



Noise Management Plan
Shire of Capel
Class 1 and 2 Waste Collection Works

Revision Status

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09/08/2024	1.2	Todd Dermody	Damien Moss	Damien Moss

Initially Prepared by



Herring Storer Acoustics

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EXECUTIVE SUMMARY

Herring Storer Acoustics were initially commissioned by Cleanaway to assist them in preparing a Noise Management Plan (NMP) for the provision of waste collection services within the Shire of Capel.

Provided within this plan is information for stakeholders in relation to the waste collection operations, such as times the collection would occur, noise levels associated with the collections, best practices employed and complaint processes.

Noise levels within this NMP have been based on measurements of existing Cleanaway operations. These noise levels have been used to provide an indication of the impact of noise at pickup points within the Shire of Capel.

As there are numerous collection points which vary greatly in land use (i.e. residential, commercial and Industrial), establishing noise levels at the nearest noise sensitive premise for all locations proves to be challenging. Guidance within this NMP however, has been provided where buffer distances are established, with these being used to provide an indication of the noise levels.

Generally, the earlier pickup times for the collection activities prior to 07:00 are located within industrial and commercial zoned areas. Therefore, most locations comply with Regulation 7 noise level criteria. Other locations which contain neighbouring noise sensitive receptors which have the potential to be impacted by noise are managed through this document.

Waste management is an essential service for the welfare of the community and given the size of the collection vehicles, it is sometimes necessary to access high traffic, congested, tight access and confined areas early morning for the safety of the community.

A “Detailed Specification” section, compiled by Cleanaway, has been included in the plan with the purpose to provide more detailed information based on ongoing feedback from Council staff.

We believe that these works are considered justified and reasonably necessary given the duration of the proposed activity, the noise control to be considered and the procedures to be implemented during the activity.

1 Introduction

The *Environmental Protection (Noise) Regulations 1997* identifies the collection of waste as being exempt from the prescribed standard for noise emissions, provided works are carried out in accordance with a NMP.

This document provides details of the works for both Class 1 (07:00 to 19:00 Weekdays and Saturdays and 09:00 to 19:00 Sundays or Public Holidays) and Class 2 (For all other hours not considered in Class 1).

A “Detailed Specification” section, compiled by Cleanaway, has been included in the plan with the purpose to provide more detailed information based on ongoing feedback from Council staff.

Waste collection activities considered in this NMP are based on both residential and commercial collection services which include:

- Front Lift Trucks (Commercial General and Recycle Waste);
- Side Lift Trucks (Residential General Waste, Recycle Waste and Food/Garden Organics (Fogo));
- Rear Lift Trucks (Commercial General and Recycle Waste);
- Hook and Skip Lift Trucks (Commercial / Residential Skip Bins).

2 Background

Cleanaway is Australia's leading waste management, recycling and industrial services company.

A smarter way and a better way. Meet the new Cleanaway

We've come a long way in our short history. We started life in South East Queensland as Transpacific in 1987 and through hard work and determination have become the leading waste management company in Australia. To ensure we continue to build and strengthen we have united our solid waste, liquids and industrial services under a refreshed and reinvigorated Cleanaway brand. And, effective from February 1, 2016, we are now Cleanaway Waste Management Limited.

Our early years were spent developing and running liquid waste management centres throughout Townsville, Mackay, Cairns and Mt Isa. We spent most of the 90s expanding into New South Wales and Victoria, and by 2001 had extended our footprint into Western Australia. In 2007 we acquired the largest solid waste company in the country – Cleanaway – making us a truly national total waste management company. The largest in Australia.

Everything we've done to grow to where we are today has been to enable us to better service our customers; from building Australia's first purpose-built hydrogenation plant to treat waste oil, to being the largest collector and processor of waste in the country.

We've been helping Australian industry, business, communities, government and households reduce, reuse, recycle and safely dispose of waste for over 50 years. We don't feel that old. Being busy and staying at the forefront of sustainability innovation keeps us young and drives us to making a sustainable future possible.

Our size and market leadership position have helped us forge partnerships with a number of leading Government, industry and commercial entities like the Australia Council of Recycling, the Australian Packaging Covenant, and the Waste Management Association of Australia. By being actively involved with these bodies, we stay at the forefront of our industry.

But size alone doesn't equal customer service or sustainability. It has to be combined with the knowledge built up over many decades of how to efficiently collect and treat waste. At Cleanaway, this is our strength and ensures we service all of our customers to the high standards needed to play an important role in the sustainability of the environment in Australia.

Everything we do has sustainability at its core. From educating children on the importance of sorting waste, to working with all our customers and communities on finding innovative ways to increase the effectiveness of their waste management and make a sustainable future possible.

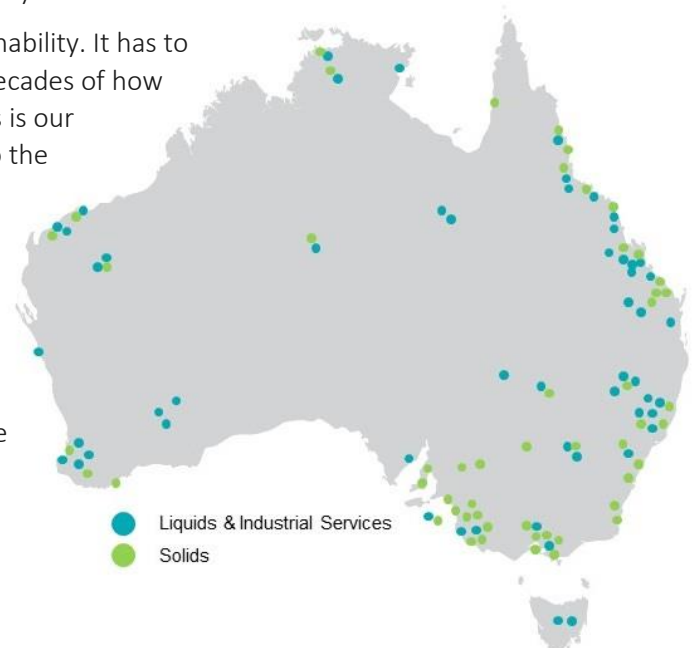


Figure 1| Cleanaway sites

3 Criteria

Western Australia noise impacts are governed by the *Environmental Protection (Noise) Regulations 1997*. Within these, Regulation 14A and 14B addresses noise from waste collection services. This Regulation does not provide specific noise levels which must be met but rather, provides management procedures to be followed as detailed below.

