

Mid-term evaluation of the National Hazardous Waste Management Plan 2021-2027

Incorporating the 2024 Annual Report



THE CIRCULAR ECONOMY PROGRAMME
The Driving Force for Ireland's Move to a Circular Economy





Mid-term evaluation of the National Hazardous Waste Management Plan 2021-2027

Incorporating the 2024 Annual Report

ENVIRONMENTAL PROTECTION AGENCY

An Ghníomhaireacht um Chaomhnú Comhshaoil

PO Box 3000, Johnstown Castle, Co. Wexford, Ireland

Telephone: +353 53 9160600 Fax: +353 53 9160699

Email: info@epa.ie Website: www.epa.ie

Lo Call: 0818 33 55 99

Published 2025

Acknowledgements

This report is published in fulfilment of Recommendation No. 19 of the National Hazardous Waste Management Plan 2021-2027. The Agency would like to acknowledge the contribution from members of the Working Group, comprising representatives from Local Government, Department of Climate, Energy and the Environment, Department of Agriculture, Food and the Marine, Department of Health, Office of Government Procurement, Irish Waste Management Association, IBEC, HSE and the Environmental Protection Agency in the preparation of this report.

Disclaimer

© Environmental Protection Agency 2025

Although every effort has been made to ensure the accuracy of the material contained in this publication, complete accuracy cannot be guaranteed. Neither the Environmental Protection Agency nor the author(s) accepts any responsibility whatsoever for loss or damage occasioned, or claimed to have been occasioned, in part or in full as a consequence of any person acting or refraining from acting, as a result of a matter contained in this publication. All or part of this publication may be reproduced without further permission, provided the source is acknowledged.

ISBN 978-1-80009-297-6

August / 2025 / Website

Acronyms

The following acronyms are utilised in this report:

C&D	Construction and Demolition
COP	Code of Practice
DAFM	Department of Agriculture, Food and the Marine
DCEE	Department of Climate, Energy and the Environment
DoH	Department of Health
DUMP	Disposal of Unused Medicines Properly
EPA	Environmental Protection Agency
EPR	Extended Producer Responsibility
GPP	Green Public Procurement
HSE	Health Service Executive
IFFPG	Irish Farm Film Producer Group
LA	Local Authority
LAWPRO	Local Authority Waters Programme
LGMA	Local Government Management Agency
NIECE	Network for Ireland's Environmental Compliance and Enforcement
NHWMP	National Hazardous Waste Management Plan
NTFSO	National Transfrontier Shipment Office
NWMP	National Waste Management Plan
PFAS	Per- and polyfluoroalkyl substances
REACH	Registration, Evaluation, Authorisation, and Restriction of Chemicals
RWMPO	Regional Waste Management Planning Office
SEA	Strategic Environmental Assessment
SOER	State of the Environment Report
WEEE	Waste Electrical and Electronic Equipment

Contents

Acknowledgements	i
Acronyms	ii
Mid-Term Evaluation Summary	1
Priority Challenge Areas	3
Recommendations In Progress & On Track	9
Completed Recommendations	11
Summary of Strategic Environmental Assessment Monitoring Programme	12
References	16

Mid-Term Evaluation Summary

In December 2021, the EPA published the [National Hazardous Waste Management Plan 2021 – 2027](#) (hereafter “the Plan”), the fourth such Plan made under Section 26 of the Waste Management Act 1996. The purpose of the Plan is to protect the environment and human health in Ireland through best-practice management of hazardous wastes.

The Plan sets out the priorities to be pursued over the term of the Plan to improve the prevention and management of hazardous waste. The implementation of the Plan is coordinated and driven by the EPA's Circular Economy Regulation team. This report is the mid-term evaluation of the Plan and incorporates the third annual report, relating to activities in 2024. Bilateral engagement meetings were held with the lead organisations responsible for the priority challenge areas set out in this evaluation. These engagement meetings provided a forum for appraisal of implementation and an opportunity to provide the latest progress updates.

In 2023, Ireland generated just over 381,000 tonnes of hazardous waste. This was approximately 8,000 tonnes less hazardous waste generated than in 2022. This decrease was largely due to less hazardous soil and stones being generated. Overall, the trend is showing a peak in 2019 with year-on-year reductions since then.

The EPA State of the Environment Report (SOER) 2024 states that we must rigorously implement existing environmental plans and programmes to achieve the benefits that they were developed to deliver. This mid-term evaluation presents updates on the implementation of all the recommendations and actions identified in the Plan with seventeen recommendations completed or on-track to date.

