



North East Lincolnshire

Waste Needs Assessment 2026

Appendix 6: Scoping of 'Other' Waste Streams

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Abbreviations

Abbreviations	Terms
AMP	Asset Management Plan
DEFRA	Department for Environment, Food and Rural Affairs
DWMP	Drainage and Wastewater Management Plan
EA	Environment Agency
EWC	European Waste Catalogue
HLW	High Level Radioactive Waste
LACW	Local Authority Collected Waste
NPPG	National Planning Practice Guidance
NPPW	National Planning Policy for Waste
STC	Sludge Treatment Centre
STW	Sewage Treatment Works
VLLW	Very Low-Level Radioactive Waste
WDI	Waste Data Interrogator
WNA	Waste Needs Assessment
WPA	Waste Planning Authority
WwTW	Wastewater Treatment Works

Glossary of Terms

TERM	DEFINITION
Agricultural Waste	Waste produced on a 'farm' in the course of 'farming'. Agricultural waste takes both 'natural' (or organic) and 'non- natural' forms e.g. plastics and metal.
Anaerobic Digestion	A process where organic matter including green waste and food waste is broken down by bacterial action in the absence of air, producing a gas (biogas) and nutrient rich solid or liquid (digestate). The biogas can be used as a fuel and digestate can be applied to land as a fertiliser.
Authority Monitoring Report	Local planning authority document that reports on the effectiveness of local planning policies, to be produced on an annual basis.
Asset Management Plan	An asset management plan produced by sewerage and water undertaking for approval by Ofwat includes an assessment of what assets make up the water, sewer or storm system in a particular area and plans to meet future needs within agreed budgets.
Biodegradable waste	Waste that can break down over time due to natural biological action/processes, such as food, garden waste and paper.
Commercial Waste	Waste from factories or premises used for the purpose of trade or business, sport, recreation or entertainment
Controlled Waste	Waste subject to controls emanating from the EU Waste Framework Directive.
Construction, Demolition & Excavation Waste	Waste arising from the building process comprising demolition and site clearance waste and builders' waste from the construction/demolition of buildings and infrastructure. Includes masonry, rubble and timber.
Defra	The UK Government department responsible for developing national waste management policy.
Drainage and Wastewater Management Plan	A strategic statutory plan produced by the water and sewerage company (which is Anglian Water in NEL) for its operating area that identifies the wastewater management needs and requirements for the next 25 years.
Energy from Waste	The conversion of the calorific value of waste into energy, normally heat or electricity through applying thermal treatment of some sort. May also include the production of gas that can be used to generate energy.
Environment Agency	The body responsible for the regulation of waste management activities through issuing permits to control activities that handle or produce waste. It also provides up-to-date information on waste management matters and deals with other matters such as water issues including flood protection.
European Waste Catalogue	Comprehensive listing of wastes divided into 20 chapters, most of which are industry-based, although some are based on materials and processes. Each waste type is assigned a unique six-digit code. Otherwise referred to as List of Waste (LoW).
Exemptions	Certain activities exempt from the need to obtain an environmental permit. Each exemption has specific limits and conditions that must be complied with to remain valid. Exemptions must be registered with the Environment Agency. Each registration lasts 3 years.
Green waste	Biodegradable plant waste such as grass and hedge trimmings, from domestic and commercial sources suitable for composting.
High Level Radioactive Waste	The highly radioactive by-product of nuclear reactor operations and fuel reprocessing, requiring permanent isolation and cooling
Incineration	The controlled combustion of waste. Energy may also be recovered in the form of heat (see Energy from Waste).
Industrial Waste	Waste arising from any factory and from any premises occupied by an industry (excluding mines and quarries).
Landfill (including land raising)	The permanent disposal of waste to land, by the filling of voids or similar features, or the construction of landforms above ground level (land-raising).