3.1 Environmental Protection (Noise Regulations 1997 - Regulation 14 a and 14B)

Regulation 14A. Waste collection and other works

(1) In this regulation —

ancillary measure means a measure designated to be an ancillary measure under regulation 14B;

class 1 works means specified works carried out between —

- (a) 0700 hours and 1900 hours on any day that is not a Sunday or a public holiday; or
- (b) 0900 hours and 1900 hours on a Sunday or public holiday;

class 2 works means specified works carried out otherwise than between the hours specified in the definition of class 1 works paragraphs (a) and (b);

specified works means —

- (a) the collection of waste; or
- (b) the cleaning of a road or the drains for a road; or
- (c) the cleaning of public places, including footpaths, cycle paths, car parks and beaches; or
- (d) the maintenance of road verges and public open space (including the collection of rubbish and the planting, trimming, watering or removal of trees); or
- (e) the periodic collection of household items or other things placed on street verges by residents for the purpose of such a collection; or
- (f) activities associated with hazard or emergency management;

waste means waste from domestic or commercial sources and includes —

- (a) putrescible waste; and
- (b) non putrescible waste; and
- (c) recyclable materials.

- (2) Regulation 7 does not apply to noise emitted in the course of carrying out class 1 works if —
 - (a) the works are carried out in the quietest reasonable and practicable manner; and
 - (b) the equipment used to carry out the works is the quietest reasonably available; and
 - (c) in a case where a person has been required to prepare a noise management plan under sub regulation (4) in relation to the works —
 - (i) the noise management plan has been prepared and submitted in accordance with the requirement, and approved in writing by the CEO; and
 - (ii) the works are carried out in accordance with the noise management plan, excluding any ancillary measure.
- (3) Regulation 7 does not apply to noise emitted in the course of carrying out class 2 works if the works are carried out in accordance with a noise management plan, excluding any ancillary measure, for class 2 works approved in writing by the CEO.
- (4) The CEO may by written notice require a person who carries out class 1 works —
 - (a) to prepare a noise management plan; and
 - (b) within the time specified in the notice, to submit the plan to the CEO, or another person specified in the notice, for the approval of the CEO.
- (5) A noise management plan for class 1 works is to include —
 - (a) details of vehicle or equipment evaluation and purchase policies adopted to select, on a reasonable and practicable basis, the quietest vehicle or equipment available; and
 - (b) measures to be adopted to minimise noise emissions resulting from carrying out the works; and
 - (c) a description of the specified works to be carried out during the times of day to which the class relates; and
 - (d) operator training programmes; and

- (e) community information on the manner in which the specified works will be carried out; and
 - (f) a complaints response procedure.
- (6) A noise management plan for class 2 works is to include, but is not limited to —
- (a) details of vehicle or equipment evaluation and purchase policies adopted to select, on a reasonable and practicable basis, the quietest vehicle or equipment available; and
 - (b) measures to be adopted to minimise noise emissions resulting from carrying out the works; and
 - (c) justification for carrying out the works during the times of day to which the class relates; and
 - (d) a description of the specified works to be carried out during the times of day to which the class relates; and
 - (e) operator training programmes; and
 - (f) community information on the manner in which the specified works will be carried out; and
 - (g) a complaints response procedure.
- (7) An application by a person, other than a local government, for the approval of a noise management plan under sub regulation (3) is to be accompanied by an application fee of \$500, but the CEO may, in his or her discretion, waive or reduce the fee.
- (8) Before approving a noise management plan under sub regulation (3) or (4), the CEO must —
- (a) if the plan was submitted by a local government, require the local government to give local public notice, as defined in the Local Government Act 1995 section 1.7, of the plan; or
 - (b) if the plan was submitted by a person other than a local government, require the person to publish notice of the plan at least once in a newspaper circulating generally throughout the district where the plan will have effect.
- (9) A notice under sub regulation (8) must specify the following —
- (a) the purpose and effect of the noise management plan;
 - (b) the places at which the noise management plan may be inspected or obtained;
 - (c) the period (being not less than 30 days after the notice is published in a newspaper) within which submissions about the plan may be made to the CEO.
- (10) After considering any submissions made under sub regulation (9)(c), the CEO may —
- (a) approve the noise management plan as proposed; or
 - (b) approve a noise management plan that is not significantly different from what was proposed; or
 - (c) refuse to approve the noise management plan as proposed and require a new plan to be prepared and submitted for approval.
- (11) A noise management plan for class 1 works or class 2 works expires —
- (a) 3 years after the day on which it is approved by the CEO; or
 - (b) on such other day, not more than 3 years after the day on which it is approved by the CEO, as the CEO specifies in the approval of the plan.

Regulation 14B. Ancillary measures: waste collection and other works

- (1) The CEO may, by written notice to a person who submits a noise management plan under regulation 14A, designate a measure in the plan to be an ancillary measure if the measure does not directly influence the level, duration or time of day of a noise emission.
- (2) A person who carries out class 1 works or class 2 works, as those terms are defined in regulation 14A, must ensure that any ancillary measure relating to the works is implemented.
Penalty: a fine of \$5 000.

3.2 Allowable Noise Levels (Regulation 7)

The allowable noise levels at the surrounding premises are prescribed by the *Environmental Protection (Noise) Regulations 1997*. Regulations 7 & 8 stipulate maximum allowable external noise levels determined by the calculation of an influencing factor, which is then added to the base levels shown below. The influencing factor is calculated for the usage of land within two circles, having radii of 100m and 450m from the premises of concern.

TABLE 0 - BASELINE ASSIGNED OUTDOOR NOISE LEVEL

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L _A 10	L _A 1	L _A max
Noise sensitive premises within 15 metres of a dwelling	0700 - 1900 hours Monday to Saturday	45 + IF	55 + IF	65 + IF
	0900 - 1900 hours Sunday and Public Holidays	40 + IF	50 + IF	65 + IF
	1900 - 2200 hours all days	40 + IF	50 + IF	55 + IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	35 + IF	45 + IF	55 + IF
Commercial	At All Times	60	70	80

It is a requirement that received noise be free of annoying characteristics (tonality, modulation and impulsiveness), defined below as per Regulation 9.