The evaluation focuses on four priority challenge areas as called out in the Plan, providing commentary on progress made and identifying areas at risk of not delivering and where progress needs to be improved. The four priority challenge areas are:



1. Resilience and Capacity of Ireland's Hazardous Waste Management;
2. Farm Hazardous Waste, including sheep dip;
3. Surplus & Out-of-Date Medicines; and
4. Household Hazardous Waste, including surplus paints.



Progressing the delivery of the priority areas has been mixed, with implementation building in some areas while for other areas it has been slow. Recent developments in some areas show progress is continuing to move towards achieving the required actions such as, household and farm hazardous waste collection programmes will be rolled out nationally before the end of 2025. Negotiations are currently ongoing for a national agreement to provide a national collection system for surplus and out of date medicines by early 2026. However, progress on addressing the resilience and capacity to treat hazardous waste management in Ireland has been very slow. There is an urgent need to identify nationally important hazardous waste infrastructure and to facilitate the provision of national hazardous waste storage/treatment to provide contingency in the event of loss of capacity at ‘at-risk’ infrastructure or waste streams.



Strategic Environmental Assessment (SEA) was carried out as part of the preparation of the fourth Plan. The [SEA Statement](#) sets out the monitoring to be carried out in order to identify any unforeseen adverse effects due to the implementation of a plan. This mid-term evaluation provides an update on the monitoring carried out to date and shows broadly positive trends in the quantities of hazardous waste generated and exported but with further progress needed to reduce export reliance. However, a review of the SEA will be required as part of the next Plan to account for emerging hazardous pollutants of concern.

Priority Challenge Areas

This section summarises the progress in delivering the priority challenge areas identified in the NHWMP. A rating has been assigned reflecting progress to date and the risk in not delivering in the current plan cycle.

Priority Challenge Areas			
<div>Resilience and Capacity of Ireland's Hazardous Waste Management</div> <div></div>	<div>Risk of Not Delivering</div> <div></div>	<div>Recommendations</div> <ul style="list-style-type: none">■ Strengthen systemic resilience for management of hazardous waste.■ Strengthen knowledge of national hazardous waste capacity to inform infrastructure development and contingency planning, in accordance with application of the proximity principle. <div>Key Actions 4.2, 9.1 & 9.2</div> <div>Summary</div> <div>Half of Ireland's hazardous waste is exported for treatment. There is a requirement for dedicated disposal and thermal recovery capacity to treat hazardous waste generated in Ireland. The "at-risk" hazardous waste streams include batteries, WEEE, solvents, PFAS contaminated soils and waste oil.</div>	
		<div>Lead Organisations</div> <ul style="list-style-type: none">■ Department of Climate, Energy, and the Environment (DCEE)■ Regional Waste Management Planning Offices (RWMPO)■ National Transfrontier Shipment Office (NTFSO)■ Local Government Sector■ Environmental Protection Agency (EPA)■ Supporting Industry to respond to the challenge	
<div>Midterm Progress</div> <div>Progress has been very slow in this area. The 2024 State of the Environment Report (SOER) points out that Ireland's capacity to collect and treat waste is vulnerable and underperforming, with an over-reliance on other countries to treat our recycling materials, general municipal and hazardous wastes. There are limited hazardous waste treatment operations in Ireland resulting in a dependence on exports for the management of hazardous waste. Of the total hazardous waste generated in 2023, 189,298 tonnes (approx. 50%) were treated abroad, while 192,467 tonnes (approx. 50%) were treated in Ireland. It should be noted that overall hazardous waste quantities are reducing following a peak in 2019. In 2024, the EPA commissioned an assessment of the hazardous waste management system in Ireland. The report identified the hazardous waste streams that are currently at risk and potentially at risk (see table on the right) in terms of secure long-term treatment options.</div>		<div>At Risk</div> <div>Batteries</div> <div>WEEE</div> <div>Solvents</div> <div>PFAS</div> <div>Contaminated Soils</div> <div>Waste Oil</div>	<div>Potentially At Risk</div> <div>Non-Solvent</div> <div>Chemical Waste</div> <div>Asbestos</div> <div>Waste from Waste Treatment</div> <div>Contaminated Soil</div> <div>Healthcare Waste</div> <div>Wastewater</div> <div>Treatment Sludges</div> <div>Radioactive Waste</div>
<div>Delivery Challenges</div> <div>One of the key priorities from the 2024 SOER states that investment in water, energy, transport, and waste management infrastructure is essential to protect the environment now and into the future. There is still no commercial hazardous waste landfill facility or cell and the treatment of hazardous waste at the two licensed incinerators has a limited intake and a restricted list of hazardous wastes which can be accepted. This lack of infrastructure is a risk to the State, as Ireland remains reliant on facilities in European countries accepting exports of residual non-hazardous and hazardous wastes.</div> <div>There is a need to increase our treatment capacity for hazardous waste, including innovative and specialist treatment solutions (fixed or mobile) for at risk streams in particular, and to include the development of a hazardous waste cell as part of the nationally important waste infrastructure. This will require a concerted co-ordination of the relevant lead organisations and industry to put in place the necessary infrastructure to improve the resilience and capacity of Ireland's hazardous waste management.</div>			

