For more information about the enforcement of planning legislation see Section 2.5.

Section 149 Planning Certificates

Under section 149 of the EP&A Act, a person may request from a council a planning certificate containing a statement on matters about a parcel of land that are prescribed in the regulation. One such prescribed matter is the existence of a council policy to restrict the use of land due to risks from contamination. Councils can include additional information on planning certificates in accordance with section 149(5) of the EP&A Act.

Guidelines developed by DUAP and the EPA (1998)7 suggest that, as a minimum, information about landfill sites and waste storage and treatment activities shown to have occurred on the land, should be provided on all planning certificates under section 149(5). Landowners are unlikely to want information included on their planning certificates that could decrease their land value, such as potential contamination from illegal landfilling activities. So section 149 planning certificates can provide landowners with a deterrent against illegal landfilling, and an incentive to clean up land that has been illegally landfilled.



Brochure by Penrith City Council. Available online at www.penrithcity.nsw.gov.au



DECC brochure available at www.environment.nsw.gov.au



Asbestos Waste

What is the problem?

Illegal dumping of asbestos is a major problem in NSW; many councils in the DEC study⁵ and during the DEC 2006 survey identified it as a priority. Councils are concerned that some renovators and building demolition companies are not handling and disposing of asbestos waste in a safe and lawful manner. There is also a great deal of community concern about health risks associated with asbestos.

Asbestos fibres are hazardous when inhaled. They can be released into the air when asbestos products are incorrectly handled, stored or transported for disposal.

C&D businesses and householders often dump asbestos waste due to unwillingness to pay⁵ – higher landfill fees apply to the disposal of asbestos waste.

Businesses or householders simply may not be aware of the risks associated with asbestos waste and the special legislative requirements related to its handling, storage and transport. Or these special requirements may be deliberately ignored to save time and costs.



How can it be tackled?

There are special legislative requirements in place under clause 42 of the Protection of the Environment Operations (Waste) Regulation 2005 for the safe storage, handling and disposal of asbestos waste. These include ensuring the asbestos waste is wet, covered, sealed in heavy duty plastic and disposed of to a waste facility licensed to accept asbestos waste.

The home renovator may not be aware of the limitations on disposal. DEC's (2006) Safely disposing of asbestos from your home brochure is designed to deal with this gap. It provides tips on safe handling, transport and directions to locate an appropriate waste facility. A list of licensed landfills that accept asbestos waste from the public is also available on the DECC website (see Section 7.3 Resources under 'Asbestos waste'). Councils can link their development process information to this electronic resource or distribute hard copies from enquiry and customer service counters as well as other locations throughout the community.

Regulatory activities

Increasing the risk and removing excuses through regulatory activities and campaigns is an effective deterrent. The DECC and Work Cover NSW together conduct regular compliance campaigns (see Case Study No. 8) and workshops to educate asbestos removalists, transporters and the waste industry about the correct handling and disposal of asbestos waste.

Holroyd City Council has successfully applied special conditions to development consents for C&D works (see Case Study No. 7).

Further information relating to the clean up of illegally dumped asbestos can be found in Section 4.4.



Copy of advertisement placed in Western Sydney community newspapers during 2004 and 2005.





Case Study 7: Regulating local development – Holroyd City Council Asbestos Cement Policy

What was the problem or issue?

An increase in demolition works during the late 1990s raised concern within Holroyd City Council and the community that correct procedures were not being followed to ensure the safe handling and disposal of asbestos cement. There was also evidence that some demolition contractors were not licensed to remove asbestos cement and were failing to comply with WorkCover NSW guidelines.

Stakeholders, targets and partners

Holroyd City Council, WorkCover NSW, WorkSafe Australia, Standards Australia.

What did they want to do (objectives)?

- 1. Reduce the risk of workers and residents next to demolition sites inhaling dangerous asbestos fibres.
- 2. Ensure that demolition contractors comply with WorkCover's NSW guidelines for the safe removal and disposal of asbestos cement.

How did they do it (actions)?

Holroyd City Council applied special conditions to development consents for demolition and renovation or recladding or brick veneering works of buildings erected before 1987, which is when builders stopped using asbestos sheeting and products. The special conditions were to ensure the safe removal and disposal of asbestos cement.

They required that:

- the developer advise neighbouring residents of the day demolition will start, five days before it begins
- proper fencing and signs (for example DANGER: ASBESTOS REMOVAL IN PROGRESS) be erected around the demolition or renovation site
- demolishers be licensed by WorkCover NSW to remove and dispose of asbestos cement
- asbestos cement waste be disposed of in a lawful manner to a waste facility licensed by DECC
- the developer provide Holroyd City Council with all original weighbridge receipts as evidence of proper disposal within 14 days of completion of demolition works.

