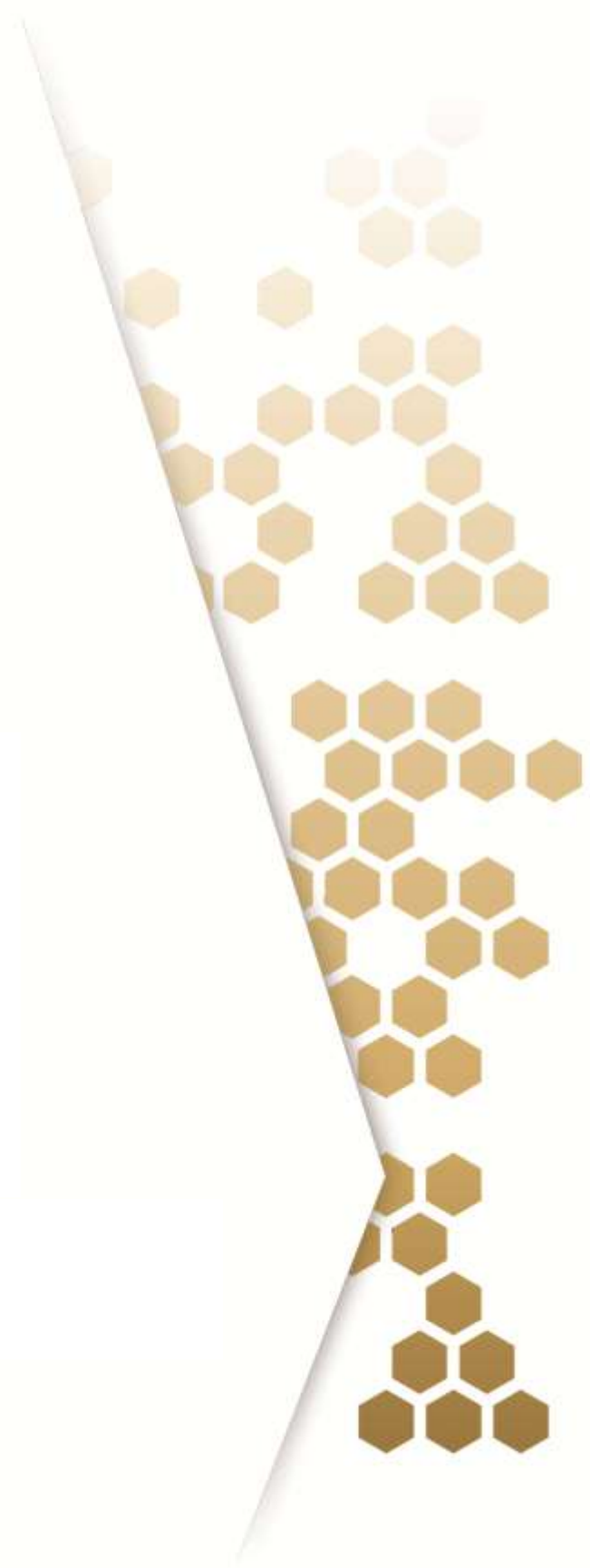


# Illegal Dumping Research Report

## Summary report

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**Research conducted by:**

Ipsos Social Research Institute  
Level 13, 168 Walker Street  
North Sydney NSW 2060  
Phone: +61 2 9900 5100

**Published by:**

NSW Environment Protection Authority (EPA)  
59–61 Goulburn Street, Sydney  
PO Box A290  
Sydney South NSW 1232

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## 1. Introduction

### 1.1 Background and objectives

Illegal dumping has been prioritised by the NSW Government. Goal 22 (Protect our Natural Environment) in the NSW 2021 plan identifies the reduction of illegal dumping as a priority, with a target of reducing illegal dumping in Sydney, the Illawarra, Hunter and Central Coast by 30 per cent by 2016.

The overriding objective of this research was to explore the motivations of people who dump waste illegally, and the influential factors which may bring about a change in behaviour among these groups of people. This research provides a benchmark for monitoring changes in attitudes, behaviours and experiences relating to illegal dumping.

### 1.2 Methodology

The research included both qualitative and quantitative components:

- qualitative individual in-depth interviews with government stakeholders, trade and industry representatives (n=44), and two group discussions with community members (n=18).
- quantitative online surveys with NSW local government authorities (n=63), trade and industry (n=100), and the wider community (n=1009).