Priority Challenge Areas			
<p>Farm Hazardous Waste Collections</p> 	<p>Risk of Not Delivering</p> 	<p>Recommendation</p> <ul style="list-style-type: none"> Establish nationwide collection and transfer of farm hazardous wastes, including unused veterinary products. <p>Key Actions 11.1 & 11.2</p> <p>Summary</p> <p>A national farm hazardous waste collection system is required and is scheduled to be rolled out in 2025. An extended producer responsibility (EPR) scheme is the proposed approach which will require supporting legislation.</p>	<p>Lead Organisations</p> <ul style="list-style-type: none"> Department of Agriculture, Food, and the Marine (DAFM) Department of Climate, Energy and the Environment (DCEE)
<p>Midterm Progress</p> <p>Progress has been slow in this area to date over the duration of the plan; however, recent developments are moving progress a step closer to achieving the required action. DAFM and DCEE undertook three trial collections of farm hazardous waste in 2024 in conjunction with the Irish Farm Film Producer Group (IFFPG). Enva Ireland Ltd. were awarded the contract to undertake the collection and disposal of the waste at all three locations. The fixed costs of the hazardous waste operator were funded by DAFM while the waste stream costs were paid by the users of the service. Approximately 600 farmers used the trial service with almost 95 tonnes of hazardous waste collected.</p> <p>A national programme of regional farm hazardous waste collections will be rolled out in 2025, with DAFM and DCEE co-funding of €150,000. This is proposed as a permanent solution with annual nominated collection days. This will take place in parallel with EPR scheme development and examining industry contribution. DAFM will engage further with veterinary and pesticide industries and will support EPR discussions with EPA and DCEE for waste oil and paint industries.</p>			
<p>Delivery Challenges</p> <p>The 2024 farm hazardous waste collection trial demonstrated that farmers are willing to engage and contribute to the costs of appropriate hazardous waste disposal. However, there is a need for industry involvement and contribution and an extended producer responsibility (EPR) scheme is required to implement a sustainable solution. This requires supporting legislation and designated procurement responsibilities. There are a small number of high-volume hazardous wastes, such as waste oils, that overlap with the collection of household hazardous wastes and are important in the context of an overarching EPR. Additional awareness raising is required to inform farmers of existing recycling services for triple-rinsed pesticide containers and WEEE recycling of batteries and to promote the safe storage of sharps on the farm.</p>			

Priority Challenge Areas			
<p>Farm Hazardous Waste Spent Sheep Dip</p> 	<p>Risk of Not Delivering</p> 	<p>Recommendation</p> <ul style="list-style-type: none"> ■ Establish a national cross-agency forum to focus on the appropriate management of spent sheep dip to prevent environmental pollution. <p>Key Actions 11.3</p> <p>Summary</p> <p>A cross-agency forum was established and produced outputs based on EPA recommendations. Further progress is needed on the appropriate management of spent sheep dip to prevent environmental pollution.</p>	<p>Lead Organisations</p> <ul style="list-style-type: none"> ■ Department of Agriculture, Food, and the Marine (DAFM) ■ Department of Climate, Energy and the Environment (DCEE)
<p>Midterm Progress</p> <p>A cross-agency forum on the disposal of waste/spent sheep dip was convened in 2024 and consisted of representatives from DAFM, EPA, Donegal County Council, LAWPRO (Border Region), ACRES Cooperation (Donegal). The work of the forum was guided by the recommendations made in the EPA commissioned report on sheep dipping which included:</p> <ul style="list-style-type: none"> ■ Code of Practice (COP) covering the entire dipping process from consideration of the appropriate products, through to spent dip disposal. ■ Professional User Register. ■ Framework for authorisation of disposal. <p>The COP was drafted in 2024. An assessment of the legal basis for implementing a professional user register is in progress and it is proposed to create a new statutory instrument (commencing in September) for such a register under the Veterinary Medicinal Products Act, 2023. From September 2025 sheep dipping products will be classified as Prescription Only Medicine (POM) and require an electronic prescription for purchase. This should provide further control on the sale of sheep dipping products and allow monitoring of use by DAFM.</p>			
<p>Delivery Challenges</p> <p>Several challenges have been identified for the appropriate management of sheep dip and disposal of spent sheep dip:</p> <ul style="list-style-type: none"> ■ The implementation of a system of registration of end users. ■ The regulation of mobile dippers, particularly those operating across jurisdictions, and engagement with the relevant authorities in Northern Ireland on cross border issues. ■ The viability of an authorisation process for disposal of spent dip, including any potential licensing requirements for storing/transporting/disposing of spent dip and the classification of sheep dip and spent sheep dip as hazardous or non-hazardous. ■ The potential establishment of an EPR scheme for a sustainable solution to sheep dip management and disposal. ■ Further dissemination of the COP and information leaflet. 			