“impulsiveness” means a variation in the emission of a noise where the difference between L_{Apeak} and L_{Amax,Slow} is more than 15 dB when determined for a single representative event;

“modulation” means a variation in the emission of noise that –

- (a) is more than 3dB L_{A Fast} or is more than 3 dB L_{A Fast} in any one-third octave band;
- (b) is present for more at least 10% of the representative assessment period; and
- (c) is regular, cyclic and audible;

“tonality” means the presence in the noise emission of tonal characteristics where the difference between –

- (a) the A-weighted sound pressure level in any one-third octave band; and
- (b) the arithmetic average of the A-weighted sound pressure levels in the 2 adjacent one-third octave bands,

is greater than 3dB when the sound pressure levels are determined as L_{Aeq,T} levels where the time period T is greater than 10% of the representative assessment period, or greater than 8dB at any time when the sound pressure levels are determined as L_{A Slow} levels.

TABLE 1 - ADJUSTMENTS TO MEASURED LEVELS

Where tonality is present	Where modulation is present	Where impulsiveness is present
+5 dB(A)	+5 dB(A)	+10 dB(A)

Note: These adjustments are cumulative to a maximum of 15 dB.

4 Noise Level Measurement

To establish the noise emissions associated with the various waste collection activities, noise level measurements have been undertaken. This involved observed, handheld measurements for each different waste collection activity.

Noise measurements were conducted at various distances from the operating equipment. These distances varied based on the type of bin, the size of the truck and the nature of the location. Consideration was given to the distances of neighbouring residential premises and where possible, measurements were conducted outside the residence.

Based on the Cleanaway operations the following equipment and the associated noise levels were measured.

4.1 Front Lift Trucks

These trucks are required to lift bins from the front of the vehicle utilising a hydraulic lift system integrating tines inserted either to the side or beneath the bin. Figure 2 details the trucks and lifting action.

Bin types range in size, although generally they are the 1.5 to 4.5 cubic metres and are located at businesses, hence are situated on commercial / industrial premises. Materials contained within the bins are a mixed range, with the majority being either recycle (cardboard) or general waste.

FIGURE 2 – FRONT LIFT TRUCK



TABLE 2 – FRONT LIFT AVERAGE NOISE LEVELS DB(A)

Measurement Location and Distance	L _{Aeq}	L _{Amax}
Side – 2 Metres	86	95
Side – 5 Metres	78	88
Side – 10 Metres	75	83
Side – 25 Metres	70	80
Side – 90 Metres	63	73
Rear – 20 Metres	70	81

For most sites, the time the truck was present on the premise was less than 1 minute. Generally, noise levels for the bin pick up cycle were approximately 30 seconds, which was the time a bin lift, empty and return took.

4.2 Side Lift Trucks

These trucks are required to lift bins from the side of the vehicle utilising a hydraulic lift system integrating a clamp to the side. Figure 4 details the trucks and lifting action.

Bin types are a standard residential waste bin and are located outside residential premises. Materials contained within the bins are either recycle or general waste.

FIGURE 3 – SIDE LIFT TRUCK AND BINS



TABLE 3 – SIDE LIFT AVERAGE NOISE LEVELS DB(A)

Measurement Location and Distance	L _{Aeq}	L _{Amax}
Side – 3 Metres	81	90
Side – 5 to 10 Metres	73	87

Generally, noise levels for the bin pick up cycle were approximately 10 seconds, which was the time required for a bin lift, empty and return.

4.3 Rear Lift Truck

These trucks are required to lift bins from the rear of the vehicle utilising a hydraulic lift system integrating a hook onto the handle of the bin. Unlike the other truck types, this collection activity requires the operator of the truck to retrieve the bins manually and hook them to the rear of the truck. Bin types are generally the 240, 660 or 1100 Litre size. These bins are normally located in compounds at residential complexes and commercial buildings. Materials contained within the bins are either recycle or general waste. Figure 6 details the trucks and lifting action.

FIGURE 4 – REAR LIFT BIN COLLECTION



TABLE 4 – REAR LIFT AVERAGE NOISE LEVELS dB(A)

Measurement Location and Distance	L _{Aeq}	L _{Amax}
Side (Passenger) – 2 Metres	83	86
Rear - 2 Metres	75	84
Side (Driver) – 2 Metres	81	83
Front – 2 Metres	76	78

Generally, noise levels for the bin pick up cycle were approximately 10 seconds, which was the time a bin lift, empty and return took.

Based on the time noise was present for each site, the applicable noise level parameter would be the L_{A01} criteria.

Note: Whilst noise emissions from these operations are not assessed under Regulation 7, the L_{A01} would be the appropriate parameter to allow for comparison.

4.4 Hook lift and Lift On Truck

These trucks are required to lift bulk hook bins from the rear of the vehicle utilising a hydraulic lift system integrating a chain and hook system. Skip bins (also known as Marrell bins) use a lift on/lift off system to provide a versatile single lift bin system.

Bin types are generally the 2 to 30 cubic metre size. These bins are normally located in commercial sites. Materials contained within the bins are either building or general waste. Figure 7 details the truck type

FIGURE 5 – HOOK LIFT TRUCKS



TABLE 5 – HOOK LIFT & LIFT ON TRUCKS AVERAGE NOISE LEVELS dB(A)

Measurement Location and Distance	L _{Aeq}	L _{Amax}
Side – 2 Metres	86	95
Side – 5 Metres	78	88
Side – 10 Metres	75	83

Generally, noise levels for the skip bin pick up can take up to 10 minutes, due to the hook up and positioning process.

Based on the time noise was present, the applicable noise level parameter would be the L_{A10} criteria as noise is present of greater than 10% of the assessable period (15 minutes).

Note: Whilst noise emissions from these operations are not assessed under Regulation 7, the L_{A10} would be the appropriate parameter to allow for comparison.

5 Predictive Noise Modelling

To provide an effective NMP, noise levels at receivers (residential premises) need to be referenced so that when considering an individual receiver there is a baseline for noise levels. The noise level received at residential premises from noise emissions associated with the waste collection activities are highly dependent on the location of the receiver (i.e. distance from the residence to the bin pickup). Due to the number of potential receivers, it is difficult to provide the noise level for each location.