Holroyd City Council also added a condition that requires an 'Asbestos Clearing Certificate' prepared by a NATA accredited occupational hygienist to be lodged within 14 days of completion of the works. This condition also requires a signed statement verifying that any demolition work and disposal of materials was done in accordance with the Waste Management Plan approved for that project.

Funding and resources

The majority of funding to establish the program came from Holroyd City Council's existing budget.

Outcomes

- 1. Increased community awareness about the requirements for safe handling and safe disposal of asbestos.
- 2. Increased numbers of builders and demolishers correctly handling and disposing of asbestos.

Furthermore in August 2002, the Local Government Association of NSW and the Shires Association of NSW executive resolved:

- 1. That Holroyd City Council's Asbestos Removal Policy be adopted as a minimum standard; and
- 2. That councils be made aware of the Waste Service NSW facility requirements for asbestos disposal.

Councils were advised of this matter through the Lgov Weekly in September 2002 and March 2003.

Further information

Waste Services Team Leader Holrovd City Council Phone (02) 9840 9840





Case Study 8: Using POEO Act powers to check lawful disposal of asbestos – DECC's audit of asbestos removalists

What was the problem or issue?

DECC has identified illegally dumped asbestos waste as a priority issue as it poses a risk to the environment and human health.

Stakeholders, targets and partners

DECC, Workcover NSW and asbestos removalists.

What did they want to do (objectives)?

To combat this, the DECC has recently conducted a targeted campaign to find out whether asbestos waste is being lawfully disposed of by licensed and unlicensed asbestos removalists.

How did they do it (actions)?

The campaign involved sending 20 asbestos removalists a legal notice (under section 191 of the POEO Act to provide the DECC with information and records in relation to their asbestos removal jobs for a three-month period. The legal notice required the selected asbestos removalists to provide information, such as:

- Address and contact details for every job where asbestos was removed.
- Tonnage of asbestos removed.
- Details of all transporters that removed asbestos.
- Disposal locations for all asbestos removed.

Asbestos removalists were also required to provide copies of every receipt that showed proof of lawful disposal of the asbestos, such as weighbridge dockets and invoices. Responses were due back within six weeks of the legal notice issue date.

All the information provided was collated and checked against WorkCover NSW's monthly notification register of asbestos jobs. This allowed the DECC to determine whether the WorkCover licensed asbestos removalists had advised the DECC of all their asbestos jobs. If the DECC identified discrepancies, it considered further investigation and action.

Funding and resources

The DECC's Waste Management Section resourced and carried out the project.

Outcomes

This campaign has raised awareness within asbestos removalists of the need to keep records and information readily available, as the DECC can request access to them at any time. This campaign has also raised awareness of the legal ramifications for unlawful disposal of asbestos waste. The DECC will continue to conduct similar campaigns in the future to crack down on illegally dumped asbestos.

Councils can use this program within their own areas to find out whether asbestos waste has been disposed of in a lawful manner. Councils could use the development application process to require developers to provide proof of lawful disposal of asbestos waste within 14 days of completing demolition works. Councils can also audit recent asbestos-related demolition works using a legal notice to require developers to provide information and records regarding disposal of their asbestos waste. Information provided by developers could be cross-referenced with information collated by WorkCover NSW to identify discrepancies.

An integrated approach using the development planning process and follow-up regulatory action will assist in the crackdown of illegally dumped asbestos waste.

Further information

Waste Operations Manager Department of Environment and Climate Change NSW (DECC) Phone (02) 9995 5000



7.0 MORE INFORMATION



7.0 MORE INFORMATION

7.1 Glossary

Most of the following definitions are from the dictionary of the Protection of the Environment Operations Act 1997 (POEO Act) and Regulations.

activity an industrial, agricultural or commercial activity or an activity of any other nature whatever

(including the keeping of a substance or an animal).

appropriate regulatory

authority

see section 6 of the POEO Act.

authorised officer a person appointed under Part 7.2 of the POEO Act by an appropriate regulatory authority.

clean-up action in relation to a pollution incident, includes:

(a) action to prevent, minimise, remove, disperse, destroy or mitigate any pollution

resulting or likely to result from the incident, and

(b) ascertaining the nature and extent of the pollution incident and of the actual or likely

resulting pollution, and

(c) preparing and carrying out a remedial plan of action.