Information Box: The Adverse Impact of Sheep Dip





Figure 1 – Location of toxic impact of spent sheep dip on aquatic animals in the Finn and Murlin Rivers, County Donegal.







Figure 2 – Sheep dipping bath in rural County Donegal (photograph Donegal County Council).





Sheep dipping is a method of agricultural pest control where sheep are immersed in water containing insecticides. Spent sheep dip is highly toxic to aquatic animals and must be disposed of correctly. Several rivers in County Donegal have been affected by inappropriate disposal of spent sheep dip. EPA biological monitoring has found toxic impacts in the Finn and Murlin Rivers where dipping baths were located upstream of the monitoring points in otherwise good habitat catchments.









Donegal County Council has undertaken countywide information campaigns and a Catchment Care project in the Upper Finn Catchment. This focussed on education of farmers through surveys and information provided at sheep marts in the area, an instructional video covering a training day on best practice, and a trial on integrated constructed wetlands (ICW) at three dipping bath sites. Recent monitoring in 2024 has shown improvements in aquatic life in the Upper Finn River and further research is to be undertaken on the effectiveness of the integrated constructed wetlands in 2025.

Priority Challenge Areas			
Surplus & Out-of-Date Medicines 	Risk of Not Delivering 	Recommendation <ul style="list-style-type: none"> By 2023 establish national collection of surplus and out-of-date medicines from household waste stream. Key Actions 12.1 & 12.2 Summary A national surplus, out-of-date, and unused medicines collection system is required with negotiations underway for possible roll out in 2025/2026. The previous target date of 2023 was not achieved. It is critical that delivery of this is key action is achieved during the period of the Plan.	Lead Organisations <ul style="list-style-type: none"> Department of Health (DoH) Department of Climate, Energy and the Environment (DCEE)
Midterm Progress Progress has been very slow in this area; however, recent developments have moved a step closer to achieving the required actions. The Disposal of Unused Medicines Properly (DUMP) research project was conducted in 2018 in counties Cork and Kerry. The overarching aims of the DUMP project were to assess a means of reducing the presence of pharmaceutical waste in the environment and to prevent and reduce the instances of unsafe storage that could result in possible accidental poisonings, deliberate harm, or drug abuse. The research included a desktop study of medicine take-back schemes in four European Union Member States and Canada. The HSE ran another DUMP campaign in 2023 using vaccination centres for the return of medicines/products by the public. A Budget 2025 allocation of €1m has been secured by the Department of Health (DoH) for expansion of pharmacy services which includes the provision of a national take back scheme for unused medicines similar to the DUMP scheme. The DoH has commenced formal negotiations with the Irish Pharmacy Union with a three-month timeframe, with the aim of securing a final agreement and move to implementation by the end of 2025. This will provide a permanent DUMP solution into the future, utilising the extensive network of pharmacies across the country. The DoH is also examining improved medication management, limiting dispensing to what is needed, and further checks on community drug schemes to reduce the amount of medicines that may end up not being used and expiring.			
Delivery Challenges It is notable that the main hazardous waste query received by mywaste.ie concerns the proper disposal of surplus or out-of-date medicines. Therefore, it is important to implement an appropriate disposal system for the public. Any arrangement with the pharmacies will also need to be included as part of the national HSE unused medicine collections. It is unlikely that an EPR will be developed in the short-term and there are additional complexities in terms of an EPR levy and the provision of medications to public patients. However, engagement with the pharmacy sector should commence sooner rather than later to examine a sustainable model of funding for long-term management and disposal of surplus and out-of-date medicines.			