To provide both the council and other stakeholders (such as residences) with an indication of noise levels, predictive computer modelling software (SoundPlan) has been employed. Sound power levels used for the calculations are based on measured noise levels as per the previous sections.

The modelling of noise levels has been based on noise sources and sound power levels shown in Table 6.

TABLE 6 – SOUND POWER LEVEL - NOISE SOURCES dB(A)

Equipment	Overall dB(A)
Front Lift Truck	102
Side Lift Truck	98
Rear Lift Truck	94
Rear Hook Lift (Skip Bin) Truck	102

Based on the above equipment noise emissions, noise contour plots have been developed to simulate a variety noise sensitive residence. Residential side lift noise levels are represented in table 7 under section 6 below. The noise levels for each vehicle type's operation are contained in Section 4.

Depending on location, service frequency varies, from one-off collections to frequent collections up to 7 days a week. The bins at these locations are generally commercial, hence the focus on commercial and industrial areas.

As previously discussed, these noise contour plots are used to provide an overall basis for noise levels. They do not contain topography and building / barriers which would impact the propagation of noise. Contour plots for all vehicle types can be provided upon request.

6 Assessment

This assessment contains individual noise levels for each activity type (truck). These noise levels are provided to allow for stakeholders to have a guide to noise levels from the operations at given distances. This can be used as an initial reference when reviewing a collection location and its vicinity to noise sensitive residence. - These noise levels have been summarised in Table 8 below.

TABLE 7 –NOISE LEVELS dB(A)

Equipment	Noise Level dB(A)			
	At 1m	At 5m	At 10m	At 20m
Front Lift Truck	94	80	74	68
Side Lift Truck	90	76	70	64
Rear Lift Truck	86	72	66	60
Rear Hook Lift (Skip Bin) Truck	94	80	74	68

The levels above reflect are collected from the oldest of our fleet. These numbers continue to drop as newer technologies and vehicles are bought into circulation in line with our buy quiet policy outlined in section 7.1.

7 Noise Management

Noise management of the individual operations comprise a range of techniques, which are all required to ensure the minimisation of noise. The management techniques are discussed in the following sections.

7.1 Quiet Equipment Purchasing Policy

New equipment is purchased utilising a “buy quiet” policy. Properly handled, the purchase of new plant is an opportunity for cost-effective noise control. To capitalise on this opportunity, two basic rules need to be followed:

- Invitations to tender for the supply of new plant should specify a maximum acceptable noise level; and
- If plant is to be purchased without tender, noise emission data should first be obtained from potential suppliers.

Requirements included in the tendering process for new equipment are broadband alarm fittings (not tonal), acoustic covers and insulation, exhaust wrapping etc.

Through the purchasing process, Cleanaway looks for the most competitive solution and be influenced by any specific requirements addressed by the client. If the client asks for the quietest truck on the market Cleanaway will seek quotes specifically around this. Cleanaway has found that the vehicle meets many a good balance between all the requirements. We will look at each truck brochure and determine on its merits.

- Emissions
- Noise
- Economics – Fuel and Maintenance
- Carrying capacity
- Standardisation of fleet.

Vehicles doing early morning pickups have the low pitch “croakers” fitted so no high pitch frequency noise is emitted when they are reversing.

The purchased vehicles exceed the Vehicle Standard (Australian Design Rule 83/00 External Noise) 2005 requirements. This vehicle standard defines limits on external noise generated by motor vehicles, motor-cycles and mopeds in order to limit the contribution of motor traffic to community noise.

7.2 Operating Times

As far as is practicable, the start times for collections will be within commercial and industrial zoned areas. For areas which contain high residential density, pick up times are moved to later in the run, such that the pickups are during times of higher background noise and periods where sleep disturbance is not likely i.e. 07:00 to 18:00.

7.3 Operator Training

Training of truck operators in the management of noise when conducting bin pickups.

For operator of the front lift trucks, noise can be reduced by smooth operations of the hydraulics, reduce revs of the truck motor and the placement of the bins on the ground.

Driver training occurs for each of the collection runs, where an inexperienced driver is mentored by an experience drive for the area. As well as driving / operator techniques, information is

provided to the new driver as to potential noise hazards and proximity of sensitive residence, and best practices for entering / exiting sites.

7.4 Equipment Maintenance

In conjunction with the buy quiet policy as mentioned above, ongoing maintenance is critical to the minimisation of noise.

Servicing of engines and hydraulic systems ensure reduced noise levels, as well as maintaining noise control items such as exhaust wrapping and acoustic covers.

Identification of potential noise hazards by maintained during the ongoing regular servicing.

Brake squeal from can often cause intrusive noise emissions that may impact members of the community. Cleanaway carries out regular servicing beyond the normal servicing requirements of a typical heavy vehicle.

This includes:

- Brake tested on a brake testing machine – Must pass electronic test to be on the road
- Vehicle driven by mechanic to test functionality prior to a service and to investigate a defect.
- Visual inspection of all brake components – Brakes are a critical component and as such if a defect is detected the vehicle must be repaired before going back to work. Pre and Post driver inspections – Driver can note any defect and defect must be investigated by the workshop.

More information about our maintenance program be found under section 9.5 “Managing Drivers and Vehicles”.

8 Complaint response

The complaint response procedure will also be adopted and will generally be as follows:
Any complaints will be registered in on the appropriate system stating:

- Where the complaint was from.
- The response to the resident.
- The resolution.
- When the resolution was actioned.
- The residence’ satisfaction with the resolution.

This complaints register is included in monthly reporting to the shire.

After the complaint has been received and responded, noise emissions from the offending item(s) on the subject equipment will be investigated. If noise levels from the offending item are found to be excessive, then the item will either be repaired, replaced with a quieter item or have noise control measures implemented to bring back in line with the levels outlined in this plan.

In the event that implemented controls are not able to practically achieve the outlined noise levels, the pickup may be altered to a time that is agreed by both the residence and Cleanaway, until such time that noise levels can be adequately controlled.

9 Shire of Capel Detailed Specifications

Cleanaway aims to reduce the risk of incident and injury across our business activities. By collecting bins prior to 7am in certain areas Cleanaway will be able to perform the waste collection service for all residents while minimising the risk to staff, equipment and public safety.

