

HAZARDOUS WASTE STATISTICS FOR IRELAND

EPA waste data release March 11th 2020, latest reference year 2018

What is hazardous waste?

A waste is hazardous when it can harm human health or the environment because it is explosive, oxidising, flammable, irritant, toxic, carcinogenic, corrosive, infectious, mutagenic, sensitising, or ecotoxic. Hazardous waste is controlled by strict regulations to protect against the threat to people and the environment.

Figure 1: Examples of Hazardous Waste



Where does hazardous waste come from?

Industry is the largest generator of hazardous wastes such as industrial solvents, sludges, oils and chemicals. Other sectors such as businesses, construction, healthcare, farms and households produce wastes such as lead-acid batteries, certain waste electrical and electronic equipment, healthcare risk waste, solvent-based paints and varnishes, and waste oils. All hazardous products are labelled with one or more of the symbols pictured above.

Figure 2: Pictograms to be used on labels under the Classification, Labelling and Packaging Regulations (EC) No 1272/2008

ON-SITE TREATMENT AT INDUSTRIAL FACILITIES

A total of 30,127 tonnes of hazardous was generated and treated on-site by 13 industrial facilities, 78% of this was disposed of and 22% was treated by recovery activities.

Over 15,000 tonnes of the material that went for disposal was salt cake landfilled by Aughinish Alumina, and almost 7,000 tonnes was incinerated on site by three other companies.

Approximately 6,500 tonnes was treated in recovery processes, mostly incineration with energy recovery. Figure 2 shows the range of disposal and recovery activities used.

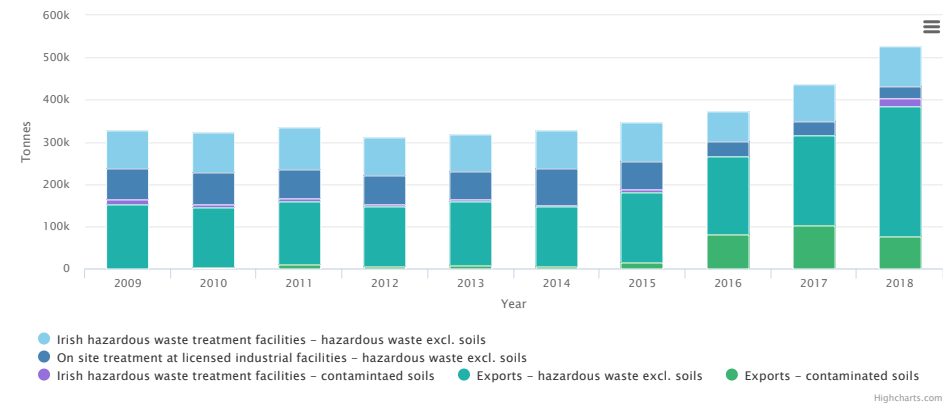
HOW MUCH HAZARDOUS WASTE DOES IRELAND PRODUCE?

A total of 526,397 tonnes of hazardous waste were generated in Ireland in 2018 (Figure 1). This was an increase of over 90,000 tonnes since 2017. The increase was driven by an increase in the quantity of ash from municipal waste incinerators.

KEY TRENDS

- ▶ EPA licensed industrial facilities fully treated 30,127 tonnes of their waste on site at their own facilities. Of this waste, 78% was disposed of and 22 % was treated by recovery activities.
- ▶ Irish hazardous waste treatment facilities treated 112,367 tonnes of hazardous waste to non-hazardous status in 2018.
- ▶ In 2018, Ireland exported 383,903 tonnes of its hazardous waste for treatment abroad. Contaminated soils accounted for 74,912 tonnes of our hazardous waste exports.