Priority Challenge Areas			
Household Hazardous Waste 	Risk of Not Delivering 	Recommendation <ul style="list-style-type: none"> ■ Prepare for separate collection of hazardous waste fractions produced by households. Key Actions 10.1 & 10.2 Summary The Waste Framework Directive (WFD) requires Member States to set up separate collection systems for household hazardous waste by 1st January 2025. A national collection system will be rolled out in 2025. An extended producer responsibility (EPR) scheme should be developed in line with the European Circular Economy Act along with standardising civic amenity site hazardous waste capabilities.	Lead Organisations <ul style="list-style-type: none"> ■ Department of Climate, Energy and the Environment (DCEE) ■ Regional Waste Management Planning Offices (RWMPO) ■ National Transfrontier Shipment Office (NTFSO)
Midterm Progress Progress has been building in this area and recent developments have moved a step closer to achieving the required actions. The Regional Waste Management Planning Offices (RWMPO) undertook four household hazardous waste collection days across all three waste regions in 2024. Enva Ireland Ltd. were awarded the contract to undertake the collection and disposal of the waste at all four locations. Over 1,800 customers availed of the service with 65 tonnes of waste collected and treated. 53% of the waste collected was non-hazardous paint. The Waste Framework Directive requires separate household hazardous waste collection from 2025 onwards. DCEE has secured €2 million in funding for household hazardous waste collection in every local authority area with a 3-year contract being put in place to provide the service. Nominated collection days will be used for this planned cycle and will include collection of all household paints. It is planned that 12 collections will take place between September and November with a further 12 collections taking place from January to March 2026. The priority for DCEE is to put a collection in place to remove legacy stockpiles initially, preventing potential risks to the environment. In the medium-term options for establishing a national EPR scheme funded by industry will be examined. In addition, the local government sector is developing a project initiation document for the Public Sector Innovation Group seeking to standardise civic amenity site operations across 96 sites in 31 local authorities. This recommends introducing a tiered system of A, B, and C where A sites would take the broadest range of household hazardous waste with a minimum of one tier A civic amenity site per local authority and in each city and big town. This will improve household hazardous waste collection resilience beyond the current Plan cycle. The proposed model is contingent on appropriate and necessary funding being made available and a coordinated programme of implementation across the local authorities.			
Delivery Challenges Appropriate locations for the collection of household hazardous waste may be challenging as the pilot collection days attracted a high number of customers requiring significant local authority resources and traffic management. There is also a supply chain risk with only one hazardous waste collector currently capable of operating the scheme and a potential health and safety issue with the handling of lithium-ion batteries at civic amenity sites. The evidence from the pilot collections highlights a lack of understanding of non-hazardous and hazardous paints on the market. Both non-hazardous and hazardous paints were combined for hazardous waste disposal adding significantly to the overall costs of disposal. Increased awareness raising of how to properly dispose of non-hazardous waste paint is required. Other possible solutions include the expansion of the Paint Reuse Network and the potential for an EPR scheme for waste paint with associated supporting legislation. In addition, further awareness is required on the proper identification of household hazardous waste, the availability of existing household hazardous waste collection systems at civic amenity sites, and the availability of alternatives to hazardous products. There are opportunities to deliver Plan actions such as facilitating the reuse of non-hazardous paints through legislative changes to the waste facility permit and registration regulations and other activities to support circular economy reuse. Pure reuse and preparation for reuse should be clarified with either no regulation or low regulation requirements. Recommendations are being considered by DCEE regarding legislative changes that would better accommodate the circular economy.			







Recommendations In Progress & On Track			
Collaborative enforcement of hazardous waste legislation 	Prevent hazardous waste in industrial sectors and support a safe circular economy 	HSA led Implementation of EU Chemicals Strategy for Sustainability Towards a Toxic-Free Environment 	Temporary storage of orphan radioactive sources 
<p>National Waste Enforcement Priorities established on a 3-year cycle with hazardous waste inspections included. EPA auditing programme in place to assess national performance of these enforcement priorities.</p> <p>An annual regulatory forum was initiated at the NIECE Workshop in 2024.</p> <p>[Key Action 2]</p>	<p>The EPA is identifying toxic substances and the options to encourage the usage of ‘non-/less-toxic’ alternatives along with the mechanisms available through the EPA licensing regime and by-product and end-of-waste regulatory provisions. Further industry engagement in this process has the potential to reduce hazardous waste generation and improve circularity.</p> <p>The EPA has made a number of single case decisions that have resulted in reduction in the quantity of hazardous waste, e.g. >8% reduction in hazardous waste generated resulting from two by-product determinations, along with two end-of-waste decisions to date relating to chemical wastes.</p> <p>[Key Action 6]</p>	<p>Collaborative Inter-Departmental/ Agency input is ongoing on REACH, Triple COP, Minamata Convention, and POPs.</p> <p>[Key Action 1.3]</p>	<p>Given the small number of disused sources and policies to trend towards zero, a National Radioactive Waste Storage Facility is currently not a priority. National arrangements for medium to long term management of orphan sources include financial provisions, review of security requirements, a protocol for temporary emergency storage and discussions with other States. The 2021 ARTEMIS peer review noted that Ireland continues to meet high standards of safety and management of radioactive waste and disused sources. This will be reviewed again in the 2026 Integrated Regulatory Review Services (IRRS) Mission.</p> <p>[Key Action 16]</p>