Cleanaway has identified that to successfully undertake waste management collections in the Shire of Capel there is the need to collect from several locations prior to 7am. To ensure that Cleanaway is carrying out collections in a safe manner and to ensure that the provisions of the Environmental (Noise) Regulations 1987 are being met Cleanaway submits this Noise Management Plan to the Shire for consideration and subsequent approval.

This Section serves to meet any required information with additional details specific to the Shire of Capel.

9.1 Basis for Collections prior to 7am

There are numerous locations in the Shire of Capel where traffic is heavy throughout the day. To ensure that the pick-ups can be carried out in a safe manner to both the public and Cleanaway staff and to ensure that significant traffic disruptions do not occur results in only a small window of opportunity to service these areas.

Some areas physically cannot be serviced at all after 7 am due to cars blocking bins or blocking access to laneways. Further, Cleanaway is limited in the number of hours we have to provide the service in the timeframe in which nominated disposal sites are open. Cleanaway collects 2500 bins each day in the Shire of Capel and delays caused by servicing blocked bins could lead to the service not being completed on some days. Our priority is to ensure the service provided is not only to the standard expected by the Shire but by the community in which we operate.

The benefit to the Shire of operating prior to 7am includes:

- It minimises the risk of interactions between our large vehicles and pedestrians/motorists in built up areas;
- Improved traffic management and flow on main roads, many of which are single lane and would hold up traffic whilst the services are being undertaken;
- It significantly reduces the number of bins that can't be serviced which could then become potential public health risk.
- A reduction of waste being spread around in the Shire by wind or birds (this is a significant issue where bins are overloaded with food waste and the lid is not down)
- A lower cost for the service to the Shire as the service can be carried out more efficiently when vehicles/pedestrians do not obstruct the collection of bins; and
- A reduction in the carbon footprint of the services due to lower operating hours and therefore lower hours heavy diesel vehicles are operating in the Shire.

Cleanaway is committed to operating in a safe manner. This means that in order to safely provide services in specific situations, or certain areas, we have found it necessary to service before 7am.

When large, slow vehicles are operating in busy areas it causes unnecessary vehicle/pedestrian congestion. This can lead to members of the public becoming impatient and/or abusive which can

escalate to motorists beeping their horns at, yelling abuse and/or most concerningly, trying to drive/walk around our vehicles whilst they're operating. The latter, which can result in very serious injuries.

The areas that Cleanaway wishes to operate in, prior to 7am are included in Section 9.2. Justification for accessing these areas is also provided below. This has been developed from many years of providing the service for Towns and is limited to those areas that we genuinely require to access prior to 7am.

- Main Roads must be serviced prior to 7am as it can be dangerous to have a large slow-moving vehicle on these streets during busy times. Some streets are single lane and therefore it can completely block traffic. These streets often have on-street parking which leads to bins being blocked as the parking is utilised after 7am. As these roads are usually in commercial areas, we would request that we service Main Roads from 5:30am.
- Industrial areas usually contain many bins requiring servicing which can be set out or in compounds. After 7am these areas become filled with cars from customers and/or employees. These are usually tight laneways or small car parks and after 7am it can become practically impossible to service. Industrial areas are usually well away from residential areas and therefore this does not usually create problems from early morning services. We would request to service these areas from 4am.
- Commercial Services are generally required at Shopping Centres or other individual service locations. These areas suffer from the same restricted access as industrial areas after 7am, however these are often far enough removed from residential areas as to not be an issue. We would request to service these areas from 430am. With additional specifics listed below:
 - For the sites of Ampol on Bussell Highway (Gelorup) and Liberty on Norton Promenade (Dalyellup) We would request to service these areas from 430 am. This time is expected to be from 5am throughout most of the year. Where the additional half hour can be used during holiday seasons or when required due to other non-holiday season special events and unexpected circumstances
 - For all other commercial service areas, we would request to service from 5am. This time is expected to be from 530am throughout most of the year. Where additional half hour can be used during holiday season or when required due to other non-holiday season special events and unexpected circumstances.
- Schools are generally serviced early as to avoid being around children and dense traffic, especially during drop off and pick up times. We would like to service these areas from 6am to minimise risk and impact as much as possible. For schools that are based in dense residential areas we endeavour where possible to make these collections during the lowest risk times between drop off and pickup times.
- The Residential Areas listed are only those that we absolutely must access prior to 7am within the Shire. In Which high traffic roads, that are main routes between residential and work areas are congested from 7am. We would request to service these areas from 6am.

In all situations where residents may be affected by noise, our drivers will endeavour to make collections as close as safely and practicably possible to 7am.

