

## SUBMISSION ON STRENGTHENING THE RESILIENCE OF AOTEAROA NEW ZEALAND'S CRITICAL INFRASTRUCTURE SYSTEM

**TO:** Department of Prime Minister and Cabinet ("DPMC")

**SUBMITTER:** Waste Management NZ Limited ("**Waste Management**").

**SUBMISSION ON:** Strengthening the resilience of Aotearoa New Zealand's critical infrastructure system ("**Discussion Document**")

### Summary of submission

1. Waste Management welcomes the opportunity to provide feedback on the Discussion Document. The Discussion Document sets out proposed regulatory approaches to critical infrastructure in New Zealand and is intended to inform the development of options for regulatory reform.
2. Waste Management's waste recovery and waste disposal facilities are critical infrastructure. These facilities provide essential services for a well-functioning economy and environment, and the health and wellbeing of New Zealanders. As illustrated recently by the adverse weather events this year, Waste Management's facilities also clearly support and significantly contribute to the resilience of infrastructure in emergency events. Waste Management therefore agrees that strengthening the resilience of critical infrastructure in New Zealand is vital and that a new regulatory approach is required to respond to the changing nature of threats to the resilience of infrastructure – notably the frequency and severity of adverse weather events from climate change.
3. Waste Management supports a broader approach to classifying critical infrastructure as proposed in the Emergency Management Bill 2023 ("**Bill**"). It also supports the development of minimum resilience standards for infrastructure where these are principle-based (to ensure there is flexibility across different critical infrastructure sectors) and considers a "simple model" to assessing a critical infrastructure sector or entities importance will be clearer to apply. However, Waste Management wishes to ensure that any reform does not impose burdensome requirements on infrastructure providers that create unnecessary inefficiencies and costs.
4. For ease we have generally structured this submission to respond to key questions raised for feedback in the Discussion Document (as summarised in Appendix C of the Discussion Document) but have also included commentary on the proposed approach to critical infrastructure in the Bill, given the relevance to this Discussion Document. We also provide commentary on Waste Management and its essential services for completeness below.

## Waste Management

5. Waste Management is New Zealand's largest waste and environmental services company, with landfills and energy parks (generating energy from waste), recycling, composting and other waste management operations located throughout New Zealand.
6. Operating across 65 locations, we directly employ over 1,600 New Zealanders and each year invest more than \$50 million in new capital works. The waste services provided by Waste Management are essential and fundamentally underpin the quality of life that all New Zealanders enjoy. They are also vital in sustainably protecting the future of New Zealand's natural environment.
7. In partnership with local authorities, Waste Management operates several landfills, recycling, and resource recovery centres. Waste Management's services include:
  - (a) **Collection:** Waste Management provides collection services for households, businesses, and non-residential and industrial customers, with a focus on efficient and environmentally friendly waste management.
  - (b) **Processing:** The company operates processing facilities to sort and treat waste, including recycling facilities and composting plants.
  - (c) **Disposal:** Waste Management provides safe and secure disposal options, including at modern engineered landfills and transfer stations.
  - (d) **Resource Recovery:** The company is involved in resource recovery, which involves collecting and processing waste materials to extract valuable resources.
  - (e) **Education and Training:** Waste Management provides education and training services to promote sustainability and waste reduction, including programmes for schools and businesses.
8. These services represent a coherent infrastructure network for waste, from the collection of waste, through separation, processing and treatment of valuable recyclables or compostable matter, to ultimate safe disposal of the residual components of the waste streams that are generated by households, communities, and commercial and industrial activities across public and private sectors. These activities are undertaken across the full network of waste infrastructure, including refuse transfer stations, materials recovery facilities (eg for tyres and concrete), solid waste treatment plants, sorting and consolidation lines, composting sites, landfills and energy recovery parks. At a high-level waste can be categorised as solid or liquid waste, which include organic and hazardous wastes, with degrees of complexity and specialisation within each. Waste Management safely manages all of these categories across its waste infrastructure network.
9. Waste Management has also played a central role in processing the waste following recent natural disasters, like the Canterbury and Kaikoura earthquakes. Waste Management also provided critical assistance alongside the New Zealand Defence Force and Auckland Council following the floods in Auckland this year and was actively involved in the recovery effort following Cyclone Gabrielle – a key impetus for the Discussion Document.

