

Hazardous waste management in Ireland

Introduction

The Environmental Protection Agency (EPA) produces national statistics on waste generation and management. This release reports information on hazardous waste managed in Ireland in 2014 (waste generated in Ireland and waste imported for treatment). The EPA compiled statistics from three sources¹ (i) waste exported (ii) waste treated on-site of generation at industrial installations and (iii) waste treated at commercial hazardous waste treatment facilities.

Because of the potential impacts on environment and human health, hazardous waste is subject to strict regulatory control. The prevention and reduction of hazardous waste generation and to strive for self-sufficiency in its management are objectives of Ireland's National Hazardous Waste Management Plan.

Key Points

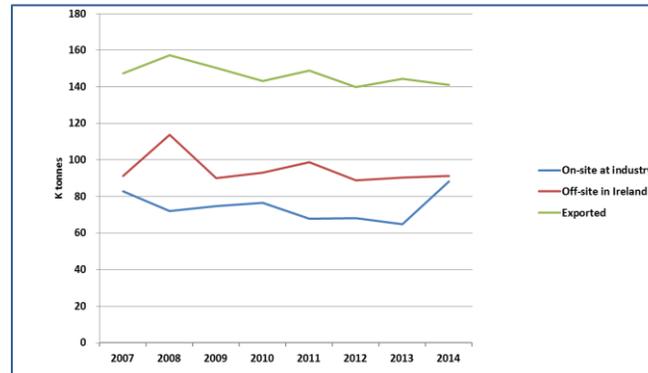
- 328 ktonnes of hazardous waste was managed;² 44% was exported, 27% was treated on-site of generation and 29% was sent to commercial hazardous waste treatment facilities within the State.
- Waste solvents (32%), waste oils and sludges (22%), and waste containing minerals (21%) accounted for more than three quarters of hazardous waste treated in Ireland.
- 104 ktonnes (32%) of hazardous waste underwent final treatment in Ireland i.e. treated to the point that it is no longer waste. The remainder underwent preparatory treatment (e.g. blending, mixing).

¹ (i) National Transfrontier Shipment Office (NTFSO) at Dublin City Council (ii) EPA Pollutant Release and Transfer Register (iii) EPA surveys of authorised waste facilities.

² 16 ktonnes of hazardous waste treated at commercial facilities in Ireland are exported for further treatment. These quantities are correctly counted in both the treated at commercial waste treatment facilities and exported for treatment.

Figure 1 outlines the routes of hazardous waste treatment in Ireland between 2007 and 2014.

Figure 1. Routes of hazardous waste treatment (excluding contaminated soil) in Ireland, 2007 to 2014 (Source: EPA, NTFSO)



Trends

Exports

- 141 ktonnes of hazardous waste was exported in 2014 which is similar to 2012 (140 ktonnes).
- 51 ktonnes of exported waste went for disposal while 90 ktonnes went for recovery, a similar breakdown to previous years.
- 90% of the total exported went to Great Britain, Germany or Belgium (Figure 2).
- Solvents accounted for 36% of exports, followed by batteries and accumulators (12%), waste electrical and electronic equipment (12%) and wastes from waste treatment (7%).

Treated on-site of generation

- 88 ktonnes of hazardous waste was treated on-site compared to 68 ktonnes in 2012. The increase was largely due to treatment of 18 ktonnes of mining waste generated through remediation work.
- 53 ktonnes of the treated waste was disposed (compared to 33 ktonnes in 2012) and 35 ktonnes was recovered compared to 33 ktonnes in 2012.
- Solvents accounted for 50% of the waste treated on-site of generation while wastes of naturally occurring minerals (mining waste) accounted for 42%.

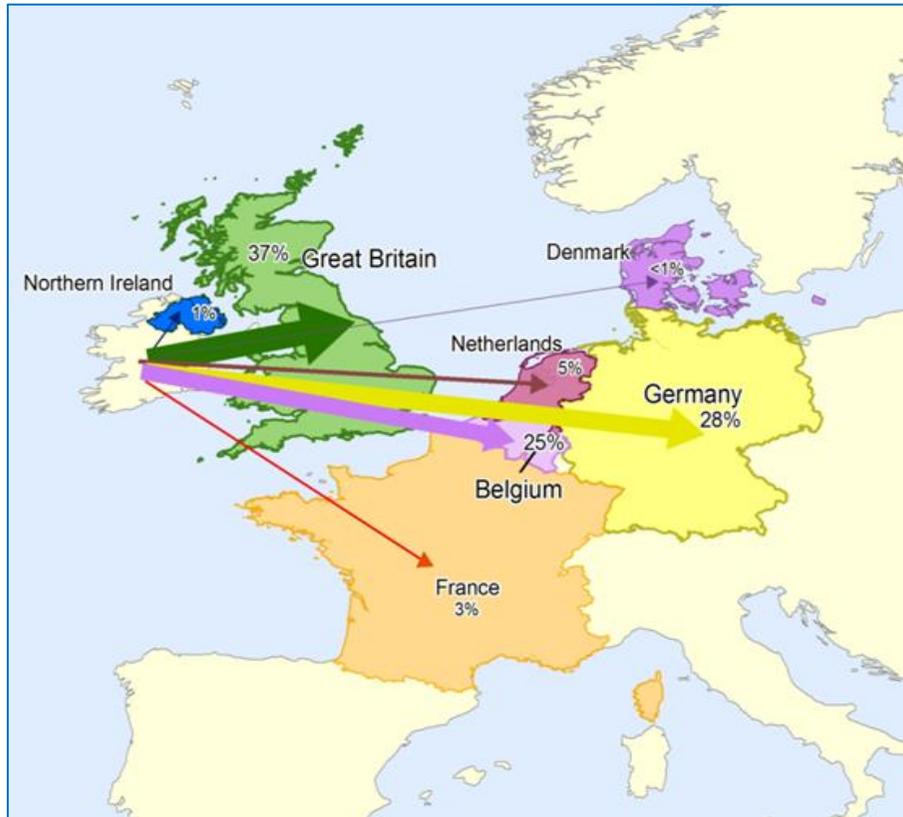
Treated at commercial waste treatment facilities

