Regional Waste Management Offices

Interim Report

Performance of the Waste Sector in Ireland

Covid 19 – Initial Restrictions Phase

12th March – 18th May 2020

May 2020

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Executive Summary

The restrictions introduced by Government during March 2020 to combat Coronavirus Covid 19 had a profound impact on the economy and public activities. Waste management services were designated as an essential service by Government and arrangements were made to ensure the continuity and protection of services.

Restrictions led to an increase in household waste produced while commercial and construction waste generation decreased significantly. Waste collection services continued as normal during the period and public waste infrastructure remained operational. Waste processing at materials recycling facilities was maintained and waste recovery at waste to energy plants continued as normal. Waste recovery at Cement Kilns reduced and ultimately ceased during the period while waste recovery at composting and bio stabilisation facilities continued with a noticeable increase in food waste. Waste disposal at landfill was in line with expectations for the period while the export of waste as fuel continued with strong demand evident.

Key decisions aided the response of the sector to the crisis including the establishment of the High-Level Advisory Group for Waste, the designation of the Regional Waste Management Offices as the sectoral lead and the establishment of the Local Authority Business Continuity Group. The Regional Waste Management Offices developed a risk based Monitoring and Early Warning System for the sector and produced weekly updates throughout the period. This was supplemented with an interim waste capacity analysis and continuous capacity monitoring. The cooperation of a wide range of waste sector stakeholders ensured that the response of the sector was effective and efficient. Key stakeholders included government and regulatory bodies, representative associations, industry operators and observers.

The waste sector proved to be remarkably resilient during the restrictions period and the collective response was enabled by many factors including the utilisation of established structures and arrangements. The establishment of a risk-based approach, rigorous monitoring and reporting and continuous capacity analysis provided an important framework for the sector. The development and implementation of robust business continuity measures by the sector ensured that services were maintained while clear guidance was provided where required supported by national and regional awareness.

The events highlighted some vulnerabilities within the sector including the sensitivity of coprocessing as a waste recovery option, the coordination and integration of public waste infrastructure and the export of certain hazardous waste streams. The management of healthcare waste was highly responsive however the dependence on a single processing option may be an issue in future. The events highlighted the potential for illegal activity notwithstanding the continuity and availability of waste services.

To prepare for future crises the state should build on the successes and actions identified including the reinforcement of existing structures, the development of risk-based approaches, and greater self-sufficiency particularly regarding hazardous waste. The state should also continue to rigorously monitor the sector and improve the quality of data, embed the requirement for robust business continuity measures and provide guidance and awareness as required. To deal with vulnerabilities highlighted the state may need to reconsider the total thermal capacity calculation in future waste plans while the completion of the Civic Amenity Site study will address the coordination and integration of public waste infrastructure. The risks associated with the export of certain hazardous wastes must be evaluated and the National Trans frontier Shipment Office has commenced this process while healthcare capacity will be included in future Quarterly Waste Capacity Reports. An increased focus on the enforcement of standardised waste presentation bye laws is required to reduce illegal activities.

The response of the waste sector in Ireland to the Covid 19 crisis in the initial phase of restrictions was robust, reliable and resilient. The strength of established structures, arrangements and relationships was evident throughout and ensured that waste as an essential service was maintained during the period.

1.0 Introduction

The National Public Health Emergency Team, NPHET, for Covid 19 was established on the 27th of January 2020 to oversee and provide national direction, guidance, support and expert advice on Covid 19 in Ireland.

The first case of Covid 19 in the Republic of Ireland was notified on the 29th of February 2020.

On the 11th of March 2020 the World Health Organisation made the assessment that Coronavirus Covid 19 could be characterised as a pandemic. The European Centre for Disease Prevention and Control subsequently updated its guidelines advising countries to act early to be effective. On the 12th of March 2020 the Taoiseach announced a range of measures including school closures, limits on mass gatherings, social distancing and general hygiene etiquette effective until the 29th of March and on the 15th of March the Government asked all public bars to close.