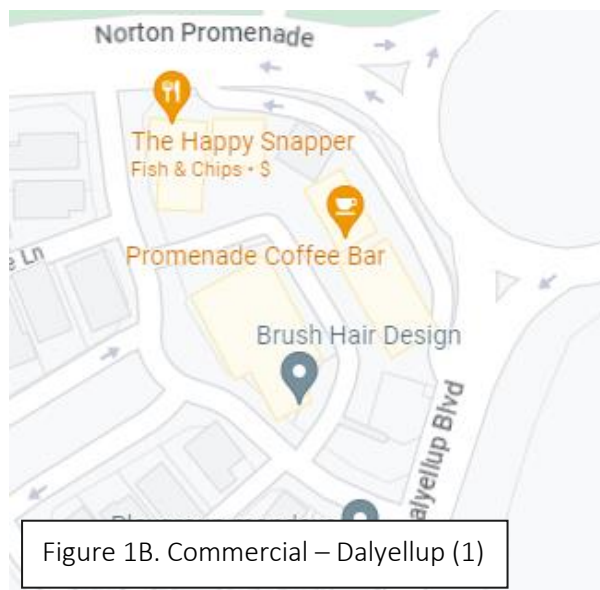
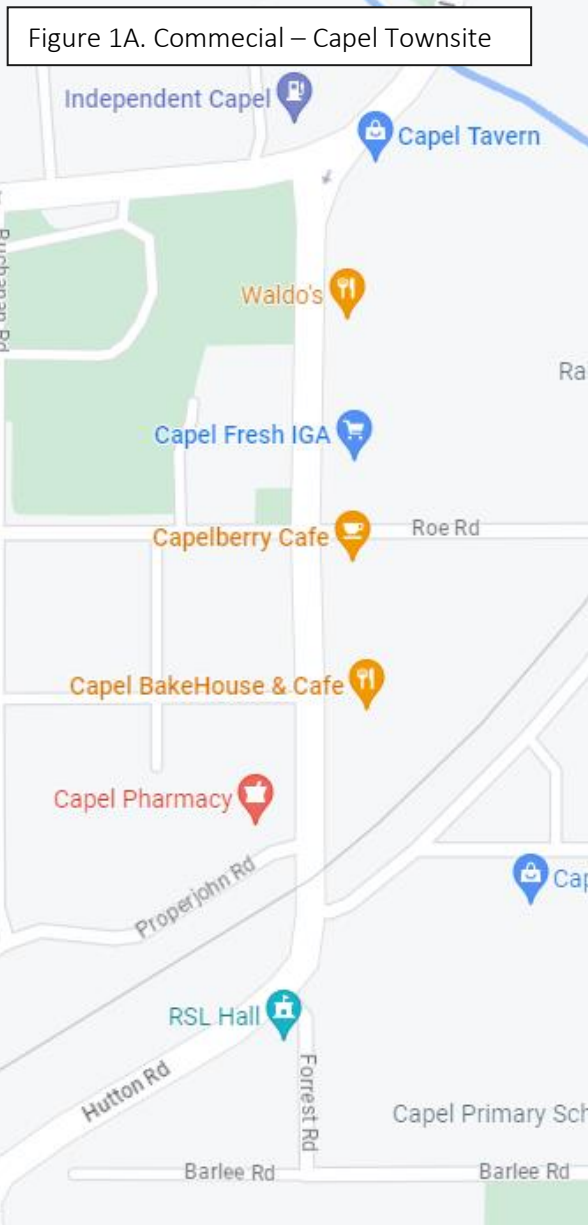
9.2 Areas Requiring Servicing prior to 7am

Based on the above information, the following locations are examples of those that Cleanaway may be required to service before 7am. Supporting images have been provided with Figures 1-3 of the areas outlined below.

- Commercial
 - Capel
 - Capel Dr
 - Forrest Rd
 - Properjohn Rd
 - Dalyellup
 - Norton Prom
 - Tiffany Centre
 - Parade Rd
 - Dalyellup Blvd
 - Gosse Way
 - Boyanup
 - Southwestern Highway
 - Bridge St
- Residential
 - Capel
 - Capel Dr
 - Forrest Rd
 - Properjohn Rd
 - Dalyellup
 - Norton Prom
 - Dalyellup Blvd
 - Parade Rd
 - Gosse Way
 - Boyanup
 - Southwestern Highway
 - Bridge St
- Industrial Areas
 - Capel
 - Ilmenite Cres
 - Zircon Way
 - Gavins Rd

The combination of sections 9.1 & 9.2 we believe provide sufficient justification for services in their requested timeframes respectively.

Figures 1: Comercial Service Areas



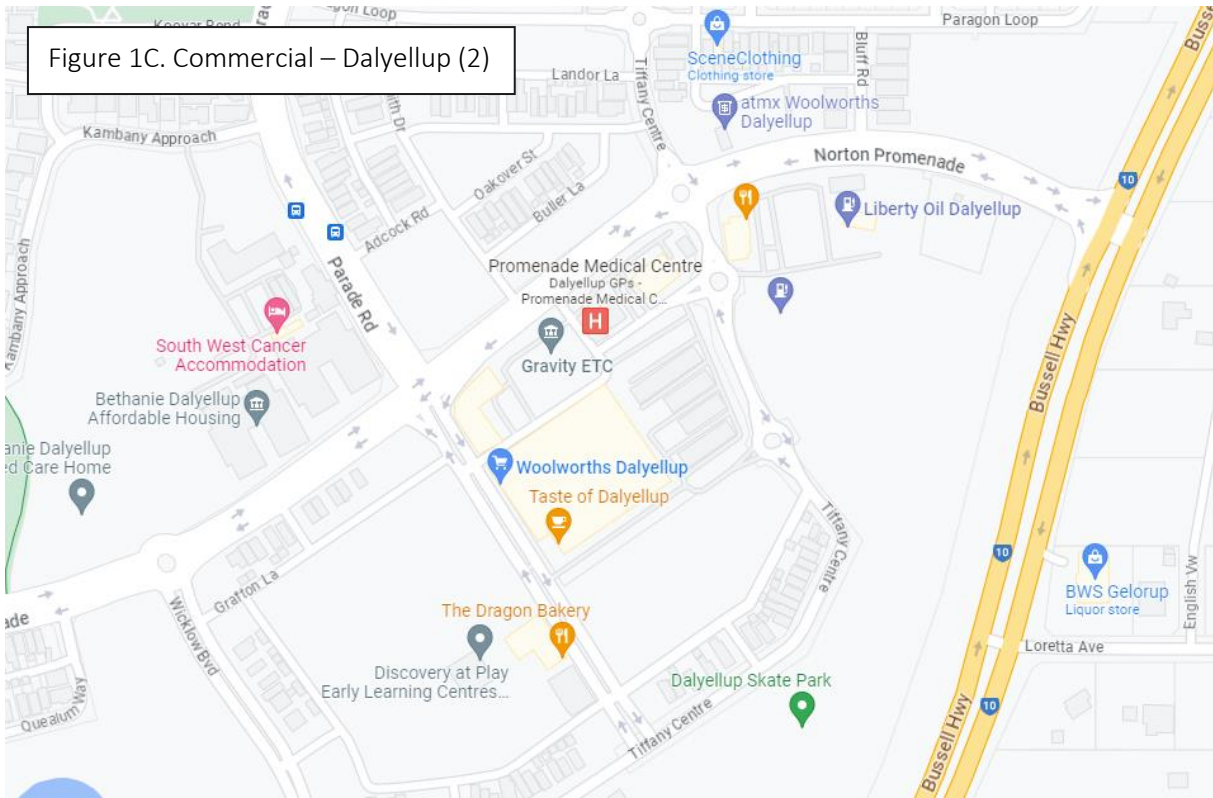
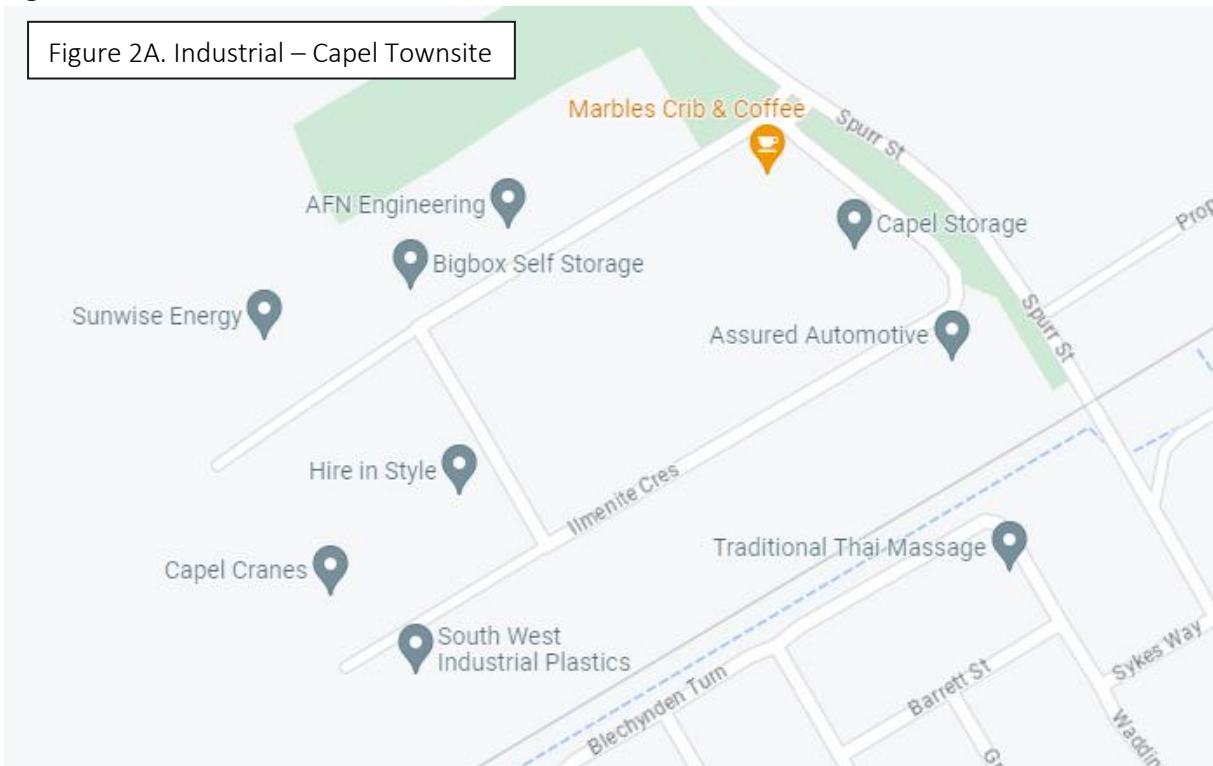