It also includes (without limitation) action to remove or store waste that has been disposed

of on land unlawfully.

enforcement officer an officer who can issue a penalty notice. The POEO (Penalty Notices) Regulation 2004

> sets out the classes of officers or employees who can issue penalty notices for particular offences under the POEO Act or Regulations. Such an officer or employee is only an enforcement officer if s/he has been duly authorised as an enforcement officer by his or

her employer to exercise the functions of an enforcement officer.

environment protection

notice

a clean-up notice, prevention notice or prohibition notice issued under

Chapter 4 of the POEO Act and in force.

instrument

environmental planning an environmental planning instrument within the meaning of the

Environmental Planning and Assessment Act 1979.

environmentally

unsatisfactory manner

for the purposes of Part 4.3 of the POEO Act an activity is carried on in an

environmentally unsatisfactory manner if:

(a) it is carried on in contravention of, or in a manner that is likely to lead to a contravention of, this Act, the Regulations or a condition attached to an environment protection licence (including a condition of a surrender of a licence) or an exemption given under this Act or

the Regulations, or

(b) it causes, or is likely to cause, a pollution incident, or

(c) it is not carried on by such practicable means as may be necessary to prevent, control

or minimise pollution, the emission of any noise or the generation of waste, or

(d) it is not carried on in accordance with good environmental practice.

exercise a function, includes perform a duty.

function includes a power, authority or duty.



harm to the environment includes any direct or indirect alteration of the environment that has the effect of degrading the environment and, without limiting the generality of the above,

includes any act or omission that results in pollution.

land pollution or

licence

means placing in or on, or otherwise introducing into or onto, the land (whether through **pollution of land** an act or omission) any matter, whether solid, liquid or gaseous:

> (a) that causes or is likely to cause degradation of the land, resulting in actual or potential harm to the health or safety of human beings, animals or other terrestrial life or ecosystems, or actual or potential loss or property damage, that is not trivial, or (b) that is of a prescribed nature, description or class or that does not comply with any standard prescribed in respect of that matter, but does not include placing in or on, or otherwise introducing into or onto, land any substance excluded from this definition by the POEO Regulations.

an environment protection licence. local authority

(a) a local council (being the council of an area under the Local Government Act 1993), or

(b) the Lord Howe Island Board in relation to Lord Howe Island, or

(c) the Western Lands Commissioner in relation to the Western Division, except any part

of the Western Division within the area of a local council, or

(d) an authority prescribed by the POEO Regulations for the purposes of this paragraph

for any place not covered above, or

(e) an authority prescribed instead by the POEO Regulations for the purposes of this

paragraph for any place wholly or partly covered above.

non-scheduled activity an activity that is not a scheduled activity and is not scheduled development work.

occupier of premises the person who has the management or control of the premises.

owner of waste or other substances does not include (in any provision under which a person

> commits an offence in the capacity of owner) a financial institution that is acting solely as a holder of a security interest in the waste or other substances. In that case, the person

who has control of the waste or other substances is taken to be the owner.

penalty notice see section 223 of the POEO Act (What is a penalty notice?).

POEO Act The New South Wales Government has a strong armoury of environmental legislation

> in place to protect our people and environmental resources. A major component is the Protection of the Environment Operations Act (POEO Act), which was enacted in 1997. It regulates air, water, land and noise pollution and waste management. The POEO Act sets the maximum penalties for various offences and gives the EPA, local government and several other government agencies the power to prosecute or fine people for

environmental pollution.

pollution (a) water pollution, or

(b) air pollution, or

(c) noise pollution, or

(d) land pollution.



pollution incident

an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

premises

includes:

(a) a building or structure, or

(b) land or a place (whether enclosed or built on or not), or

(c) a mobile plant, vehicle, vessel or aircraft.

preventive action

action that a prevention notice may require to be taken, and includes without limitation: (a) installing, repairing, altering, replacing, maintaining or operating control equipment or other plant,

(b) modifying, or carrying out any work on, plant,

(c) ceasing to use plant or altering the way plant is used,

(d) ceasing to carry on or not commencing to carry on an activity,

(e) carrying on an activity in a particular manner,

(f) carrying on an activity only during particular times,

(g) monitoring, sampling or analysing any pollution or otherwise ascertaining the nature

and extent of pollution or the risk of pollution,

(h) action with respect to the transportation, collection, reception, reuse, recovery,

recycling, processing, storage or disposal of any waste or other substance,

(i) preparing and carrying out a plan of action to control, prevent or minimise pollution

(j) reviewing the carrying out of an activity.

records

includes plans, specifications, maps, reports, books and other documents (whether in writing, in electronic form or otherwise).

residential premises

premises used wholly or partly as a residence.

scheduled activity

an activity listed in schedule 1 of the POEO Act.

substance

includes matter or thing.

VENM

virgin excavated natural material (eg clay, gravel, sand, soil and rock).