## 2. Key findings

### 2.1 Illegal dumping is a growing problem

Illegal dumping is a significant issue for NSW LGAs, charitable recyclers, and other land managers, particularly (but not exclusively) in metropolitan NSW. The perception among these groups is that illegal dumping has become more prevalent in recent years, and this is supported by findings of the survey of NSW LGAs which indicated that it has become more of a problem since 2004.

The main problem caused by illegal dumping, for land managers, is the cost of dealing with dumped waste (including the additional resources required). Most LGAs are dealing with up to 100 illegal dumping incidents a year (and fewer illegal landfilling incidents); however, over one in 10 (11%) spend more than half a million dollars a year on activities relating to the prevention, monitoring and enforcement of illegal dumping. Most of this is spent on staff time and contractors.

The prevailing view in industry was that the extent of illegal dumping is fairly limited, with only a small minority of businesses adopting the behaviour; however, it was acknowledged that illegal dumping is done covertly and was not often spoken of, and therefore it is difficult to know how prevalent it is.

### 2.2 Household waste on the kerbside is the most common form of illegal dumping

The research found that a third (35%) of the community and over a quarter (27%) of waste producing businesses had dumped waste illegally in the last year. Most of this was on the kerbside or roadside. One in 10 (11%) in the community had illegally dumped waste in other locations.

Householders and businesses most commonly admitted to illegally dumping household waste and recyclables (among householders) and general waste (among businesses). This aligns with the experiences of LGAs, which find that they most commonly deal with household waste dumped by the roadside or kerbside (and this has remained unchanged since 2004).

Asbestos comprises a small proportion of dumped waste in terms of what LGAs are cleaning up (8%), and while no one in industry admitted to illegally dumping asbestos, the prevailing view among LGAs was that asbestos is being dumped more frequently now than five years ago. Despite forming only a minority of illegal dumping incidents, illegally dumped asbestos was commonly cited as being the most problematic for land managers.

### **2.3 Illegal dumping is not necessarily confined to any particular demographic**

The general perception among land managers was that a minority of households and businesses illegally dump waste, and that this was confined to certain demographic characteristics. The view was that low socioeconomic-status households, immigrants and residents of unit blocks were more likely than others to illegally dump waste; however, the research with the community demonstrated that this is not the case: there are no discernible differences in the demographic characteristics of people who dump at the kerbside and people who do not. It is young people, males and those in full-time employment who are among the most likely to illegally dump waste elsewhere (other than or in addition to the kerbside). The survey showed that illegal dumpers are *not* characterised as having low incomes, a lower level of formal education, or as culturally and linguistically diverse (CALD).

## **3. Detailed findings**

### **3.1 Experiences and perceptions of land managers**

The main problem caused by illegal dumping, for land managers, is the cost of dealing with dumped waste, with over one in 10 LGAs (11%) spending more than half a million dollars a year on activities relating to the prevention, monitoring and enforcement of illegal dumping. Most of this is spent on staff time and contractors.

The general view was that perpetrators of illegal dumping formed a small minority of the population. Both tenants and house owners were thought to be responsible, along with small businesses. It was thought that the community were generally unaware of the impacts of illegal dumping.

LGAs are most commonly dealing with household waste dumped by the roadside or kerbside (and this has remained unchanged since 2004). Despite forming only a minority of illegal dumping incidents (8%), illegally dumped asbestos was thought to be on the rise and was commonly cited as being the most problematic for land managers, due to the health and safety risks and the high cost of cleaning it up.

Cost was seen as one of the main drivers in dictating waste disposal behaviour. Many respondents thought reducing the cost of legal waste disposal (particularly of asbestos) would help reduce illegal dumping. Many also thought that a major contributor was a lack of concern for the local community.