## Objectives for and principles underpinning the work programme

### *Improving the resilience of New Zealand's critical infrastructure*

10. The Discussion Document seeks to enhance the resilience of New Zealand's critical infrastructure system to all hazards and threats, both natural (such as earthquakes and floods) and man-made (such as cyber security incidents and espionage).<sup>1</sup>
11. Waste Management supports reforming the current regulatory settings to support, enhance and improve the resilience of critical infrastructure. The Discussion Document and Bill represent a significant step to improving the resilience of New Zealand's critical infrastructure system.
12. Specifically, Waste Management supports the move away from the narrow, prescriptive approach to "lifeline utilities" taken in the Civil Emergency Management Act 2002 to a principles-based approach to classifying critical infrastructure, which is more dynamic and can recognise the benefits of a broader range of critical infrastructure.
13. The definition of "lifeline utilities" under the current regime does not capture resource recovery and waste disposal activities, despite the vital function these facilities provide across the country. That said, Waste Management considers its waste recovery and waste disposal facilities are critical infrastructure under the Bill. Waste Management's facilities:
  - (a) provide essential services for a well-functioning economy and environment, and the health and wellbeing of New Zealanders, these benefits include:
    - (i) reduction of the amount of waste that is released into the environment. This includes reducing the amount of waste that goes to landfills, which can contribute to greenhouse gas emissions, and reducing the risk of water and air pollution. This is achieved via active management of waste collection methods, education, separation, reuse and recycling;
    - (ii) efficient and effective waste management which is critical to the functioning of New Zealand's economy;
    - (iii) public health improvements by reducing the risk of exposure to hazardous materials and minimizing the spread of diseases that can be spread through the handling and disposal of waste; and
    - (iv) renewable energy creation from landfills in capturing methane and converting it to energy to supply to the grid to power households and businesses;
  - (b) provide for the ongoing and essential function of the waste network in times of national emergency. Landfills must have sufficient capacity to safely and efficiently dispose of waste during large, one-off events such as flooding, volcanic eruptions, earthquakes, tsunamis, pandemics, land-slips, fire, and electricity outages. During

<sup>1</sup> Department of Prime Minister and Cabinet *Strengthening the resilience of Aotearoa New Zealand's critical infrastructure system - Discussion Paper* (June 2023) at 7.

the Level 4 COVID-19 lockdowns, the waste collection, sorting and disposal network was one of the few "essential services" required to continue operating; and

- (c) are a fundamental part of enabling crucial construction (including housing development) and industrial activities as well as other significant infrastructure projects. For example, the management and eventual disposal of contaminated soils, special waste (bio-solids and medical waste), asbestos and asbestos wraps will continue to be waste material which require some sort of disposal facility. Such projects also play a key role in the recovery phase of emergencies.
14. It is essential that waste disposal and resource recovery facilities are recognised as critical infrastructure, to reflect the critical function these activities provide. As the devastating weather events in Auckland and the Hawkes Bay have shown this year, resilient resource recovery and waste disposal activities are vital aspects of the recovery effort, and a lack of resilience in waste management processes may create risks to public health and safety.
15. Furthermore, the New Zealand Infrastructure Strategy ("**Infrastructure Strategy**"),<sup>2</sup> which was fully adopted by the Government,<sup>3</sup> recognises waste infrastructure and acknowledges the importance of resource recovery infrastructure, especially for organic and recyclable materials. If the Government wishes to fully implement the Infrastructure Strategy and provide a resilient infrastructure network, then identification of resource recovery and waste disposal facilities as critical infrastructure must be a core element of any emergency management regime.

*Critical infrastructure failures and impact on Waste Management / the public*

16. The Discussion Document seeks to understand how critical infrastructure failures have affected New Zealand communities and businesses.<sup>4</sup>
17. The Auckland Anniversary storm event and Cyclone Gabrielle provide very current examples of impacts to a resilience and safe waste disposal network and support for why a more resilient system – including recognising waste disposal and resource recovery facilities – is necessary.
18. During those recent events, Hampton Downs landfill was forced to stop accepting waste. Fortunately, Waste Management's Tirohia landfill (some further 70 km away) was able to keep its essential services open and provide additional necessary support for Auckland and Hawkes Bay, but there was a very real risk that essential and urgent waste disposal would not be possible. This would have posed a significant risk to public health and safety and also not met New Zealander's expectation of the provision of basic waste disposal and recovery public services.

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<sup>2</sup> New Zealand Infrastructure Commission *New Zealand Infrastructure Strategy* (2022).

<sup>3</sup> Department of Prime Minister and Cabinet, above n 1, at 3.

<sup>4</sup> At 13-14.

### *Performance during adverse events*

19. The Discussion Document seeks feedback on how a resilient critical infrastructure system should perform during adverse events.<sup>5</sup>
20. During an adverse event, Waste Management expects a resilient critical infrastructure system to be able to efficiently share information and resources (as necessary), and coordinate responses to restore access to key infrastructure assets, while protecting public health and safety. Waste Management expects all critical infrastructure providers to respond promptly to any challenges to the resilience of the critical infrastructure system, and to communicate with decision-makers and the public (as required) of any such threats.

### *Criteria for assessing reform options*

21. The Discussion Document does not consider costs and benefits of specific reform options but intends to do so in future public consultation. The Government has proposed three criteria for assessing the costs and benefits of future reform options. These are considering how:<sup>6</sup>
  - (a) well the option enhances infrastructure resilience across all critical infrastructure sectors;
  - (b) the option changes regulatory burden on critical infrastructure owners and operators and regulatory certainty across the community; and
  - (c) the option changes the regulatory system's complexity including any additional costs on government.
22. Waste Management supports using these three criteria for assessing reform options. While enhancing the resilience of the critical infrastructure system is important, this needs to be balanced against other competing interests. In Waste Management's view, any changes to the system should not impose burdensome compliance costs and obligations that create inefficiencies.