Schedule 1 of the POEO Act, Division 2: Special Interpretive Provisions Relating to Waste (a) is not mixed with any other waste and has been excavated from areas that are not contaminated, as the result of industrial, commercial, mining or agricultural activities, with

manufactured chemicals and that does not contain sulphidic ores or soils, or

(b) consists of excavated natural materials that meet such criteria as may be approved

by the EPA.



waste

includes:

- (a) any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment, or
- (b) any discarded, rejected, unwanted, surplus or abandoned substance, or (c) any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, processing, recovery or purification by a separate operation from that which produced the substance, or
- (d) any processed, recycled, reused or recovered substance produced wholly or partly from waste that is applied to land, or used as fuel, but only in the circumstances prescribed by the POEO Regulations, or
- (e) any substance prescribed by the POEO Regulations to be waste.

A substance is not precluded from being waste for the purposes of the POEO Act merely because it is or may be processed, recycled, reused or recovered.

waste facility

any premises used for the storage, treatment, processing, sorting or disposal of waste (except as provided by the POEO Regulations).

waste guidelines

the document called Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes issued by the EPA and in force as at 1 July 1999.

Waste Avoidance and Resource Recovery Act 2001

An Act to promote waste avoidance and resource recovery. Its purpose is to develop a statewide framework to achieve integrated waste and resource management planning, programs and service delivery, to provide for the continual reduction in waste generation, to minimise the consumption of natural resources and the final disposal of waste and to encourage the most efficient use of resources.

Waste Avoidance and **Resource Recovery** (WARR) Strategy

The development of the WARR Strategy is requirement of the WARR Act. The initial strategy was released in 2003, and an updated strategy was released in 2006. The WARR Strategy provides guidance and priorities for action to ensure that efficient resource use and impacts on the environment are considered throughout the life cycle of goods and materials, including extraction of raw materials, manufacturing, distribution, consumption and recovery for reprocessing or safe disposal.



7.2 Training and further learning

Protection of the Environment: **Authorised Officers Course**

The course is offered by an external training provider on behalf of the DECC at a cost of \$1,200 per participant (correct at time of publishing) for the four days (includes comprehensive Learner Guide, assessment and all catering), with reductions for in-house or group delivery.

Further information, including the course outline and registration form, is available at www.sdenviro.com.au or contact SD Environmental Management on (02) 4946 7811. Or you can contact the DECC's Environment Line on 131 555.

The Littering Law for Parking Officers

This one-day workshop is offered by the Local Government and Shires Associations of NSW (LGSA). It reviews the responsibilities and regulatory powers of parking officers, who are authorised officers for the enforcement of anti-litter and illegal dumping provisions under the POEO Act.

The workshop is offered at a cost of \$429 per participant (correct at date of publishing), including comprehensive handouts.

For more information contact LGSA's Local Government Learning Solutions on 9242 4181/3.



7.3 Resources

Aboriginal land

The DECC's website includes the following resources relating to Aboriginal communities:

- 1) Working with local Aboriginal communities on environmental projects
- 2) Planning activities to protect our places: A guide for Aboriginal communities
- 3) Aboriginal people protecting country: Environmental sustainability success stories.

Available online at www.environment.nsw.gov.au

Ashestos waste

The DECC's website provides a list of licensed landfills for each region in NSW that accept asbestos waste for disposal. Available at www.environment.nsw.gov.au

The DEC's (2006) Safely Disposing of Asbestos Waste contains important information for home renovators and builders. This brochure can be distributed with rates notices or in a letterbox drop. Available at www.environment.nsw.gov.au

WorkCover NSW's (2003) Your Guide to Working with Asbestos contains safety guidelines and requirements for work involving asbestos. Available at www.workcover.nsw.gov.au

The NSW Government's Fibro and Asbestos: A Renovator & Homeowner's Guide contains a safety checklist, advice about the safe disposal of fibro and some general tips about what to do if fibro is damaged. Available online at www.nsw.gov. au/fibro/

The Holroyd City Council's (2005) Part A of the Asbestos Cement: a Policy for Safe Removal and Disposal provides information about the special conditions adopted for the safe removal and disposal of asbestos cement. Available at www.holroyd.nsw.gov.au/html/eps/health/asbestoscementpolicy.pdf

Clean up of illegally dumped waste

The Yellow Pages® directory provides information about clean up providers under 'Rubbish Removers and Asbestos Removal and/or Treatment'. Available at www.yellowpages.com.au

The DECC's HAZMAT Register contains information about providers that offer resources, equipment, products and advice to minimise the environmental effects of hazardous materials incidents. Available at www.environment.nsw.gov.au

The Environmental Trust's Emergency Pollution Clean-up Program may contribute funds towards the costs of measures to remove, disperse or mitigate serious pollution when those measures need to be taken immediately. Available at www.environment.nsw.gov.au

Construction and demolition waste

The DECC's (2007) brochure Know your responsibilities: managing waste from construction sites. Available at www.environment.nsw.gov.au



