



BACKGROUND

Almost overnight, waste has become a hot topic. This was highlighted by the incredible success of ABC TV's *War on Waste,* which pulled 759,000 viewers back in May. The show was even trending at #1 on Twitter before its premiere (tytonight.com.au).

Here in the ACT, the good news is that we are proposing to introduce a raft of innovations and changes to the Development Control Code for Best Practice Waste Management in the ACT (the Code) that promise to bring the ACT into line with global best practice in waste management, and reinforce our excellent environmental track record

Some of these proposed changes have come about due to the move to higher density living. Today, we are seeing new developments with a scale and mix of uses that we have not seen before. This urban densification requires the Code to be updated so it addresses the particular needs of the large multi-unit developments that are now being planned and built.

Some proposed changes have also been prompted by stakeholders in the development industry, building managers and owners' corporations, who have asked the Government to re-examine the Code, which some feel is too prescriptive when it comes to large developments and mixed-use precincts. ACT NOWaste has listened to these stakeholders. We have carried out benchmarking studies and talked to industry experts, and set in train a consultative review process to update the Code so it reflects emerging issues and ensures that new buildings meet best practice standards.

This report sets out the proposed changes to the Code and other innovations.

WHAT IS 'THE CODE'?

The 'Development Control Code for best practice waste management in the ACT' directs the building industry on how to incorporate best practice waste and recycling management principles into the design, construction and operation of all new developments in the ACT. The Code also ensures that residents have appropriate waste management facilities without impacts on amenity.

POTENTIAL CHANGES TO THE SIZE OF TRUCKS

The access requirements for waste collection in large multi-unit developments stem from 2013 when the Government awarded the domestic waste and recycling contract to SUEZ. At the time, an advantage of SUEZ's trucks was their larger capacity.

However, developers and the Property Council have stated that these larger trucks have a number of disadvantages. For a start, the trucks need buildings to have very large openings and 6.5 metre height clearances to service the hoppers that store waste inside multi-unit developments. The trucks also have very large turning circles, and – because they are front-loading – they need to enter a site in a forward direction, and then often need to reverse out

These stakeholders have asked for changes to the Code to enable the use of smaller, rear-loading waste trucks (similar to those used for recycling) as they would allow a better use of the available space in buildings and need a lower height clearance of 4.3 metres (see Figure 1).

The property industry would prefer the use of smaller trucks in large multi-unit developments. But, a question to be resolved is who would pay the additional cost.

Figure 1: Trucks and waste hoppers

Front-loading truck



31 m³ capacity. Used to collect waste. They require a 6.5 m clearance to service waste hoppers.

Rear-loading truck



24 m³ capacity. Used to collect recyclables. They require a 4.3 m clearance to service recycling hoppers.

Hoppers





3000 L hoppers are used for waste, and 1100 L hoppers are used for recyclables.

AN INDEPENDENT REVIEW

In response, ACT NOWaste commissioned an independent expert review of a range of smaller rearloading trucks. The review found that rear-loading or smaller trucks could address some of the industry's concerns. For example, they would have a lower ceiling height (see Figure 1) and require less operating space within buildings. The trucks would also be able to reverse in and exit forwards, which would improve safety.

However, rear-loading or smaller trucks would also have several adverse effects: the need for more frequent collections would increase traffic, waste collection costs would increase, and variations to the waste collection contract would mean added payments to the contractor.

The review found that if smaller trucks were introduced, the best option would be to use 24m3 rear-loading trucks (similar to recycling trucks) to collect waste in new multi-unit developments. Some industry stakeholders have advised ACT NOWaste that they are satisfied with this option.

However, a key question to be resolved by government is who would pay the additional cost – developers, the owners' corporations or the general ratepayer.

OTHER INNOVATIONS

While looking at truck sizes, a number of other opportunities were canvassed with industry in relation to multi-unit developments.

These are outlined below.

INCREASED RECYCLING

Until now, waste and recycling allocations for multiunit developments were based on the number of units, rather than the number of bedrooms. Under this formula, residences in single-unit dwellings were allocated 120 litres per week for recyclables, but those in multi-unit developments only 40 litres. These allocations led to complaints by owners' corporations and strata managers.

To bring us into line with best practice, ACT NOWaste has changed the allocations so they are based on the number of bedrooms rather than number of units. The new allocations are to be applied in new developments (see table below) and, importantly, should result in higher recycling rates.

REVISED ALLOCATIONS FOR WASTE AND RECYCLING IN NEW DEVELOPMENTS (LITRES PER WEEK)

Dwelling size	Waste	Recyclables
Single-unit development	140	120
4-bedroom unit or greater	140	120
3-bedroom unit	120	110
2-bedroom unit	100	90
1-bedroom plus separate study room	90	80
1-bedroom or studio unit	80	70

A NEW PATHWAY FOR ALTERNATIVE WASTE MANAGEMENT SOLUTIONS

The development industry has commented that the Code is excessively prescriptive, which discourages innovation and cramps the potential for Government to assess the merits of waste management proposals that do not strictly comply with the Code.