- 91 ktonnes of hazardous waste was treated at commercial waste treatment facilities in 2014 compared to 89 ktonnes in 2012 (up 2%).
- The main hazardous waste types treated were oil/water emulsion/sludges (20%), used motor oils (19%), solvents (15%), waste electrical and electronic equipment (11%) and human infectious health care wastes (10%).
- 9 ktonnes of human infectious healthcare wastes was treated and most was sent for incineration.

Imports

Just under 4 ktonnes of hazardous waste was imported for treatment, primarily waste oils from Northern Ireland.

Figure 2. Main destinations of exported hazardous waste, 2014 (Source: EPA, NTFSO)



Contaminated Soil

7 ktonnes of contaminated soil was managed in 2014; 5.7 ktonnes was exported for treatment and 1.5 ktonnes was treated at commercial waste facilities in Ireland.

Farm Hazardous Waste Collections

The EPA is leading a pilot farm hazardous waste collection programme which represents the largest ever voluntary bulk removal of highly toxic pollutants out of the Irish environment in a concentrated period of time. Ten collection centres operated in 2014 and a total of 170 tonnes of hazardous waste was collected. Waste oils, batteries, veterinary medicines and sharps, pesticides and waste electrical and electronic equipment were collected. Over 1 tonne of the pesticides were classified as persistent organic pollutants (POPs).

Quarterly National Household Survey

The Central Statistics Office's Quarterly National Household Survey *Module on Household Environmental Behaviours* identified poor management of hazardous and potentially hazardous wastes by householders. For example, 3% dispose of waste oils with their household waste, 7% dispose of chemical wastes with household waste, 22% dispose of unwanted medicines with their household waste, 7% dispose of small electrical waste with their household waste and 27% do not recycle portable batteries.

Management of Hazardous Waste

At the heart of the National strategy for the effective management of hazardous waste is the minimisation of the environmental, health, social and economic impacts of hazardous waste generation and management. These figures indicate that more work is needed in the following areas:

Prevention

Prevention initiatives incorporated into Regional Waste Management Plans and the Green Public Procurement Action Plan should provide for the substitution and reduction in use of hazardous materials.

Collection

The provision of comprehensive and accessible networks of local drop-off facilities for householders and small businesses to tackle the problem of hazardous and potentially hazardous wastes being disposed inappropriately with other household wastes which would also reduce amount of "unreported" hazardous waste.

Self-sufficiency

Minimising exports where it is strategically/environmentally advisable, and technically and economically feasible.

Regulatory

Reviewing legislation in order to facilitate collection, transport and temporary storage of certain hazardous wastes from small sources pending proper treatment.

Supporting Information

Excel/csv files with data presented in this release and additional information is available to download from: <http://www.epa.ie/pubs/reports/waste/stats/>

Farm Hazardous Waste Collection Report 2014:
<http://www.epa.ie/pubs/reports/waste/haz/farmhazwastereport2014.html>

CSO QHNS Module on Household Environmental Behaviors (March 2016):
<http://www.cso.ie/en/releasesandpublications/er/q-env/qnhsenvironmentmoduleq22014/>

National Hazardous Waste Management Plan for Ireland for the period 2014 to 2020:
<http://www.epa.ie/waste/hazardous/>

Since 1st June 2015 waste classification legislation has been amended, including the steps for determining whether waste is hazardous or non-hazardous:
<http://www.epa.ie/pubs/reports/waste/stats/wasteclassification/>

For information on Ireland's progress with EU waste targets:

<http://www.epa.ie/pubs/reports/waste/stats/ireland-progresstowardseuwastetargets.html>

Ireland's Regional Waste Management Plans 2015-2021:
<http://www.epa.ie/waste/policy/regional/>

Green Public Procurement Action Plan: <http://www.environ.ie/environment/sustainable-development/green-public-procurement/green-public-procurement>

Figure 3. Waste oil filters



Figure 4. Hazardous waste chemicals