Education

The EPA's (1997) What we need is... A Community Education Project provides background information about community education; a step-by-step guide to planning a community education project; sample community education projects; and a summary of useful community education methods. Available at www.environment.nsw.gov.au

The DEC's (2004) report *The Environment and Ethnic Communities in 2004* surveyed the relationships between ethnicity and environmental knowledge, attitudes and behaviours in NSW. Available at www.environment.nsw.gov.au

The DEC's (2006) *Multi-Unit Dwelling (MUD) Kit* is specifically about the problem of illegal dumping of waste near multi-unit dwellings. It provides advice about prevention strategies for councils. Available at www.environment.nsw.gov.au

The DEC's (2004) report An assessment of attitudes and behaviours amongst multi-unit dwelling residents in relation to illegal dumping examined the attitudes and behaviour of residents in relation to illegal dumping. It included owners, short- and long-term tenants, public housing tenants and tenants with a language other than English. Available at www.environment.nsw.gov.au

Funding

One of the DECC's Urban Sustainability Grants Program's objectives is to improve the quality of the local urban environment through integrated approaches to a combination of the following examples: air quality, noise, odour, chemical use, biodiversity, litter and illegal dumping. Available at www.environment.nsw.gov.au

General illegal dumping resources

The DECC's illegal dumping resources include information about *Regional Illegal Dumping (RID) Squads*. Available at www.environment.nsw.gov.au

The UK Department for Environment, Food and Rural Affairs' illegal dumping resources includes the University College London's (2006) *Fly Tipping: Causes, Incentives and Solutions*. A good practice for local authorities and the national fly tipping database. Available at www.defra.gov.uk/environment/localenv/flytipping/index.htm

The US Environment Protection Agency's illegal dumping resources include the *Illegal Dumping Prevention Guidebook* (1998) and the *Illegal Dumping Economic Assessment (IDEA) model*. Available at www.environment.nsw.gov.au

The US National Center for Environmental Decision-Making Research has developed a *Decision Maker's Guide to Controlling Litter and Illegal Dumping*. Available at www.ncedr.org/guides/litter/determine.htm

Illegal fill material

The DECC's (2006) Avoiding the dangers of accepting fill on your land brochure contains important information for landholders. This brochure can be distributed with rates notices or in a letterbox drop. Copies are available from the DECC's Environment Line on 131 555 and at www.environment.nsw.gov.au

The DEC's (2004) Important information for waste transporters and the waste industry describes covering loads, transporting waste to a legal facility and fines. Copies are available from the DECC's Environment Line on 131 555 and atwww.environment.nsw.gov.au



The Department of Urban Affairs and Planning and Environment Protection Authority's (1998) Managing Land Contamination Planning Guidelines SEPP 55 - Remediation of Land will assist planning and consent authorities to fulfil their responsibilities under the EP&A Act. Available at www.planning.nsw.gov.au/assessingdev/pdf/gu_contam.pdf

Legal and investigations

The DECC's information for authorised officers in local government has recently been updated to reflect the latest legislative amendments and current policy and replaces the printed reference document Environment Protection Manual for Authorised Officers. Available at www.environment.nsw.gov.au

The DEC's (2006) Powers of Authorised Officers – A guide to your powers under environment protection legislation (2006). Copies are available from the DECC's Environment Line on 131 555 and at www.environment.nsw.gov.au

The Department of Urban Affairs and Planning and the EPA's (1998) Managing Land Contamination Planning Guidelines SEPP55 - Remediation of Land (1998). Available at www.planning.nsw.gov.au/assessingdev/pdf/gu_contam.pdf

The DEC's (2006) Guide to Notices Under the Protection of the Environment Operations Act 1997 contains detailed information about notice preparation. Available at www.environment.nsw.gov.au/resources/guidenotices06173.pdf

The EPA's (2004) Prosecution Guidelines will assist with deciding whether or not to prosecute. Available at www.environment.nsw.gov.au

The EPA's (2003) Guidelines for Seeking Environmental Court Orders (2003) will assist councils when seeking court orders under Part 8.3 of the POEO Act in connection with waste offences. Available at www.environment.nsw.gov.au

The approved form of the written notice under Section 143 of the POEO Act that can be given to a waste transporter or displayed at a property is available from the DECC's website at www.environment.nsw.gov.au/waste/s143notice.htm.