### **Setting proportionate resilience requirements**

#### *Minimum resilience standards*

23. The Discussion Document proposes to introduce minimum resilience standards for critical infrastructure.<sup>7</sup> These are designed to provide a consistent standard across all critical infrastructure sectors and entities and can be used to assist with aligning investment decisions with public expectations of resilience, among other things. The Discussion Document identifies two potential approaches to minimum resilience standards, these being:

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<sup>5</sup> Department of Prime Minister and Cabinet, above n 1, at 10.

<sup>6</sup> At 9 – 10.

<sup>7</sup> At 34.

- (a) principle-based requirements (for example, an objective of 'being resilient'); and
  - (b) process-based requirements (for example, a requirement to adopt a standard process).
24. Waste Management does not oppose minimum resilience standards for critical infrastructure. It is important that critical infrastructure providers are held to a certain standard, given the central role such providers play in the New Zealand economy and society.
25. Of the two approaches, Waste Management supports the approach of requiring critical infrastructure providers to satisfy a particular set of principles. This is because:
- (a) A principles-based approach to regulation provides more flexibility and allows the regulatory settings to be adapted to reflect the characteristics of the critical infrastructure provider in question and the potential emergency in question. This will reduce the potential for inefficiencies and any hindrance of the ability of infrastructure providers to respond promptly to emergencies.
  - (b) Prescribing process-based requirements may lead to the duplication of existing processes and regulatory requirements, creating additional costs for infrastructure providers.
26. Notwithstanding the above, Waste Management has some concerns about a principles-based approach. While flexible, there is an element of uncertainty in terms of how these principles are applied and what infrastructure providers will be covered. If the criteria is applied too strictly or interpreted incorrectly, there is a risk of some critical infrastructure providers not being covered by minimum standards and creating inconsistent outcomes.
27. Moreover, any principles should be articulated in a way that provides a consistent regulatory approach but limits any potential inefficiencies and duplicative processes.

*Assessment models for determining importance of critical infrastructure*

28. The Discussion Document questions how a critical infrastructure asset's importance will be determined to apply the regulatory requirements. Two approaches to determining the importance of critical infrastructure are outlined. These are a:<sup>8</sup>
- (a) simple model (assessment based on geographic area and number of citizens affected); and
  - (b) holistic model (assessment based on a range of societal domains).
29. Of these two models, Waste Management supports the simple model. Waste Management expects it would be clear and easy to understand and apply across the country (and would take into account different population sizes throughout New Zealand).

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<sup>8</sup> Department of Prime Minister and Cabinet, above n 1, at 36.

30. Waste Management has reservations about the holistic model has been framed in Appendix B of the Discussion Document for the following reasons:
- (a) Given the number of different factors used in the model, assessing the importance of critical infrastructure will likely be complex.
  - (b) Efforts are commonly put into responding to any significant events immediately and ensuring ongoing, residual effects are not felt by the public for long. Many of the scale of consequences refer to "ongoing effects", but many infrastructure providers can provide workarounds to ensure ongoing effects are kept to a minimum.
  - (c) It is unclear how the overall figure (between 6 – 30 points) would be used. What number would be critical enough? Some critical infrastructure may be overlooked if say, some consequence types are determined to be "extreme" or "major", while other consequence types are "insignificant" or "minor". This may impact the overall weighting – and effectively ignore those "extreme" or "major" consequences.

### **Clear accountabilities and accountability mechanisms for critical infrastructure resilience**

#### *Agency responsible for resilience of New Zealand's critical infrastructure system*

31. The Discussion Document acknowledges there is no agency or Minister that has had responsibility for developing policy to enhance the resilience of the critical infrastructure system.<sup>9</sup> Waste Management supports coordination across the critical infrastructure system. Waste Management does not necessarily oppose one Ministry or one Minister having responsibility for the critical infrastructure system; however, Waste Management wishes to ensure any changes in this regard do not create additional layers of "red-tape" and lead to inefficient outcomes.

#### *Compliance and enforcement mechanisms*

32. The Discussion Document references potential monitoring and enforcement mechanisms to ensure that critical infrastructure comply with their regulatory requirements.<sup>10</sup> Waste Management agrees that reporting requirements would be appropriate for transparency from critical infrastructure providers. However, Waste Management opposes compliance and enforcement mechanisms that have the potential to duplicate existing processes, unduly increase the regulatory burden and costs on critical infrastructure providers, create inefficiencies, unduly impact innovation or impact efficient and timely responses to emergencies.

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<sup>9</sup> Department of Prime Minister and Cabinet, above n 1, at 44-46.

<sup>10</sup> At 44-46.

### Next steps

33. Waste Management thanks DPMC for the opportunity to submit on the Discussion Document and would welcome the opportunity to discuss this submission with DPMC further as it engages in further consultation on critical infrastructure resilience.

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