Recommendations In Progress & On Track			
<p>Remediate legacy waste disposal sites containing hazardous waste</p> 	<p>Expand reporting protocols for best practice on hazardous waste management</p> 	<p>Identify key performance indicators to measure and track trends in hazardous waste management</p> 	<p>All-island approach on hazardous waste</p> 
<p>Six closed landfills have been identified as containing hazardous waste following a full risk assessment under the EPA Code of Practice. All six have been issued EPA Certificates of Authorisations.</p> <p><i>[Key Action 17]</i></p>	<p>The NTFSO's Waste Transfer Management Portal (WTMP) went live in October 2023 and was used by LA staff for 2024 annual waste return validation, including any hazardous waste returns.</p> <p><i>[Key Action 18.1]</i></p>	<p>The EPA reports annually on hazardous waste management in Ireland and publishes this information on the EPA website. Hazardous waste indicators are provided to track trends, and these are being further developed with EPA statistical information. Overall, hazardous waste generation is decreasing in Ireland since 2019.</p> <p><i>[Key Action 19.4]</i></p>	<p>DCEE are seeking to engage with the Northern Ireland executive to establish if they can support the creation of such a working group. This should be progressed in conjunction with Ireland's hazardous waste resilience and capacity building.</p> <p><i>[Key Action 3]</i></p>





Completed Recommendations			
Circular Economy Programme & National Hazardous Waste Management Plan Objective 	National Hazardous Waste Management Plan Working Group 	Hazardous Waste Characterisation Studies 	Hazardous Waste Guidance 
<p>The Circular Economy Programme was launched by the EPA in 2021 and included the implementation of the NHWMP. The relevant objectives of the NHWMP were incorporated into the National Waste Management Plan for a Circular Economy 2024-2030 by the RWMPOs.</p> <p><i>[Key Actions 1.1 & 1.2]</i></p>	<p>Established in 2022 with membership from public sector and industry to provide leadership on achievement of the NHWMP objectives. Meets twice per year to drive achievement of the Plan objectives.</p> <p><i>[Key Action 19.1]</i></p>	<p>Household municipal and non-household municipal waste sampling completed in 2022 identified hazardous waste categories in bins.</p> <p>National survey on householder awareness & behaviours regarding hazardous substances completed in 2024.</p> <p><i>[Key Actions 5.3, 7.2 & 18.2]</i></p>	<p>Multiple hazardous waste guides were published for garages, safe storage of lithium-ion batteries, hazardous fractions in C&D waste, and handling asbestos.</p> <p><i>[Key Actions 14 & 15]</i></p>
Research on reducing use of hazardous substances 	Green Public Procurement (GPP) 	Collection for surplus paint (household and commercial) 	Reducing consumption of hazardous substances in households 
<p>50 Green & Circular Economy research projects, including 6 hazardous waste related projects, were awarded funding since the Plan commenced in 2021. €3.8 million funding was awarded under the 2024 EPA Research Call.</p> <p><i>[Key Action 7.1]</i></p>	<p>EPA's GPP guidance updated in 2024 and includes criteria for products containing hazardous substances. Out of a total of €1.2 billion "in scope contracts" €1.02 billion used green criteria.</p> <p><i>[Key Action 8]</i></p>	<p>26 locations nationwide for collecting surplus paint and nine social enterprises involved, with recycled paint sales/donations increasing by 65% in 2023.</p> <p><i>[Key Action 13]</i></p>	<p>Greener living guides updated in 2024 with a special guide on preventing and handling hazardous waste at home based on survey results of householder awareness & behaviours regarding hazardous substances.</p> <p><i>[Key Action 5]</i></p>



Summary of Strategic Environmental Assessment Monitoring Programme

A Strategic Environmental Assessment (SEA) was undertaken for the Fourth National Hazardous Waste Management Plan (NHWMP). Article 10 of the SEA Directive requires that monitoring be carried out to identify, at an early stage, any unforeseen adverse effects due to implementation of a plan, and to be able to take remedial action. Monitoring is carried out by reporting on a set of indicators, which enable positive and negative impacts on the environment to be measured. The environmental indicators of relevance to the Plan were identified from the SEA process. These are used to identify unforeseen adverse effects from implementation of the Plan. A summary of the monitoring objectives and midterm evaluation trend with commentary are presented below.