Lawlink NSW provides details of Land and Environment Court decisions relating to waste offences under the POEO Act. Available at www.lawlink.nsw.gov.au/lawlink/caselaw/ll_caselaw.nsf/pages/cl_index

The DECC's Public Register lists clean-up notices issued by DECC relating to illegal dumping. Available at www.environment.nsw.gov.au

Protection of the Environment Operations Act 1997 is available from the NSW Legislation website operated by the Parliamentary Counsel's Office at www.legislation.nsw.gov.au/

Searches of basic details of business and company names and ACNs may be carried out on the National Names Index maintained by the Australian Investments Commission. Available at www.search.asic.gov.au

The NSW Department of Land's Spacial Information eXchange (SIX) provides NSW-wide geospacial information and data (in many cases free of charge). Available at www.maps.nsw.gov.au

The RTA maintains a database of owners of registered vehicles in NSW called DRIVES. For more information about accessing the DRIVES online database contact the RTA's Co-ordinator, Data Access and Administration Section on (02) 8837 0474 or email CED_Fleet@rta.nsw.gov.au

Disclosure of customer information from telephone carriage service providers (CSPs) can be requested from the telecommunications regulator Australian Communications and Media Authority on 1300 850 115.



Multi-unit dwellings

The DEC's (2006) Multi-Unit Dwelling (MUD) Kit is specifically about illegal dumping of waste near multi-unit dwellings. It provides advice about prevention strategies for councils. Available at www.environment.nsw.gov.au

The DEC's (2004) report An assessment of attitudes and behaviours amongst multi-unit dwelling residents in relation to illegal dumping. The study examined the attitudes and behaviour of residents in relation to illegal dumping. It included owners, short- and long-term tenants, public housing tenants and tenants with a language other than English. Available at www.environment.nsw.gov.au

Resource NSW's (2002) Better Practice Guide for Waste Management in Multi-Unit Dwellings was developed to assist council staff, architects and developers. It outlines the essential points to be considered when designing a waste management system for medium- or high-density residential developments. Available at www.environment.nsw.gov.au

Project planning

The EPA's (1997) What we need is... A Community Education Project provides background information about community education; a step-by-step guide to planning a community education project; sample community education projects; and a summary of useful community education methods. Available at www.environment.nsw.gov.au

The DEC's (2004) Does your project make a difference? is a quide to evaluating environmental education projects and programs. Available at www.environment.nsw.gov.au

The EPA's (2000) Profits from Cleaner Production: A Self-Help Tool for Small to Medium-Sized Businesses helps enterprises reduce their operating costs by systematically identifying cleaner production opportunities. Available at www.environment.nsw.gov.au

Recycling, reuse and alternatives to disposing of waste

Planet Ark and Sensis' Recycling Near You website www.recyclingnearyou.com.au allows the general public to search for upto-date and reliable local recycling information either by council, area or product. National Recycling Hotline: 1300 733 712.

Trolley Tracker is an information service that gives the general public the opportunity to call a free number and report abandoned shopping trolleys from participating stores. Trolley Tracker Hotline 1800 641 497. Also available at www.trolleytracker.com.au

The Local Government and Shires Associations of NSW provides information about waste management and recycling. Available at www.lgsa.org.au/www/html/258-waste-managementrecycling.asp

The DECC's Household Chemical Clean Out scheme provides a drop off collection for old and leftover household chemicals. Available at www.environment.nsw.gov.au



7.4 Contacts

Non-government organisations

Bi-lingual educators

This is a paid service under the Ethnic Communities Sustainable Living Project. The educators in this project are trained to deliver environmental education to ethnic communities in their local government areas. The project promotes awareness, knowledge and understanding about ways to live more sustainably at home, leisure and work. Education sessions are in community languages.

Ph: (02) 9319 0288 Fax: (02) 9319 4229

Email: admin@eccnsw.org.au Website: www.eccnsw.org.au

Ethnic Communities' Council NSW

The Ethnic Communities' Council of NSW (ECC) is a peak non-government body representing many organisations and people. The ECC's primary roles are advocacy, education and community development. The ECC of NSW actively promotes the principles of multiculturalism, and lobbies for the development of a culturally inclusive society.

221 Cope Street (corner of Wellington Street) Waterloo, NSW 2017

Ph: (02) 9319 0288 Fax: (02) 9319 4229

Email: admin@eccnsw.org.au Website: www.eccnsw.org.au

Clean Up Australia Day

Every year hundreds of thousands of Australians help clean up their local environment during Clean Up Australia activities. If your council is interested in finding out more about partnering with Clean Up Australia please contact:

Clean Up Australia Ltd Level 1, 18 Bridge Road Glebe NSW 2037 Ph: (02) 9552 6177

Fax: (02) 9552 4468

Website: www.cleanup.com.au

Government organisations

Department of Environment and Climate Change NSW (DECC)

The DECC is a new state government department formed on 27 April 2007. It incorporates the former Department of Environment and Conservation (DEC). The department is responsible for programs to reduce waste, toxicity, litter and illegal dumping.

