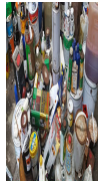


## HAZARDOUS WASTE STATISTICS FOR IRELAND

EPA waste data release 04-04-19, latest reference year 2017

### 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 eco-toxic. Hazardous waste is controlled by strict regulations to protect against the threat to people and the environment.

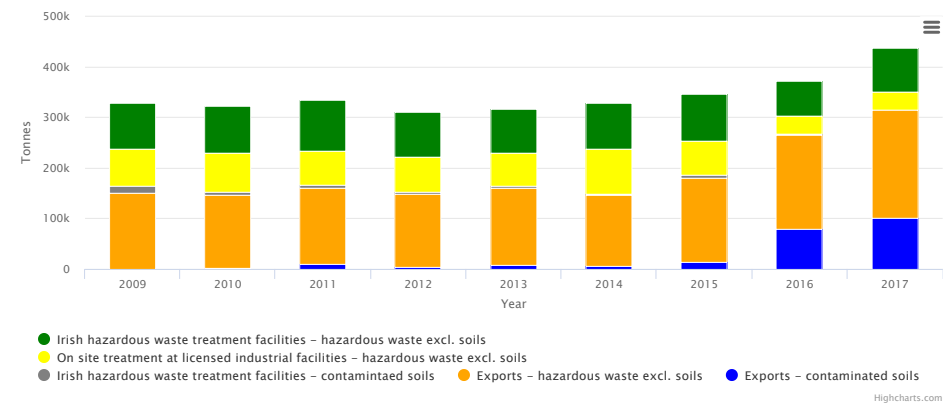


### Where does hazardous waste come from?

Industry is the largest generator of hazardous wastes such as industrial solvents, sludges, oils and chemicals. Businesses, the construction and healthcare sectors, farms and households produce wastes such as lead-acid batteries, 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 on the right.



Figure 1: Hazardous waste treatment location



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## 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), off site at hazardous waste treatment facilities, or at facilities in other countries.

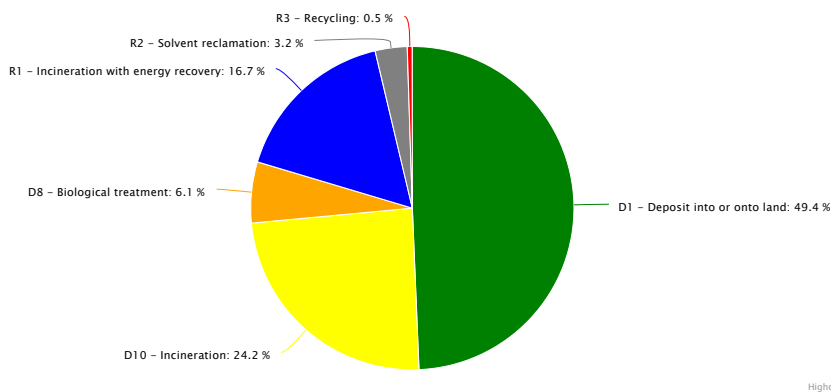
### TREATMENT AT IRISH INDUSTRIAL FACILITIES

Fifteen EPA licensed facilities that manufacture a range of products (pharmaceuticals, chemicals, aluminium, surface coatings and explosives) treated their own hazardous waste on site during 2017. A total of 34,114 tonnes were generated and fully treated by these 15 companies. Figure 2 shows the range of disposal and recovery activities used. In total, 80 per cent was treated by disposal activities and 20 per cent by recovery activities.

Of the 25,104 tonnes that went for disposal, 16,864 tonnes consisted of salt cake landfilled on site and 8,249 tonnes were incinerated on site by five other companies. Approximately 6,000 tonnes were treated in recovery processes, mostly incineration with energy recovery.

The waste generated and treated at EPA licensed facilities does not include solvents that were regenerated to re-enter industrial processes on site. This is because solvents that undergo this process are reused and therefore do not become waste (waste prevention).

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



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# TREATMENT AT IRISH HAZARDOUS WASTE FACILITIES

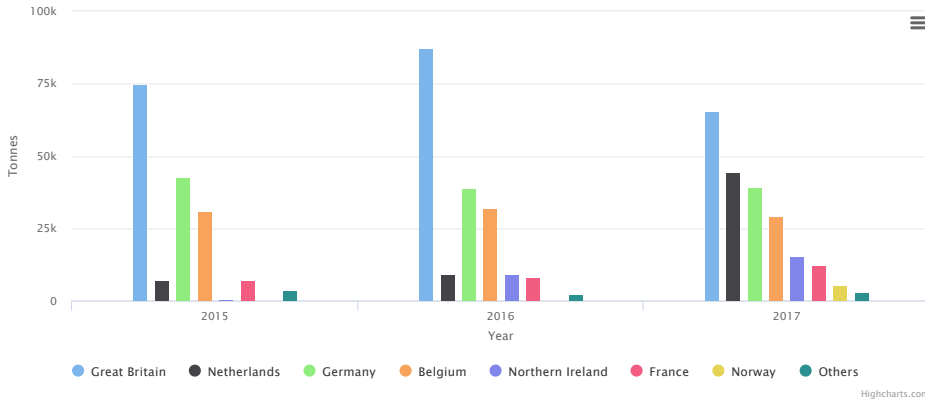
A total of 87,517 tonnes of hazardous waste were treated at Irish hazardous waste treatment facilities in 2017. This is an increase of 24 per cent on the previous year. Waste types include used motor oil, healthcare waste, sludges, soils, filter cake, absorbents, laboratory and chemical waste and household hazardous waste from civic amenity sites. These wastes are treated until they are non-hazardous; the non-hazardous wastes that result from treatment are then further treated either in Ireland or abroad.