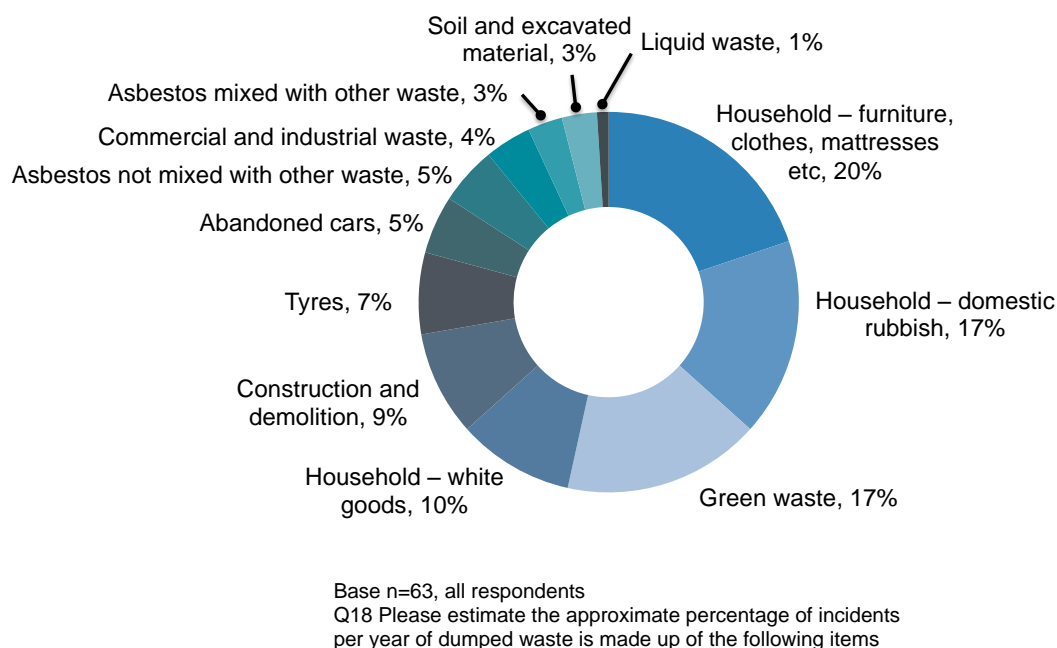
The consensus was that the possibility of being caught needed to be made more of a reality for illegal dumpers. Increased surveillance and patrolling were seen as effective, but not a viable solution, given the number of locations where it would be required; however, it was thought that even if there was not a real increased chance of being caught, it needed to appear to be a genuine risk. It was commonly believed that the penalties for dumping illegally were too lenient.

There was a view that public education campaigns could help change the culture of illegal dumping, and a desire for greater regulation of waste producers, applicable to both householders and businesses.

### 3.2 Local government experiences of illegal dumping

A quantitative survey of members of NSW local government authorities (LGAs) was conducted to explore the nature and extent of the issue of illegal dumping in their remit, and the measures and strategies in place (or planned for the future) to combat illegal dumping.

Over eight in 10 respondents from local government (81%) felt that illegal dumping in their area was a major or moderate problem. Figure 1 shows LGAs' estimates of the proportion of incidents that involve various types of waste. Household furniture was the most common type of waste dumped, followed by domestic and green waste.



**Figure 1: LGA estimates of the types of waste dumped (proportion of incidents)**

More than half of the responding LGAs had noticed an increase in the illegal dumping of household waste (54%) and asbestos (52%) in the past five years. Bushland, vacant lots and the roadside were thought to be the most common places for illegal dumping to occur. Householders, small businesses and large businesses were all identified as dumping waste illegally. Overall, householders were seen as the most likely to dump almost all types of waste.

Patrolling and surveillance was seen as the most effective strategy for reducing illegal dumping. Enforcement and community reporting were generally seen as the most effective prevention measures for most types of waste.