For information relating to the DECC's illegal dumping programs or to report illegal dumping:

- Phone the DECC's Environment Line on 131 555 (24 hours)
- Visit the DECC's website at www.environment.nsw.gov.au

Department of Local Government (DLG)

The charter of the DLG is to provide a range of continuous improvement mechanisms, which encourage, assist and promote excellence in the operation of the local government sector for the benefit of the wider community.

For more information about the DLG:

- Phone (02) 4428 4100
- Visit the DLG's website at www.dlg.nsw.gov.au

Department of Planning (DOP)

The DOP is the State Government department responsible for administering environmental planning legislation in NSW.

The DOP Information Centre can direct your inquiry to its planning and natural resource management specialists, or other government agencies, local government, developers and the community at large.

For more information about the DOP:

- Phone the DOP's Information Centre on (02) 9228 6333
- Visit DOP's website at www.planning.nsw.gov.au



Local Government and Shires Associations of NSW (LGSA)

The Local Government Association of NSW and the Shires Association of NSW are the peak industry bodies for local government in NSW. The associations represent the views of member councils to governments; promote local government to the community; and provide specialist advice and services.

For more information about the LGSA:

- Phone (02) 9242 4000
- Visit the LGSA's website at www.lgsa.org.au

Regional Illegal Dumping (RID) Squads

The DECC and partner councils have formed two regional illegal dumping squads to focus on and tackle the problem of illegal dumping.

For more information about the RID Squads:

- Phone Western Sydney RID Squad on (02) 4732 7446
- Phone Greater Southern RID Squad on 02) 4429 3771
- Visit the DECC's website at www.environment.nsw.gov.au



7.5 References

- ¹ Australian Association of Bush Regenerators (undated) *Bushcare*, Australian Association of Bush Regenerators website. Available online www.aabr.org.au/index.php?option=com_content&task=view&id=16&Itemid=48. (retrieved on 05/09/06).
- ² Billante N (2003) The Beat Goes On: Policing for Crime Prevention. Issue Analysis, No. 38., The Centre for Independent Studies. Available at www.cis.org.au/IssueAnalysis/ia38/ia38.htm (retrieved 31/8/06).
- ³ Buchanan R A (1996) Bush Regeneration Recovering Australian Landscapes, Open Training and Education Network, Strathfield.
- ⁴ Department of Environment and Climate Change NSW (2007) Research Report: Waste Management and the Construction Industry, DECC, unpublished, Sydney.
- ⁵ Department of Environment and Conservation NSW (2004) Illegal Dumping in NSW, DEC, unpublished, Sydney.
- ⁶ Department of Environment and Conservation NSW (2004) An Assessment of attitudes and behaviours amongst multi unit dwelling residents in relation to illegal dumping, DEC, Sydney. Available at www.environment.nsw.gov.au
- ⁷ Department of Urban Affairs and Planning (DUAP) and Environment Protection Authority (EPA) (1998) Managing Land Contamination Planning Guidelines SEPP 55 – Remediation of Land. Available at www.planning.nsw.gov.au/ assessingdev/pdf/gu_contam.pdf)
- 8 Regional Illegal Dumping (2004), Regional Illegal Dumping Squad Annual Review 2003-2004, RID, Sydney.
- ⁹ Scott Michael S (2004) *The Benefits and Consequences of Police Crackdowns*, Centre for Problem-Oriented Policing. www.popcenter.org/Responses/response-crackdowns.htm#2 (retrieved 31/9/06).
- ¹⁰ Southern Sydney Waste Board (2000) Scoping Paper for Illegal Dumping and Litter for Southern Sydney Waste Board.
- ¹¹ United States Environment Protection Agency (1998) Illegal Dumping Prevention Guidebook, US EPA, EPA905-B-97-001, Illinois, United States. Available at www.epa.gov/reg5rcra/wptdiv/illegal_dumping/downloads/il-dmpng.pdf
- ¹² University College London (2006) Fly-tipping: Causes, Incentive and Solutions. A good practice guide for local authorities, prepared by Jill Dando Institute of Crime Science, UCL, London, England.



7.6 Index

Aboriginal land 40, 46, 106

advertisements (see media)

aerial surveillance (see surveillance)

alternatives to waste disposal 54-57, 109

appropriate regulatory authority 18, 27, 28, 59

asbestos 56, 97-99, 106

authorised officer 18, 20, 105

barriers 39-41, 46, 82

beautification 39, 57

building design 51

builders' waste (see construction and demolition waste)

bushland 26, 46-47, 59, 69, 88-89, 93

businesses 55, 61, 69-70, 76, 109

cameras (see surveillance)

campaigns (see education campaigns)

cars (see vehicles - abandoned)

chain of custody 20

chemicals (see hazardous waste)