## HAZARDOUS WASTE EXPORTS

Ireland does not have the facilities required to treat the full range of hazardous wastes it produces. In 2017, Ireland exported 314,529 tonnes of hazardous waste. This included 213, 089 tonnes of various waste types such as chemicals, medical waste, cement kiln dust and incinerator ash. In addition, over 101,000 tonnes of contaminated soils were exported. Contaminated soils come from old industrial sites such as gas works, mines, tanneries, dock yards, petrol stations, etc.; and they are often contaminated with hazardous chemicals. Contaminated soils must be removed before the site can be used again.

The UK, Netherlands, Germany, Belgium and France together accept most of our hazardous waste exports. Great Britain and Northern Ireland are important export destinations for Irish hazardous waste (Figure 3).

Figure 3: Hazardous waste exports (excl. soils)



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Show Table 1: Hazardous waste management

| Year  | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 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  |
| Irish hazardous waste treatment facilities - contaminated soils (t)                   | 12,428  | 6,260   | 7,094   | 4,426   | 4,830   | 1,630   | 5,938   | 682     | 608     |
| 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  |
| Exports - hazardous waste excl. soils (t)   | 150,395 | 143,180 | 149,037 | 144,241 | 151,980 | 141,000 | 166,000 | 185,801 | 213,089 |
| Exports - contaminated soils (t)  | 476     | 2,590   | 10,203  | 3,638   | 7,659   | 5,701   | 14,329  | 79,591  | 101,440 |

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         | 16,864 | 49.4%    |
| D10 - Incineration                     | 8,240  | 24.2%    |
| D8 - Biological treatment              | 2,081  | 6.1%     |
| R1 - Incineration with energy recovery | 5,680  | 16.7%    |
| R3 - Recycling                         | 156    | 0.5%     |
| R2 - Solvent reclamation               | 1,093  | 3.2%     |

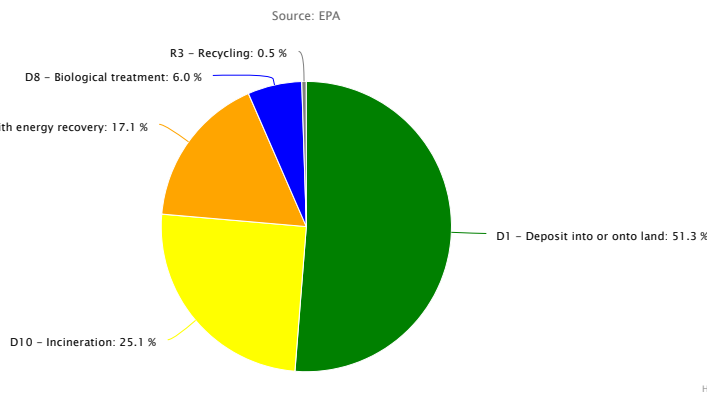
Open in Excel: [Table 2: Hazardous waste treatment at industrial facilities \(XLS 8KB\)](#)

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) | Others (t) |
|------|-------------------|-----------------|-------------|-------------|----------------------|------------|------------|------------|
| 2015 | 74,630            | 6,969           | 42,682      | 30,945      | 464                  | 6,865      | 0          | 3,371      |
| 2016 | 87,034            | 9,155           | 38,685      | 31,879      | 8,850                | 7,988      | 0          | 2,211      |
| 2017 | 65,567            | 44,356          | 39,039      | 29,218      | 15,098               | 12,088     | 5,127      | 2,596      |

Open in Excel: [Table 3: Hazardous waste exports \(XLS 10KB\)](#)

### Onsite treatment of hazardous waste at EPA licensed facilities



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## KEY TRENDS

- ▶ A total of 436,160 tonnes of hazardous waste were managed in Ireland in 2017 (Figure 1). This was an increase of over 64,000 tonnes since 2016. The increase was driven by increased quantities of contaminated soils and of ash from municipal waste incinerators.
- ▶ EPA licensed industrial facilities fully treated 34,114 tonnes of their waste at their own facilities. Of this waste, 80 per cent was treated by disposal activities and 20 per cent by recovery activities.
- ▶ Irish hazardous waste treatment facilities treated 87,517 tonnes of hazardous waste to non-hazardous status in 2017.
- ▶ In 2017, Ireland exported 314,529 tonnes of its hazardous waste for treatment abroad. Contaminated soils accounted for 101,440 tonnes of our hazardous waste exports.