On the 27th of March the Taoiseach announced further restrictions advising the public to stay at home with limited exceptions, a prohibition on public gatherings and the closure of non-essential shops and services. The additional measures included the closure of community centres, the postponement of non-essential health procedures, no hospital or healthcare facility visits and shielding / cocooning was introduced for over 70's with travel restricted to a 2km radius. Local Authorities were charged with the Local Emergency Response to ensure all citizens got the help required with measures to be effective until the 12th of April 2020.

On the 28th of March the Government published a list of essential service providers including ***"waste collection, remediation activities, and other waste management treatment and disposal activities".***

On the 10th of April the Taoiseach announced that all restrictions would be extended until the 5th of May 2020 and on the 1st of May the Taoiseach announced that the restrictions would be further extended until the 18th of May with some easing on cocooning and travel limits.

On the 1st of May the Taoiseach also announced the Roadmap for Reopening Society and Business consisting of 5 phases commencing with Phase 1 on the 18th of May and concluding with Phase 5 on the 10th of August subject to the approval of the National Public Health Emergency Team.

This interim report considers the response of the Waste Sector in Ireland to the impact of the Covid 19 pandemic and associated restrictions from the 12th of March to the 18th of May 2020 (The Restrictions Period).

2.0 Waste Generation and Management

The specific restrictions introduced to combat and contain Covid 19 impacted waste generation and management in several ways as follows:

2.1 Household Waste

The introduction of the restrictions meant that people had to stay at home and there was a consequential increase in household waste generated. Household waste increased by 21% on average during the restrictions period with residual waste up by 19%, Recycling Waste up by 8% and Brown Bin Waste up by 26%.

2.2 Commercial Waste

The closure of non-essential retail and commercial activities had a significant impact on commercial waste generation with volumes down by 50% during the period.

2.3 Construction Waste

The suspension of construction activity resulted in a 70% reduction in construction and demolition waste arising during the period while skip hire, casual use, increased significantly. Some construction and demolition waste sites remained open during the period to facilitate essential construction.

2.4 Civic Amenity Facilities

Civic Amenity Facilities saw an initial surge in activity with people involved in clear-outs and clean-ups. Essential household waste services were maintained at civic amenity sites during the period.

2.5 Bring Centres

Bring Centres saw a surge in glass volumes which was sustained during the period. International textile outlets declined during the period however bring banks were maintained by operators.

2.6 Materials Recycling Facilities

The decrease in commercial waste arising was offset by the increase in household recyclable waste at materials recycling facilities during the period. Materials handling risks were identified early, and appropriate arrangements were put in place.

2.7 Thermal Recovery

Volumes at direct thermal recovery facilities remained on target while the use of solid recovered fuel from waste at cement kilns decreased and ultimately stopped during the period.

2.8 Biological Recovery

Waste recovery at compost and bio stabilisation facilities increased by 25% during the period reflecting the increase in brown bin waste arising.

2.9 Disposal

Waste disposal at landfill was in line with projections during the period with the bio stabilised fraction remaining relatively high reflecting the reduced dependence on waste export during the period.

2.10 Waste Export

Not all prebooked exports were utilised during the period notwithstanding strong demand indicating a diversion to disposal and recovery outlets within the country arising from the reduction in commercial waste arising.

The factors outlined above were central to the response of the waste sector to the challenges arising during the restrictions period and are particular to the Covid 19 crisis.

3.0 Key Decisions

With the National Public Health Emergency Team, NPHET, and Government setting the landscape for the national response to the Covid 19 Pandemic each sector was charged with responding accordingly particularly where essential services were concerned.

On the 28th of March the Government published a list of essential service providers including ***"waste collection, remediation activities, and other waste management treatment and disposal activities".***

The following key decisions were critical to the management and coordination of the waste sector during the period:

3.1 High Level Covid 19 Waste Management Advisory Group

On the 11th of March 2020 the Department of Communications Climate Action and the Environment, DCCAE, convened a meeting of the High Level Covid 19 Waste Management Advisory Group. This group consisted of key stakeholders representing the waste sector and agreed the sectoral response to the pandemic.

3.2 Coordination by Regional Waste Management Offices, RWMO's.

The DCCAE requested that the RWMO's lead the response for the sector and the RWMO's developed a strategy consisting of three parts as follows:

(i) A Primary Waste Activity Monitoring and Early Warning System, PWA/MEWS.