Figure 1: Quantity of hazardous waste generated and treatment location

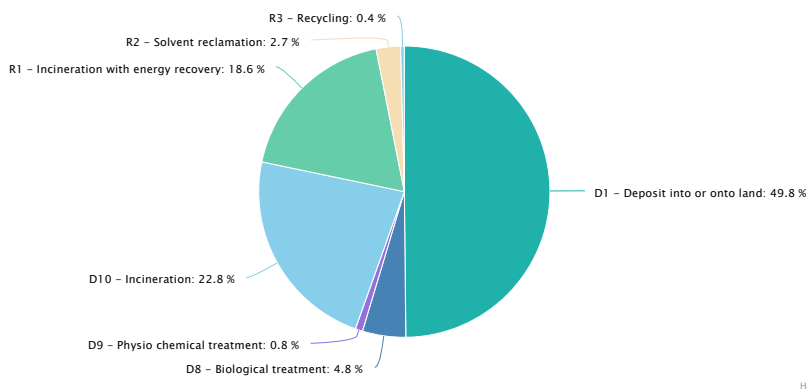


[Back to top](#)

HAZARDOUS WASTE TREATMENT

Hazardous waste must be treated to reduce its potential to pollute the environment or to threaten human health. Ireland's hazardous waste is treated either on-site at the industrial facility where the waste was generated (under conditions of EPA licence), offsite at hazardous waste treatment facilities, or at facilities in other countries.

Figure 2: On-site treatment of hazardous waste at EPA licensed industrial facilities



[Back to top](#)

TREATMENT AT IRISH HAZARDOUS WASTE FACILITIES

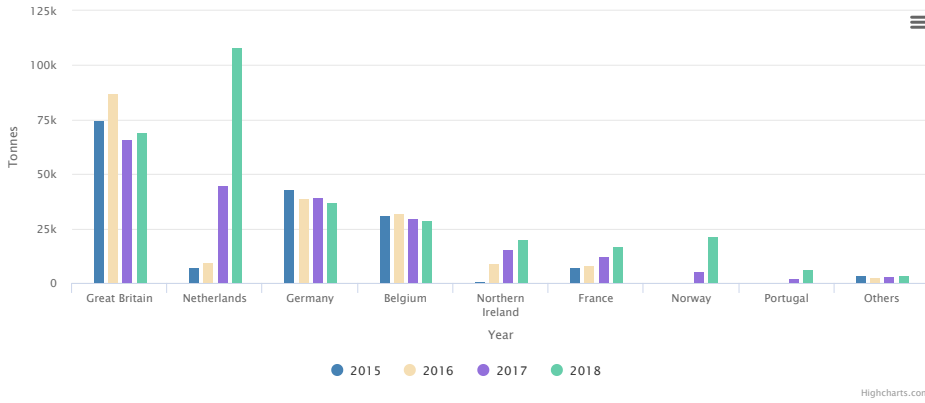
In 2018, a total of 112,367 tonnes of hazardous waste was treated at Irish waste facilities. This is an increase of 29% on the previous year (2017 taken as 100%), which is largely attributable to an increase in the treatment of contaminated soils. Other waste types treated included used motor oil, healthcare wastes, sludges, filter cakes, absorbents, laboratory and chemical waste and household hazardous waste from civic amenity sites. These hazardous wastes are treated until they become non-hazardous, before going for further treatment either in Ireland or abroad.

HAZARDOUS WASTE EXPORTS

In 2018, Ireland exported 73% (383,903 tonnes) of its hazardous waste to other EU member states and beyond. Almost 75,000 tonnes of this was contaminated soils (see below) and a total of 308,991 tonnes was various waste types such as chemicals, medical waste, cement kiln dust and ash from municipal waste incinerators. Ireland does not have the facilities required to treat the full range of hazardous wastes it produces. The Netherlands, UK, Germany, Belgium, Norway and France together accept 99% of non-soil hazardous waste exports.

Destination countries that accepted this waste for treatment are presented below. The spike in waste sent to the Netherlands in 2018 is due to an increase of approximately 100,000 tonnes of ash from municipal waste incinerators.