Figure 2: Industrial Service Area



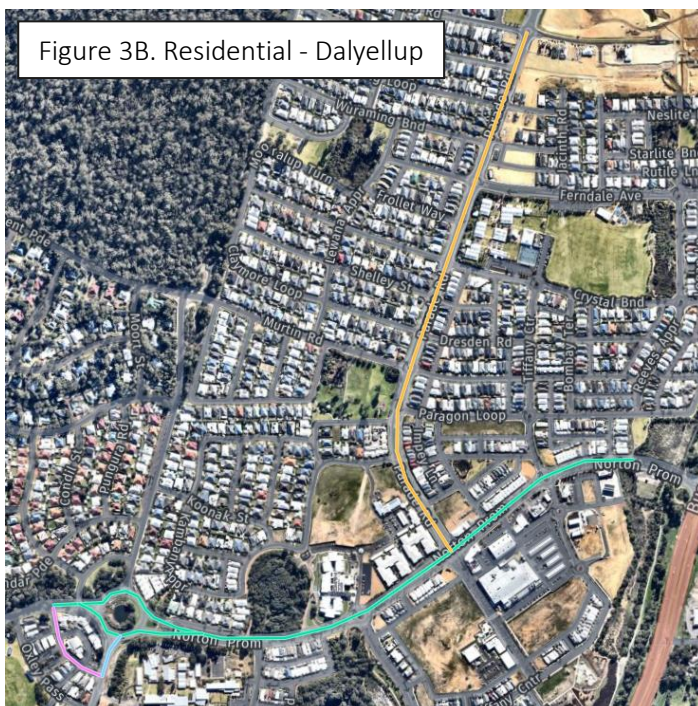
Figures 3: Residential Service Areas

Figure 3A. Residential - Capel Townsite



- Capel Dr (Pink) &
- Forrest Rd (Green)
 - These roads are high traffic roads from 7am. Drivers do these stretches prior to 7am to minimise impact on residents.
- Properjohn Rd (Blue)
 - This stretch of road contains commercial premises that when required are serviced prior to 7am to minimise impact on residents.

Figure 3B. Residential - Dalzellup



- Parade Rd (Yellow)
- Norton Prom (Green)
 - These roads are high traffic roads from 7am. Drivers do these stretches prior to 7am to minimise impact on residents.
- Gosse Way (Pink)
 - This stretch of road contains commercial premises that when required are serviced prior to 7am to minimise impact on residents.



Figure 3C. Residential - Boyanup

- Southwestern Highway (Pink)
This road is a high traffic road from 7am. Drivers do this stretch prior to 7am to minimise impact on residents.
- Bridge St (Green)
This stretch of road contains commercial premises that when required are serviced prior to 7am to minimise impact on residents.

Wherever possible, depending on the Shires collection schedule, Cleanaway will start collections on Main Roads and the Industrial Areas prior to moving into the residential areas. It should be noted that most residential areas are only serviced once/week, with exceptions at times in high tourism areas.

Within the Shire there are many laneways that back onto commercial and industrial properties. Often the other side of these lanes back onto residential properties and in some cases, where a property has been subdivided the only access to the second dwelling is via this laneway. These laneways are often the only rear access for service and delivery vehicles, such that they become inaccessible during the day. In cases that these lanes are single lanes with no room for overtaking, they're serviced prior to 7am.