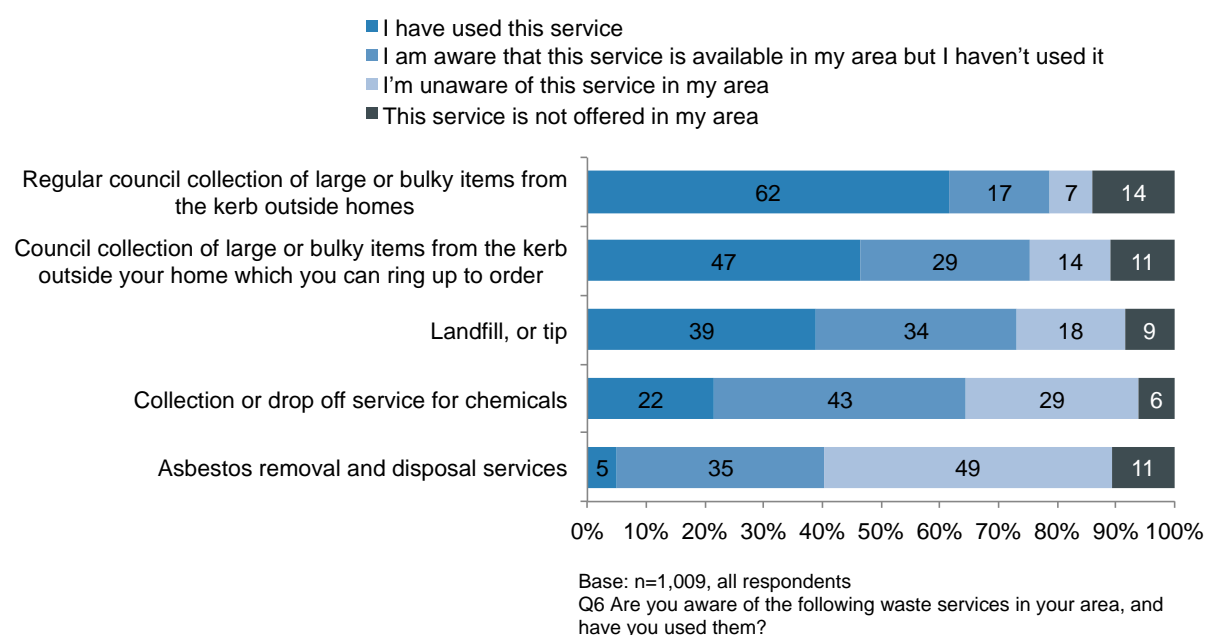
### 3.3 Community and industry: dumping behaviours, attitudes and beliefs

A third (35%) of the community and over a quarter (27%) of waste producing businesses had dumped waste illegally in the last year, most of which was on the kerbside. One in 10 (11%) in the community had illegally dumped waste elsewhere.

**The COM-B behavioural framework<sup>1</sup> has been used in the analysis and reporting of this research. This identifies three fundamental factors influencing any behaviour: Capability, Opportunity, and Motivation. The research findings are structured according to these factors.**

### 3.3.1 Capability

**Low awareness of legal methods does not appear to be driving illegal dumping** (see Figure 2). The research showed that people who were aware of legal disposal methods were no less likely to dump waste illegally; in fact those who were most aware of, and most likely to have used, the services available were also most likely to have dumped waste illegally. The qualitative research suggested that this is due to these people most needing to know about legal disposal methods because they frequently have waste to dispose of, whereas those who do not generally dispose of waste are less aware of the disposal methods available to them.



**Figure 2: Awareness and use of waste disposal services**

**People understand that (most) dumping is illegal.** The research showed that there is a good understanding among the general community and industry of the illegal status of dumping waste; however, there is some confusion in the community about the legality of leaving household waste on the kerbside (outside of council collection dates), with a third believing it to be legal (33%) and nearly a quarter not knowing either way.

### 3.3.2 Opportunity

**Social norms around dumping play an important role in influencing waste disposal behaviour.** Illegal dumping was viewed by the vast majority of the community and businesses as very unacceptable, with the exception of kerbside dumping which was not viewed with such condemnation. Householders who dumped waste elsewhere, or in addition to the kerbside, were more likely to see illegal dumping as acceptable, indicating that

<sup>1</sup> Michie, S, van Stralen, M and West, R 2011, 'The behaviour change wheel: A new method for characterising and designing behaviour change interventions', Implementation Science 6:42, available at [www.implementationscience.com/content/6/1/42](http://www.implementationscience.com/content/6/1/42).

perceived acceptability of dumping waste does impact on a person’s likelihood of doing it. There were no differences in terms of income or other demographics among those who viewed dumping as acceptable and those who did not.

