

Shannon Technology and Energy Park (STEP) Power Plant

Appendix A16.2: Waste Management Facilities

Shannon LNG Limited

Shannon Technology and Energy Park (STEP) Power Plant Volume 4_Appendices

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Shannon Technology and Energy Park (STEP) Power Plant

Environmental Impact Assessment Report (EIAR) - Volume 4

Appendix A16.2 Waste Management Facilities

Shannon LNG Limited

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Delivering a better world

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1. Waste Management Facilities

The waste management facilities to be utilised by the Proposed Development are not yet known and suitability will be determined by the appointed Contractor. Waste disposal and recovery activities in Ireland require authorisation in accordance with the Waste Management Act 1996 as amended. A waste recovery or disposal activity at a facility is either:

- an exempted activity (no authorisation required), or
- requires a Waste (or IPC) licence, or
- requires a Waste Facility Permit, or
- requires a Waste Certificate of Registration / Registration Certificate.

The Environmental Protection Agency (EPA) is the competent authority for granting and enforcing Industrial Emissions (IE) and Industrial Pollution Control (IPC) licences for specified industrial and agriculture activities including waste management. This appendix provides information on waste management facilities in Ireland, including capacity for landfills, incinerators, waste to energy facilities, and composting, anaerobic digestion and biostabilisation of organic fines.

1.1 Operational landfills in Ireland

Table 1 shows that there has been a significant decrease (86%) in the availability of landfills accepting municipal waste over the last 12 years. As of 2021, there are three landfills currently receiving municipal waste (**Table 2**) with a total limit 570,000 tonnes accepted per annum.

Table 1: Number of Operational Landfills, 2013-2020 (EPA, 2021)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of landfills accepting municipal waste for disposal	11	9	6	7	5	5	4	3	3

Number and Location Disposal (I		Waste Types for I (maximum tonnes per annum)		Waste Types for Recovery (maximum tonnes per annum)		
W0146	Knockharley Landfill Co. Meath	175,000	household	100,000	25,000 construction & demolition	
			commercial	45,000	70,000 inert waste	
			industrial	30,000		
W0165	Ballynagran Residual Landfill Co. Wicklow	175,000	household	62,500	28,000 construction &	
			commercial	67,500	demolition	
			industrial	45,000		
W0201	Drehid Waste Management Facility Co. Kildare	120,000	non-hazardous municipal, commercial and industrial wastes	120,000	No limit for inert waste where used in landfill engineering	
	Total	470,000				

1.2 Other Waste Management Infrastructure

Table 3 shows that there has been an increase in the availability of incinerators. There are two incinerators currently operating (**Table 4**) with a total acceptance limit of 835,000 tonnes per annum. An additional 342,875 tonnes is available for co-incineration in cement kilns.

Table 3: Number of Operational Incinerators, 2013-2020 (EPA, 2021)

Year	2013	2014	2015	2016	2017	2018	2019	2020
Number of municipal waste incinerators	1	1	1	1	2	2	2	2

Table 4: Authorised Waste to Energy Facilities

Authorised Waste t	o Energy Facilities in Ireland	Authorisation Number	Maximum Waste Acceptance Limit Per Year (tonnes)		
Incineration	Indaver Ireland Ltd.	W0167	235,000		
	Dublin Waste to Energy Ltd.	W0232	600,000		
Co-Incineration	Lagan Cement	P0487	95,000		
	Irish Cement Ltd.	P0030	120,000		
	Quinn Cement Ltd.	P0378	127,875		
	Total		1,177,875		

The authorised capacity for composting, anaerobic digestion and biostabilisation or organic fines is 687,660 per year as shown in **Table 5**.

Table 5: Authorised Capacity for Composting, anaerobic digestion and biostabilisation of Organic Fines (EPA, 2021)

Maximum Annual Intake Authorised for:	Tonnes per annum		
Composting, anaerobic digestion and biostabilisation of organic fines ¹	687,660		
Composting ²	Approximately 459,000		
Anaerobic digestion ²	Approximately 110,000		
Biostabilisation of organic fines ²	Approximately 143,700		

Notes

1: Does not include facilities where only waste generated on site is treated on site such as at industrial installations. 2: Approximate as some facilities carry out more than one activity e.g. composting and biostabilisation.

Authorised facilities for other types of waste management infrastructure including material recovery and CDW treatment are not summarised in the EPA waste data release.

1.3 References

Environmental Protection Agency (EPA) (2021). *Waste Infrastructure in Ireland*. Available at: https://www.epa.ie/our-services/monitoring--assessment/assessment/irelands-environment/waste/

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