clean fill 14, 95

clean up 20, 39, 50, 58-60, 71, 88, 106, 110

clean up costs 25, 42, 47, 50

clean up notice 17, 18, 20, 23, 24, 26-28, 50, 80-81, 86

commercial and industrial waste 14,55

community involvement 39, 43-44, 58, 75, 89, 93, 107

community pride 39, 57-58, 71, 75

company searches 21

compliance campaigns 29, 38, 45, 66, 69, 82, 94, 97

compliance cost notice 17, 24, 26-28

construction and demolition waste 15, 59, 73, 97-102

councils - expenditure 11-12, 78

court (see also local court or Land and Environment

Court) 19-20, 23, 28, 31, 33, 48-50

court orders 23, 49, 108

culturally and linguistically diverse (see ethnic

communities)

data 31-34, 74, 79, 83

development consent 17, 18, 21, 25-26, 29, 45, 49, 77,

94-99

development control plan 14, 29, 51, 95-96, 98

dob in a dumper scheme 44, 58, 71, 91

dumpers (see offenders)

earth mounds (see barriers)

education campaigns 53-56, 61-71, 107

enforcement 12, 18, 23-24, 29, 37, 42, 45-48, 66-68, 78,

81-82,96

enforcement officer 18, 101

Environmental Planning and Assessment Act 1997 17, 29

Ethnic communities 54, 62, 63, 67-69, 87, 107, 110

evidence 20-25, 42-43, 59-60, 96

expert opinion 22

fences (see barriers)

fines 48, 50, 71, 80

funding 78, 107

garden organics 56-57, 93

global positioning system (GPS) 35, 44

grants (see funding)

green waste (see garden organics)

hazardous waste 20, 56, 59-60, 97, 106, 109

household waste 13, 50-54, 61-62, 67-68, 85, 91-92

illegal landfilling 7, 9, 12, 14, 16, 95-96, 107-108

Impounding Act 17

intelligence gathering (see data surveillance and

investigations)

interviews 20, 22

investigation notice 18, 22, 24-28, 99, 108

investigations 18, **20-22**, 24, 34, 59, 80-82, 92, 108

Land and Environment Court 23, 26, 49

landfilling (see illegal landfilling)

legislation 17-19, 23-29, 70, 96, 102, 108

licence 7, 17, 19, 49, 59, 95, 97-99, 101-102, 106

lighting 37

litter 58, 78, 105

local court 22-23, 25-26

local environment plan 51, 95-96

Local Government Act 1993 17, 78, 102

logs and boulders (see barriers)

media 48-49, 69

multi-unit dwellings 13, 61-63, 67-69, 85-87, 109



natural justice 27, 29

notices (see clean-up notice, prevention notice, compliance cost notice & investigation notice)

occupational health and safety 21, 59-60, 97

offences 9, 17-19, 22-24, 26, 28, 48-49, 71, 108

offenders 13-15

orders 17, 26, 29, 49, 108

partnerships 48, 74-77, 80-83

patrols (see surveillance)

penalty notice (see fines)

planning certificates 95-96

planning instruments (see development control plan

and local environment plan)

prevention notice 17, 23-24, 26-28, 50, 86, 101, 103, 108

private property 26, 95

program development 73-78, 109

program evaluation 79

property information 21

prosecutions 9, 10, 23-26, 28-29, 31, 42-44, 48-49, 80, 108

Protection of the Environment Operations Act 1997 17-29,

50, 59, 95-96, 99, 102

public land 46-47, 59-60, 90-91

publication order 49

publicity (see media)

real estate agents 62, 63-65, 67-69, 75-77, 86, 87

recycling (see alternatives to waste disposal)

Regional Illegal Dumping Squad 32, 36, 44, 80-81, 82, 92,

94, 111

renovators (see builders' waste)

reuse (see alternatives to waste disposal)

revegetation 39, 93

Roads (General) Regulation 2000 17

scheduled activity 18-19, 59, 95, 102-103

shopping trolleys 17, 109

signs 47, 55, 58, **71**, 80, 82, 87

skip bins 17, 43

stakeholders (see partnerships)

steering committee 76

strata managers (see real estate agents)

surveillance 33, 35, 42-44, 45, 46-47, 71, 80-81, 82, 92

telephone number searches 21

tenants 87 (see also multi unit dwellings)

transport of waste (see waste transporters)

tyres 8, 11, 14, 60

uncovered loads 45

vehicle registration search 21

vehicles - abandoned 11, 17, 46, 81, 89, 90

virgin excavated natural material (VENM) 95

volunteers (see community involvement)

warning letters 23-24

waste collection and disposal services 50-57, 61

waste disposal costs 14, 50, 56

waste disposal receipts 22, 29, 45, 60, 70, 96, 99

waste management plan 29, 99

waste transporters 19, 25, 26, 45, 50, 70, 80, 96, 97

witnesses 20-22, 25, 75 (see also dob in a dumper

scheme)