It is now proposed to have a new assessment pathway that allows creative and alternative solutions to be considered at the development application stage. This approach should help minimise problems with non-conforming developments and enable the approval of the best possible design solutions.

ACT NOWaste is exploring opportunities to provide innovative solutions for waste and recycling management in multi-unit developments.

Figure 2: Innovative solutions for waste and recycling management





Dual chutes



User friendly hoppers



COMPACTORS FOR VERY LARGE MULTI-UNIT DEVELOPMENTS

Many cities with high-density mixed-use developments require the use of waste compactors. In the ACT, compactors are used in commercial developments. It is now recommended that compactors be required for large multi-unit developments, with a preference for leak-proof integrated compactors.

DUAL CHUTES FOR WASTE AND RECYCLING

The Code permits chutes for waste but not recycling. This means residents must either take their recyclables to their building's waste area or to recycling bins on their floor. While this system may be practical for small developments, it is not practical in very large developments with hundreds of units. It is therefore recommended that two chutes be allowed in large developments.

USER-FRIENDLY HOPPERS

Some residential stakeholders have raised concerns about the large hoppers with heavy lids, which are difficult to use, particularly for elderly people and those with disabilities. In response, ACT NOWaste proposes to introduce new user-friendly plastic hoppers with an easier to use lid.

TRIALS OF NEW WASTE MANAGEMENT TECHNOLOGIES

The Government is trialing a collaborative approach to enable innovative waste outcomes at the SOHO development on Northbourne Avenue and The Republic development in Belconnen. The trial is testing the proposed allocations for recycling and waste, the potential for integrated compactors, and the potential for separate chutes for waste and recycling. ACT NOWaste is also assessing other ideas, such as turntables for collection trucks and a carousal of bins under the chutes with the use of compactors.

Figure 3: Visualisation of The Republic development in Belconnen



OTHER AREAS WE ARE LOOKING TO IMPROVE

COMPLIANCE

ACT NOWaste has received complaints from residents, strata managers and the waste collection contractor, SUEZ, that waste infrastructure in many multi-unit developments does not comply with the Code (a recent audit found that around one-third of multi-unit developments built over the last 12 to 18 months do not comply).

This creates significant problems. In particular, it makes it harder to provide waste services; alternative solutions are often needed but, sometimes, other solutions are untenable and the Territory at times finds it is unable to provide (any) waste service to those developments. This means the owners' corporation needs to arrange its own services at an additional cost to the building's residents.

ACT NOWaste is working with EPSDD and Access Canberra to ensure compliance.

ENFORCEMENT AND EDUCATION

The Code is not enforceable, which means non-compliances cannot be penalised. However, that could be about to change. ACT NOWaste recommends making the Code an enforceable 'Code of Practice' under the new ACT *Waste Management and Resource Recovery Act 2016.* This is strongly supported by some industry and stakeholder groups. ACT NOWaste is also looking to develop an education campaign to raise awareness of the waste management legislation and the need to comply with the Code, and to increase recycling in large multi-unit developments.

KERBSIDE COLLECTIONS FOR MULTI-UNIT DEVELOPMENTS

Currently, developments with up to 10 units are permitted to have kerbside collections, but developments with more than 10 units require onsite waste enclosures and collection within the property. Building designers say that up to two units are being sacrificed in some developments to provide on-site access for waste trucks. As a result, industry representatives have asked for kerbside collection services for multi-unit developments with more than 10 units using bins that are shared between the units, rather than having separate bins for each unit.

ACT NOWaste considers this may be possible for new developments with, say, 10 to 30 units if enough kerbside space is available.

The question for Government, if the shared bin option is adopted, is who will pay for the management of shared kerbside bins so they do not impact on neighborhood amenity.

Figure 4: Kerbside collection of larger shared bins



GREEN WASTE AND FOOD ORGANICS

In April 2017, ACT NOWaste began a 15-month pilot green waste collection service. Data from the pilot will be used to inform decision-making on future green waste services. Depending on the outcome, the Code may be revised to include provisions for a garden organics bin in single and multi-unit developments. The ACT Waste Feasibility Study is also looking to identify how the ACT might implement a food organics and garden organics (FOGO) collection service.

The question for Government to resolve is how to collect FOGO from multi-unit developments, which present particular challenges; however, a third chute for food organics collection could be considered.

SELF-MANAGEMENT OF WASTE BY OWNERS' CORPORATIONS

Some representatives from the development industry have suggested that larger scale developments with commercial and residential waste could manage their own waste collections, with owners' corporations covering the cost for this combined service.

While there could be some efficiencies in combining commercial and residential waste, there would be considerable risks in allowing developers to hand over waste management responsibilities to owners' corporations on the expectation it would be delivered through commercial arrangements.

Without strong regulation and reporting there would be a risk that inadequate space would be provided for waste infrastructure and/or access for collection, which could result in adverse effects. For example, a developer could propose that a commercial operator provide a small truck on a daily basis.

This would result in very high ongoing costs for residents, more truck movements within the development and on city streets, and a loss of government control over the quality of domestic collections.