(ii) Coordinated Weekly Updates.

(iii) Continuous Capacity Monitoring.

The RWMO's Primary Waste Activity Monitoring and Early Warning System, PWA/MEWS, issued the first of 8 weekly updates on the 20th of March 2020. The RWMO's also produced an Interim Waste Capacity Report on the 20th of March and a Waste Collection Strategy.

3.3 Local Authority Business Continuity Group

The City and County Managers Association, CCMA, established the Local Authority Business Continuity Group on the 10th of March to coordinate business continuity across the Local Authority Sector including waste activities such as civic amenity sites, bring centres and waste enforcement. The CCMA also confirmed the availability of emergency powers as part of the response if required.

The above decisions enabled the waste sector to respond collectively to the challenges presented during the restrictions period.

4.0 Key Stakeholders

The High-Level Advisory Group for Waste brought together the primary stakeholders in the waste sector and the Primary Waste Activity Monitoring and Early Warning System developed by the RWMO's identified others. Figure 1.0 illustrates the range of key stakeholders involved while Table 1.0 describes the functions and roles of each key stakeholder.

It is important to note that key stakeholder relationships were well developed in the context of existing committees and working groups.

These groups include the National Coordinating Committee for Waste Planning, the Waste Capacity Working and Steering Groups and the Communications Working Group.

Figure 1.0 Key Stakeholders

The relationships and trust established within the sector since the waste capacity crisis of 2016 provided an established platform to work with ensuring that all parties could hit the ground running in response to the Covid 19 Crisis. Shared services such as the NTFSO and the NWCPO also contributed to readiness while established bodies such as the EPA, WERLA's and REPAK greatly assisted with the coordinated response. Representative bodies such as the IWMA, CRE, CMI and the LGMA enabled responses efficiently.

The RWMO's also liaised closely with the Association of Cities and Regions, ACR+, to maintain an EU wide perspective regarding individual country responses to the crisis.

Healthcare waste management was a critical factor during the restrictions period and Stericycle, Healthcare Waste Specialists, provided real time information on healthcare waste volumes and logistics.

Function	No.	Stakeholder	Stakeholder Title	Role
Guidance Direction Coordination Communication	**1**	**DCCAE**	Department of Climate Action Communications and Environment	Policy Guidance and Direction
	2	**CCMA**	City and County Managers Association	Guidance Direction Operations and Powers
	3	**WMPLA**	Waste Management Planning Lead Authorities	Management and Coordination
Regulatory Supports	**4**	**NTFSO**	National Trans frontier Shipment Office	Liaison with IMPEL processing and monitoring TFS applications and risk analysis.
	5	**NWCPO**	National Waste Collection Permit Office	Monitoring and Reporting on Non IWMA Waste Collectors and assisting with regulatory requirements
	6	**EPA**	Environmental Protection Agency	Monitoring and reporting on Waste licenced facilities
	7	**WERLA**	Waste Enforcement Regional Lead Authorities	Monitoring and Reporting on Illegal activities and enforcement responses
	8	**REPAK**	Packaging Compliance Scheme	Monitoring and Reporting on packaging recycling operators, trends, and issues.
Representative Associations	**9**	**CRE**	Composting and Anaerobic Digestion Association of Ireland	Monitoring and reporting on Composting and Biostabilisation Plants
	10	**IWMA**	Irish Waste Management Association	Monitoring and Reporting on IWMA members representing >90% of the market.
	11	**CMI**	Cement Manufacturers Ireland	Monitoring and reporting on Coprocessing Capacity.
Waste Recovery	**12**	**Waste to Energy**	Covanta Indaver	Monitoring and reporting on recovery capacity.
Waste Disposal	**13**	**LANDFILL OPERATORS**	AGB Holdings, Bord Na Mona, Beauparc	Monitoring and reporting on landfill capacity.
Waste Export	**14**	**Export**	Export Brokers and Other Service Providers (eg Textiles)	Monitoring and reporting on export capacity trends and issues
Healthcare Waste	**15**	**STERICYCLE**	Healthcare Waste Management	Monitoring and Reporting on healthcare waste volumes and logistics
International Hazardous Waste Perspective	**16**	**CURLAND**	Specialist Waste Management	International Hazardous Waste Management Perspective
EU Perspective	**17**	**ACR+**	Association of Cities and Regions	EU Waste Perspective
NGO Perspective	**18**	**CRNI**	Community Reuse Network Ireland	Monitoring and reporting on the charity and social enterprise sector

Table 1.0 Key Stakeholders – Functions and Roles

The wide range of key stakeholders illustrates the challenge of coordinating activities. The cooperation of stakeholders is based on consent which was consistently provided.