Figure 3: Hazardous waste exports (excl. soils)



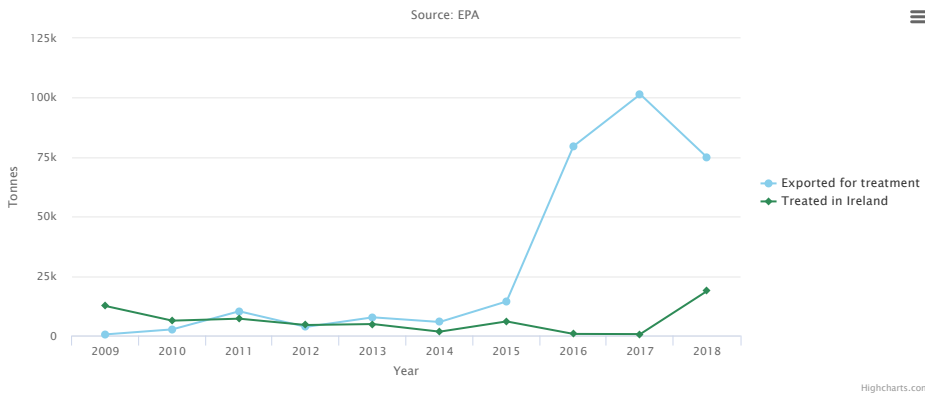
[Back to top](#)

CONTAMINATED SOILS

The total amount of contaminated soil generated in Ireland in 2018 was 93,645 tonnes, a slight decrease from 2017 (see Figure 4 below). A total of 74,912 tonnes of contaminated soil was exported for treatment and the remainder was treated in Ireland. Contaminated soil accounted for 20% of our hazardous waste exports in 2018.

This soil comes from old industrial sites such as gas works, mines, tanneries, dock yards, petrol stations, etc. and is often contaminated with hazardous chemicals. Contaminated soils must be removed before the site can be used again.

Figure 4: Quantity of contaminated soil treated, 2010-2017



[Back to top](#)

Show Table 1: Hazardous waste management

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Irish hazardous waste treatment facilities - hazardous waste excl. soils (t)	89,992	93,049	99,513	89,135	87,690	91,000	94,000	69,791	86,909	93,635
Irish hazardous waste treatment facilities - contaminated soils (t)	12,428	6,260	7,094	4,426	4,830	1,630	5,938	682	608	18,733

On site treatment at licensed industrial facilities - hazardous waste excl. soils (t)	74,668	76,655	67,772	68,100	64,752	88,000	66,500	36,253	34,114	30,127
Exports - hazardous waste excl. soils (t)	150,395	143,180	149,037	144,241	151,980	141,000	166,000	185,801	213,089	308,991
Exports - contaminated soils (t)	476	2,590	10,203	3,638	7,659	5,701	14,329	79,591	101,440	74,912

Open in Excel: [Table 1: Hazardous waste management \(XLS 10KB\)](#)

Show Table 2: Hazardous waste treatment at industrial facilities

Recovery/disposal activity	Tonnes	Per cent
D1 - Deposit into or onto land	15,008	49.8%
D8 - Biological treatment	1,457	4.8%
D9 - Physio chemical treatment	251	0.8%
D10 - Incineration	6,874	22.8%
R1 - Incineration with energy recovery	5,607	18.6%
R2 - Solvent reclamation	823	2.7%
R3 - Recycling	134	0.4%

Open in Excel: [Table 2: Hazardous waste treatment at industrial facilities \(XLS 9KB\)](#)

Show Table 3: Hazardous waste exports (excl. soils)

Year	Great Britain (t)	Netherlands (t)	Germany (t)	Belgium (t)	Northern Ireland (t)	France (t)	Norway (t)	Portugal (t)	Others (t)
2015	74,630	6,969	42,682	30,945	464	6,865	NA	NA	3,371
2016	87,034	9,155	38,685	31,879	8,850	7,988	NA	NA	2,211
2017	65,567	44,356	39,039	29,218	15,098	12,088	5,127	1,745	2,596
2018	68,959	108,002	36,806	28,696	19,835	16,682	21,073	5,921	3,017

Open in Excel: [Table 3: Hazardous waste exports \(XLS 11KB\)](#)

Show Table 4: Contaminated Soils

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Contaminated soil: Exported for treatment NTFSO	476	2,590	10,203	3,638	7,659	5,701	14,329	79,591	101,440	* 74,912
Contaminated soil: Treated in Ireland PRTR (non-waste facilities)	12,428	6,260	7,094	4,426	4,830	1,630	5,938	682	608	* 18,733
Total Tonnes	12,904	8,850	17,297	8,064	12,489	7,331	20,267	80,273	102,048	93,645

Open in Excel: [Table 4: Contaminated Soils \(XLS 10KB\)](#)