Legend					
Arrow Direction:		Downward trend		Stable or mixed trend	 Upward trend
Arrow Colour:		Positive impact		Neutral or mixed impact	 Negative impact

Monitoring Objective	What is being monitored?	Midterm Evaluation Trend	Comment
1. To protect human and environmental health from inappropriately managed HW.	Tracking and recording all hazardous waste streams in Ireland.	 Decreasing quantities of HW generated.	<p>It is not possible to reliably produce data on the level of “mismanaged hazardous waste” in Ireland. Therefore, this indicator has been amended to track the quantities of hazardous waste in Ireland as an indicator of appropriate management of this waste.¹</p> <p>In 2023, Ireland generated a total of 381,764 tonnes of hazardous waste, which is approximately 8,000 tonnes less hazardous waste generated in 2022.² This decrease was largely due to less hazardous soil and stones being generated. Overall, the trend is showing a peak in 2019 with year-on-year reductions since then. Incinerator bottom ash (IBA) was reclassified as a non-hazardous waste in 2020 further reducing the quantities of hazardous waste generated.</p>
	Increasing trends in small HW streams.	 Increasing quantities of small HW streams collected.	<p>95t of farm hazardous waste and 65t of household hazardous waste was collected and treated in 2024 as part of the trial collection projects. These collections will be extended in 2025 to national hazardous waste collection programmes. Therefore, the quantities of small hazardous waste streams are expected to increase significantly. This is a positive increase as these hazardous wastes will be collected and disposed of appropriately.</p>
	Improvements in awareness and compliance in households and key sectors e.g. unused medicines, healthcare, farms.	 Consistent public engagement with hazardous waste website information.	<p>Mywaste.ie is Ireland’s official web guide to managing waste. Its hazardous and medical waste page³ provides details for the proper disposal of 22 different types of hazardous wastes and received over 2,000 views in 2024. There was consistent internet traffic to the EPA Hazardous Waste information page⁴ over the last three years (average 2,500 visits per year).</p>
2. Reduce and eliminate legacy hazardous waste issues.	The degree to which closed/illegal landfills and dumping sites with HW that are being remediated.	 Increasing identification and authorisation of hazardous closed landfills.	<p>Six closed landfills have been identified as containing hazardous waste following a full risk assessment under the EPA Code of Practice. This is an increase from five identified in 2023. All six have been issued EPA Certificates of Authorisations, an increase on two issued authorisations in 2023. Work will continue in this area to ensure that closed landfills containing hazardous waste are appropriately authorised.</p>

Monitoring Objective	What is being monitored?	Midterm Evaluation Trend	Comment
3. Safeguard soil quality and quantity from hazardous waste, reduce and eliminate soil contamination, and reduce exports/loss of the soil resource.	Trends in the volumes of hazardous contaminated soil being generated.	 Overall decrease in quantities of hazardous soil generated but recent trend is rising.	There was a significant increase in hazardous soil treated within Ireland from 2018 to 2022 (with the exception of 2020) ² which is offset by significant reductions in hazardous soil being exported for treatment (see below). The overall quantities of hazardous soil generated has decreased but the recent trend is rising. However, this is dependent on the level of construction developments and use of brownfield sites and will vary year on year.
	Trends in the volumes of hazardous contaminated soil being exported for treatment	 Decreasing quantities of hazardous soil exported.	The total hazardous soil exports in 2022 were only 10 tonnes with 99% of contaminated soils treated at Irish hazardous waste facilities. ² This drop is a significant positive for the target of retaining the national soil resource. There was a significant increase in hazardous soil exported for treatment in 2016 (approx. 80k tonnes) which peaked in 2017 at just over 100k tonnes and then decreased thereafter. However, it should be noted that the quantity of hazardous contaminated soils generated is largely reliant on activity in the construction sector and the level of brownfield development undertaken.
4. Improve air quality and reduce emissions to air from the key issues: backyard/illegal burning and from transport emissions from moving HW.	Trends in the level of illegal/backyard burning.	 Increased LA household waste complaint inspections (incl. backyard burning).	Illegal burning of waste releases hazardous chemicals into the air. Local Authority household waste/waste presentation inspections arising from complaints, including backyard burning, increased from 2,597 in 2021 to 3,697 in 2023. These inspection numbers do not distinguish between general waste presentation inspections and backyard burning investigations. Therefore, it is difficult to deduce if an increase in backyard burning has occurred and further investigation is required.
	Trends in the levels of transport of HW as a proxy for emissions to air.	 Recent decrease in HW export transport but still over reliant on export treatment.	<p>In 2023, Ireland generated a total of 381,764 tonnes of hazardous waste, which is approximately 8,000 tonnes less of hazardous waste generated in 2022.² This decrease was largely due to less hazardous soil and stones being accepted by facilities.</p> <p>Of the total hazardous waste, 189,298 tonnes (approx. 50%) of hazardous waste were treated abroad, while 192,467 tonnes (approx. 50%) were treated in Ireland. 99% of hazardous waste exports for treatment were to EU member states and to the UK. All exports were to countries that are party to the Basel Convention.</p> <p>Overall emissions from the waste sector decreased by 3.0% in 2023 (or 0.03 Mt CO₂eq), with waste sector emissions projected to decrease by 25.2% between 2018 and 2030 to 0.7 Mt CO₂eq under the Existing Measures scenario.⁵</p>