5.0 Success Factors

The waste sector, both public and private, proved to be resilient during the restrictions period. The resilience of the sector was underpinned by the early decisions made as discussed in section 3.0 however there were a range of other factors which assisted as follows:

5.1 Established Structures

The response of the waste sector was enabled using existing structures and arrangements and building on established relationships developed through various waste sector working groups.

5.2 Coordinated Risk Based Approach

The establishment of a risk based Monitoring and Early Warning System by the Regional Waste Management Offices provided an immediate focus on the risks facing the sector with an inbuilt and integrated response mechanism.

5.3 Waste Capacity

The early analysis of built disposal and recovery capacity together with potential accelerated intake capabilities, underpinned by Local Authority emergency powers, provided confirmation of a national waste backstop, if required, as the pandemic developed. This was enabled by recovery and disposal operators and the local authority sector.

5.4 Rigorous Monitoring and Updating

Weekly Monitoring and reporting by the RWMO's provided real time information to the sector based on data provided by the sector. This was enabled by weekly communications between representative bodies and their members.

5.5 Robust Business Continuity Measures

The early adoption of robust and innovative business continuity measures by local authorities and industry ensured that staff and customers were protected while continuing to provide essential services. This was assisted by the relaxation of permitting requirements regarding operational hours.

5.6 Clear and Quick Guidance

The structures and arrangements adopted enabled clear and quick guidance where required and facilitated integrated solutions where possible. Close coordination between stakeholders delivered beneficial solutions particularly regarding the management of hazardous waste.

5.7 Communications and Awareness

The mywaste.ie website provided a national platform for waste information and guidance. The RWMO's were also able to quickly respond with a national awareness campaign emphasising the continuity of waste services and discouraging illegal activities.

The success factors described illustrate the readiness of the sector to respond to a developing crisis while recognising that the characteristics of this crisis did not have a disproportionate impact on the waste sector relative to other sectors.

6.0 Vulnerabilities

While the waste sector proved resilient during the restrictions period the events also highlighted some vulnerabilities as follows:

6.1 Thermal Coprocessing (Cement Kilns)

Following the suspension of construction activity, the demand for cement reduced which ultimately lead to the closure of all cement kilns in the country. This development had immediate implications for outlets for solid recovered fuel from waste which accounts for 240,000 tonnes of municipal solid waste annually. Cement kilns also provide outlets for blended fuels from the biopharma and medical devices industries. This was not exclusive to Ireland and coprocessing outlets also reduced in other countries.

6.2 Public Waste Infrastructure

The local authority sector operates an extensive network of Civic Amenity Sites and Bring Centres nationally which process in excess of 15% of household waste annually. While most sites remained operational throughout the period operational arrangements were decided on a localised basis. This led to an initial inconsistency in the provision of some public waste services.

6.3 Waste Exports

The export of municipal solid waste as refuse derived fuel continued uninterrupted during the restrictions period as demand for fuel increased internationally due to the decrease in commercial waste arising. The export of certain hazardous wastes proved more difficult and regulatory solutions had to be found for hospital risk waste. The export of other specific waste streams such as textiles remains interrupted and the NTFSO have commenced an analysis of export risks as a result of this and other issues.

6.4 Healthcare Waste

The management and processing of healthcare waste proved resilient during the restrictions period and was greatly assisted by the one point of contact with the main service provider. Healthcare waste processing capacity was not exceeded during the period and additional capacity was provided to long stay facilities where required. As normal healthcare activities resume, in parallel with the ongoing management of Covid related material, the dependence on a singular healthcare processing facility may be an issue.