Cleanaway aims to reduce the risk of incident and injury across our business activities. By collecting bins prior to 7am in certain areas Cleanaway can perform the waste collection service for all residents while minimalizing the risk to public safety.

9.3 Type of Trucks Used in the Service

Most bins will be collected with a Sidelift vehicle. The Sidelift vehicles service refuse, recycle & organics bins with each property receiving a weekly Organics service and Refuse and Recycling on alternating weeks, this can be supported by Rearlift vehicles in areas with Town’s street bins, Park bins or otherwise restricted access (i.e caravan parks). Additionally, we have a combination of Rearlift, Frontlift, Lifton & Hooklift vehicles, that provide services to the numerous stated Commercial and Industrial Areas.

9.4 Length of Service

Where bins are set out correctly and unobstructed, they usually take approximately 8 seconds to service. However, where bins are blocked it can take anywhere from 30 – 60 seconds to service and the bin must be wheeled to the vehicle (and back) which creates more noise.

9.5 Managing Drivers and Vehicles

Cleanaway is currently rolling out new vehicles to the Shire of Capel. These vehicles are fitted with the newest technology so we can monitor the vehicles and ensure they don’t enter areas they are not permitted prior to the appropriate time.

As previously mentioned, Cleanaway has a comprehensive maintenance program for all its vehicles which are set out in 15 standards within the business. All our vehicles are set up in an online program where all vehicles data is recorded i.e. hours, kms, work orders (WOs) etc. The system generates automatic WOs for A, B and C services based on operational hours. We also have, on top of our scheduled maintenance, a 75 day inspection which is again automated by the system and unless has happened on the 75th day will render the vehicle off service and off the road. In addition to the scheduled services and 75 day inspection, we have an annual independent inspection. We have all our fleet inspected against manufacturer’s requirements and roadworthiness by an independent organisation.

The drivers complete a pre and post check on the vehicles they are operating daily. Any defects identified are noted on the pre and post checks and the vehicles are grounded until it has been reviewed and passed by a mechanic. A list of Driver, Asset and Maintenance Standards that Cleanaway adheres to is provided in Table 9. Additional information and associated documentation are provided in Section 7.4.

TABLE 8 – CLEANAWAY VEHICLE STANDARDS

The foundation blocks that underpin Fleet SAFETY First comprise three Absolutes, supported by 15 Standards.

Driver Absolute	
Driver Standards	D1 Heavy Vehicle Licence & Assessment/ Verification of Competency
	D2 Light Vehicle Licence & Assessment
	D3 Yellow Gear Equipment Heavy Vehicle Licence & Assessment/ Verification of Competency
Asset Absolute	
Asset Standards	A1 Additions, Transfer & Amendment or Disposal
	A2 Asset Parent / Child Relationship in JDE E1
	A3 Registration
Maintenance Absolute	
Maintenance Standards	M1 Heavy Vehicle Safe Truck-Safe Driver (including Trailer where applicable)
	M2 Light Vehicle Safe Vehicle-Safe Driver
	M3 Yellow Gear Equipment Safe Equipment-Safe Operator
	M4 Meter Reads (Hours and Kilometres)
	M5 Preventative Maintenance (A, B, C Services)
	M6 AA Technical Inspection (60 Days)
	M7 Annual Inspection / Roadworthy
	M8 Corrective Maintenance
	M9 Third Party Maintenance Suppliers

9.6 Managing residents who may be affected?

Cleanaway maintains our dedicated customer service hotline (9724 7903) into which any affected residents can call. Additionally, we can receive complaints via email at bunburycsu@cleanaway.com.au. We endeavour to respond to all complaints within 48 hours.

All complaints are lodged in our systems and each is allocated a Work Order which gets closed out once addressed. A report can be generated of all complaints received and closed out monthly. The Customer Service Manager is responsible for managing all complaints. The Branch Manager is responsible for managing our team of operators to prevent these complaints occurring.

Cleanaway will work with the Shire of Capel to respond to any complaints that may be received and will alter our operations where possible. Cleanaway will follow the appropriate notification protocols for any changes to services.

Complaints are also registered as incidents in the Cleanaway OHS Management System (MyOsh) which ensure that each individual complaint is investigated, and all relevant stakeholders are notified and involved including Cleanaway's Environmental Business Partners and senior management.

9.7 Measurement of Noise

The appointed noise consultant (Herring Storer) carried out noise measurements over a one week period which informed the timing and the level of impact the noise created.

Noise levels measurements of the trucks were carried out for each operating condition including when vehicles were both operating and when bins were being picked up and emptied. Time histories of the noise levels were measured with an example being provided in Figure 5, Section 4.2. This time history details the time the noise is present. As the operation is present for greater than 9 seconds in a Representative Period (15 Minute) the assessment would be considered as an LA01. However, for the examples measured, such as within a cul-de-sac the noise could be present at a receiver for greater than 1%, hence the Plan assessment has considered the LA10 as being a "worst case" scenario.

9.8 Training for new and existing drivers

All drivers existing and new are subject to our vehicle and driver training program. All new drivers are required to undergo this training and are accompanied by a ride along a buddy for at least two weeks then assessed by an experienced Driving Trainer prior to them being able to operate the vehicle on their own. Drivers are required to demonstrate that they are capable of driving and operating safely, under a wide range of scenarios, including busy and built-up areas. Existing drivers are required to undergo refresher training every two years. In the case of any incidents or complaints, drivers are put through a Corrective Action Plan (CAP) and are monitored before they get reassessed and cleared.

9.9 Management Plan Review

This plan will be reviewed on a 3 year basis or as required.

10 Shire Sign off

Name

Title

Date

11 Glossary, Acronyms and Abbreviations

Defines the acronyms and abbreviations used in this document.

TABLE 9 – GLOSSARY, ACRONYMS AND ABBREVIATIONS

Identifier	Definition
Regulations	Environmental Protection (Noise) Regulations 1997 as amended
L_{A10}	Is the noise level exceeded for 10% of the time.
L_{A01}	Is the noise level exceeded for 1% of the time.
L_{Amax}	Is the maximum noise level.
CLEANAWAY	Cleanaway Pty Ltd