Monitoring Objective	What is being monitored?	Midterm Evaluation Trend	Comment
5. Minimise emissions of greenhouse gases associated with hazardous waste management.	Overall reduction in hazardous waste generation	 <p>Recent reductions in HW transport GHG emissions but still over reliant on export treatment.</p>	EPA data from 2009 to 2022 shows that the level of hazardous waste exported for treatment was approximately 150K tonnes per annum between 2009 and 2014. There was a gradual increase between 2015 to 2018 where it peaked in 2018 at approximately 384K tonnes. A decrease was then noted between 2019 and 2020. The amount exported between 2021 and 2022 seems to be stabilised at approx. 220K tonnes per annum.
6. Prevent and minimise the generation of HW, minimise exports and promote circular economy principles.	Trends towards waste prevention and reduction in various sectors, particularly in the key identified priority sectors: medicines, healthcare, farms.	 <p>Decreasing quantities of HW generated overall but increasing municipal HW.</p>	For Industrial/Other hazardous wastes there has been a downward trend from over 460K tonnes generated in 2019 to just under 300K tonnes in 2022.2 C&D hazardous waste peaked in 2020 with just over 360K tonnes and decreased to just over 60k tonnes in 2022. However, municipal hazardous waste has seen a gradual increase from almost 13K tonnes in 2019 to approx. 31K tonnes in 2022. This further highlights the importance of Objective 1.2 in collecting and appropriately treating/disposing of these smaller hazardous waste streams.

References

- 1 SEA Statement: <https://www.epa.ie/publications/circular-economy/resources/SEA-Statement.pdf>
- 2 EPA hazardous waste data archive: <https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/waste-statistics-data-archive/hazardous-waste-data-archive/>
- 3 [Mywaste.ie](https://mywaste.ie) hazardous and medical waste page: <https://mywaste.ie/what-to-do-with-different-types-of-waste/type/hazardous-medical/>
- 4 EPA hazardous waste information page: <https://www.epa.ie/our-services/monitoring--assessment/waste/hazardous-waste/>
- 5 EPA Waste GHG emissions: <https://www.epa.ie/our-services/monitoring--assessment/climate-change/ghg/waste/#>

Headquarters

**PO Box 3000,
Johnstown Castle Estate,
County Wexford, Ireland**

T: +353 53 916 0600

F: +353 53 916 0699

E: info@epa.ie

W: www.epa.ie

LoCall: 0818 335599

Regional Inspectorate

McCumiskey House,
Richview, Clonskeagh Road,
Dublin 14, Ireland

T: +353 1 268 0100

F: +353 1 268 0199

Regional Inspectorate

Inniscarra, Co. Cork,
Ireland

T: +353 21 487 5540

F: +353 21 487 5545

Regional Inspectorate

Seville Lodge, Callan Road,
Kilkenny, Ireland

T: +353 56 779 6700

F: +353 56 779 6798

Regional Inspectorate

John Moore Road, Castlebar,
Co. Mayo, Ireland

T: +353 94 904 8400

F: +353 94 902 1934

Regional Inspectorate

The Glen, Monaghan,
Ireland

T: +353 47 77600

F: +353 47 84987

Regional Offices

The Civic Centre,
Church St, Athlone,
Co. Westmeath, Ireland

T: +353 906 475722

Room 3, Raheen Conference Centre,
Pearse House, Pearse Road,
Raheen Business Park, Limerick,
Ireland

T +353 61 224764