6.5 Illegal Activities

The potential for illegal activity always exists and while waste services remained operational during the restrictions period there was an increase in illegal dumping. The CCMA responded to this challenge by asking the WERLA's to coordinate monitoring and the enforcement response while the RWMO's responded with a regional and national awareness campaign highlighting the continuity of services and discouraging illegal activities.

The vulnerabilities described reflect a well-developed and mature waste sector with elements requiring fine tuning and further development as opposed to fundamental reorganisation. While this crisis did not overtly highlight dependence on non-hazardous waste exports it did illustrate the vulnerabilities associated with finely tuned supply and delivery chains and the implications for the export of hazardous wastes.

7.0 Actions

7.1 Building on Success Factors

The 8-week Covid 19 restrictions period was an intensive experiment in the proactive coordination and management of the waste sector in Ireland which depended on the cooperation of all key stakeholder's which was given consistently. The success factors identified in section 5.0 indicate that the foundations exist to respond to a crisis however potential improvements could be made as follows:

Structures: Reinforce existing structures within the sector and create a Crisis Response arrangement to build on experience and prepare for future crises.

Risk: Establish a risk-based approach to waste management and planning with a commitment to address high risk areas in future plans.

Self Sufficiency: Continue to work towards greater self-sufficiency for hazardous and non-hazardous waste.

Monitoring: Continue to improve waste data and reduce duplication across the sector.

Business Continuity: Ensure that all key stakeholders have robust business continuity measures in place including EPA Waste Licenced and IPPC Facilities.

Guidance: Develop a sectoral crisis management protocol building on recent experience.

Communications: Develop a crisis communications strategy to be included in regional waste plans

As the sector continues to consolidate and the regulatory response becomes more aligned the potential for more proactive management increases including the management of future crises.

7.2 Dealing with Vulnerabilities

The Covid 19 restrictions period revealed a number of vulnerabilities across the sector. As with the success factors outlined above the vulnerabilities reflect a mature waste sector which could benefit from some further interventions:

Thermal Coprocessing – Thermal coprocessing has developed as a significant MSW recovery option accounting for 240,000 tonnes of Solid Recovered Fuel in 2019. Due to the commercial vulnerability of this waste outlet consideration may have to be given to its inclusion in the calculation of total thermal capacity in future regional waste management plans.

Public Waste Infrastructure – Local Authorities operate approximately 100 Civic Amenity Sites nationally and over three thousand Bring Centres. Each facility is currently managed locally and does not benefit from the potential collective coordination of the network. The RWMO's are currently engaged in a Civic Amenity Site Study which will address this issue.

Export - While Ireland continues to work on self-sufficiency dependence on non-hazardous waste export continues. The export of hazardous waste also continues, and Ireland needs to improve hazardous waste recovery and disposal capacity while recognising that due to scale not all hazardous waste provisions can be made.

Healthcare Waste - While healthcare waste processing capacity was not exceeded during the restrictions period processing facilities are limited and consideration should be given to a review of this situation.

Illegal Activities - The restrictions period highlighted the issue of illegal dumping and the number of households that may not be availing of an authorised waste service. The RWMO's have developed standardised waste presentation bye laws across all local authorities which will help to ensure that all households are availing of an authorised waste service.

Dealing with the vulnerabilities outlined will strengthen the sector further and make it more resilient in the event of a future crises.

8.0 Conclusion

The introduction of Covid 19 restrictions in March 2020 brought the economy to a halt and confined most of the population to their homes. Waste management was designated as an essential service by the Government and the waste sector responded accordingly.

The structures and arrangements that were put in place for the period helped to ensure that the sector continued to operate smoothly.

The characteristics of the crisis. while challenging from an operational point of view, did not put the sector under extraordinary pressure during the restrictions period.

Some key waste decisions were made early in the process which enabled the sector to respond effectively while a number of success factors were identified which will be beneficial for future events. Some vulnerabilities were identified which can be addressed through existing structures or arrangements.

The sector responded to this crisis in a collective cooperative way and existing structures and arrangements proved to be fit for purpose. The characteristics of this crisis however may not be repeated in future and further strengthening measures may be required as a result.