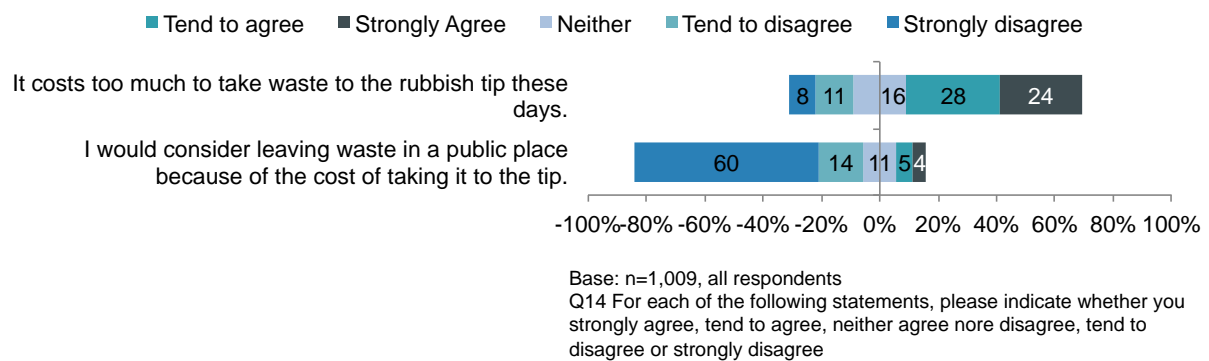
In addition, householders and businesses who dumped waste illegally (other than or in addition to the kerbside) were more likely to have seen or heard of other people dumping waste illegally. These householders were also more likely to say that their behaviour is influenced by others. In other words, illegal dumping was more prevalent among people who viewed it as a social norm.

Widespread disapproval of illegal dumping was a major deterrent to businesses to dump waste illegally. The reputation of their business was critically important to them and their livelihood, and therefore the potential damage to their name caused by illegal dumping was a powerful incentive to use legal disposal methods.

**The distance to waste disposal facilities may contribute to decisions to dump illegally.** Most in the community and in industry did not experience difficulties accessing waste disposal facilities. The majority have access to a vehicle, and this did not vary between those who did and did not dump waste illegally; however, householders who had further to travel to landfills were more likely to dump waste illegally (in places other than or in addition to the kerbside). These people were also more likely to have access to a trailer, aiding their ability to take waste elsewhere.

### 3.3.3 Motivation

**Cost avoidance is a key driver for businesses to dump illegally.** The majority of the general community also found waste disposal very expensive; however, for most this did not drive them to dump their waste illegally. Those who do dump waste illegally (in places other than or in addition to the kerbside) said they do so in part to save money, but the research shows that other factors are influencing their decisions.



**Figure 3: Cost of waste disposal as an influencing factor**

**Low awareness or consideration of the consequences of dumping illegally was a factor.** The research found that the majority in the community and industry thought there was some chance of being caught (which varied by location), and that perceptions of the likelihood of being caught did not vary between those who do dump waste illegally and those who do not. This suggests that a higher perceived likelihood of being caught is not in itself a strong deterrent.

Despite perceiving being caught as a reality, there was low awareness of the penalties which applied if caught. Knowledge of the magnitude of the fines applicable was fairly low among the community, but there was awareness that higher fines applied if the waste dumped was hazardous. There was higher awareness among industry of the fines applicable.

Concern for the environmental impacts of dumping was fairly low, and appears to be lowest among the householders and businesses who are dumping illegally (in places other than or in addition to the kerbside).

### 3.4 Interventions

Most LGAs were implementing some kind of community education and awareness raising, in an attempt to reduce illegal dumping. Education was seen as one of the most effective ways to reduce dumping, in conjunction with enforcement. Resourcing action dumping policies and programs is a major challenge for many LGAs, particularly those with large land areas to cover.

### 3.5 Summary of recommendations

Based on the findings of this research, future strategies and interventions to reduce illegal dumping ought to:

- **Capitalise on businesses' concern for their reputation.**
  - Convey a strong message to industry that the reputation of their business (and therefore their livelihood) is at risk if they dump.
  - Name and shame businesses guilty of dumping, to make the threat of reputation damage a reality and leverage word-of-mouth within industries.
- **Reinforce the social norm that illegal dumping is unacceptable.**
  - Communicate to the minority who see it as acceptable and the norm, that illegal dumping is disapproved of and not the norm.
- **Create a social norm around reporting illegal dumping.**
  - Convey the message that 'dobbing in a dumper' is socially acceptable and is the norm, and that it is not acceptable to ignore dumping.
- **Increase the perceived likelihood of being caught dumping in state forests and at charity bins.**
  - Indicate that patrolling and surveillance does happen in these places, and that arrests do occur, through raising the profile of enforcement and penalties.
- **Raise the profile of the personal consequences (i.e. magnitude of fines, prison sentences), and ensure fines are more than the savings made by dumping illegally.**
- **Educate householders to request evidence of legal disposal from any contractors used.**
- **Share best practice relating to strategies to minimise, enforcement, and clean-up among LGAs and other land managers.**