Local Authority Collected Waste	Waste collected by or on behalf of a local authority. Includes household waste and waste delivered to HWRCs. LACW is the definition used in statistical publications, which previously referred to municipal waste.
Ofwat	The regulatory body responsible for overseeing the privatised water and sewage industry in England and Wales.
Planning Practice Guidance	An online resource that provides detailed context and guidance on implementing the national planning policy in England
Recovery	Subjecting waste to processes that recover value including recycling, composting or thermal treatment to recover energy.
Recycling	The reprocessing of materials extracted from the waste stream either into the same product or a different one.
Sludge Treatment Centre	A place which processes sewage sludge—a by-product of wastewater treatment—using methods like anaerobic digestion to create nutrient-rich biosolids for agriculture and biogas for renewable energy. May be included on wastewater treatment works or stand alone.
Wastewater Treatment Works	A facility which treats wastewater from sewers to reduce pathogen levels and remove contaminants, to level that liquid may be lawfully discharged to controlled waters and resulting sludge may be applied to land. May include primary, secondary and tertiary treatment processes,
The Plan area	The area subject to the Local Plan to which this study relates. In this case North East Lincolnshire.
Very Low Level Radioactive Waste	A sub-category of low-level radioactive waste containing trace amounts of radioactivity, usually originating from nuclear site decommissioning or industrial processes
Waste Needs Assessment	Forecasts waste that will require management by different means in a WPA area over a certain period of time, assesses capacity of the existing facilities available to manage this waste and considers the need for additional facilities to meet the forecast management needs. This underpins the preparation of planning policies for waste.
Waste Data Flow	A web-based reporting system used by English local authorities to report LACW management data to central government
Waste Data Interrogator	Dataset published by the Environment Agency annually reporting quantities and types of waste managed at permitted waste management facilities in England.
Waste Planning Authority	The authority responsible for planning for waste within a specific administrative area. In this case North East Lincolnshire Council.
Waste Transfer Station	A site to which waste is delivered for sorting or baling prior to transfer to another place for recycling, treatment or disposal.
Water Resources Management Plans	Statutory documents that all water companies must produce at least every 5 years intended to set out how they will achieve a secure water supply while also enhancing the environment.

1 Context

- 1.1 BPP Consulting LLP was commissioned by North East Lincolnshire Council to update the 'Waste Needs Assessment' (WNA 2015) for North East Lincolnshire (NEL) - the NEL Waste Needs Assessment Update 2026 (NEL WNA 2026). This work is being carried out in the context of the National Planning Policy for Waste (NPPW) and the waste chapter of the national Planning Practice Guidance (nPPG), which expects that:

"Planned provision of new capacity and its spatial distribution should be based on robust analysis of best available data and information, and an appraisal of options." (emphasis added)¹

- 1.2 This report forms part of a suite of reports that constitute the NEL WNA 2025, consisting of the following reports:

- Local Authority Collected Waste Management Requirements to 2045;
- Commercial & Industrial Waste Management Requirements to 2045;
- Construction, Demolition & Excavation Waste Management Requirements to 2045;
- Hazardous Waste Management Requirements to 2045;
- Scoping Review of 'Other Waste' Management Requirements in 2024; and
- Review of Strategic Waste Flows in 2024.

- 1.3 This report is the Scoping Review of 'Other Waste' Management Requirements that assesses possible management needs for 'Other' waste streams as follows:

- Wastewater
- Agricultural Waste
- Low-level radioactive waste.

- 1.4 As the nPPG advises that Waste Planning Authorities (WPAs) should seek to plan for these streams, this scoping report assesses the quantities that may arise within each stream and how well existing arrangements may cope in future, and whether it is necessary to provide for them expressly and therefore account for them in the WNA Update in detail.

- 1.5 While established data sources inform the generation of estimates for the principal waste streams, the data to estimate arisings of the 'other' streams is less readily available. As a result, quantifying and forecasting arisings is problematic.

¹ National Planning Policy for Waste. (DLUHC November 2016)

2 Wastewater

Context

- 2.1 Every five years water and sewerage undertakers are required to submit to the water regulator, Ofwat, business plans known as Asset Management Plans (AMP). These set out the services and infrastructure improvements the statutory undertaker is planning to make and how these are to be funded. Ofwat sets price limits for the next five years based around these AMPs. Certainty of infrastructure provision over the medium and long terms can only be gained when future funding is secured through Ofwat's AMP review process. The current AMP period (known as AMP8) runs from 1 April 2025 to 31 March 2030 and does not therefore cover the whole NEL Local Plan period to 2045².
- 2.2 Water and sewerage undertakers are also required under the Environment Act 2021 to produce a Drainage and Wastewater Management Plans (DWMP). These are 25-year strategic plans setting out how each statutory undertaker intends to ensure the drainage and wastewater system infrastructure within their respective area is fit for purpose. These statutory plans inform the AMP process and provide the evidence base for identifying future infrastructure requirements and investment priorities.
- 2.3 Whilst Wastewater Treatment Works (WwTW) are classed as waste development and therefore planning applications relating to their provision are determined by the waste planning authority, the assessment of the need for future wastewater management capacity is led by the water and sewerage undertakers through the AMP. The nPPG advises that early discussions take place between local planning authorities and water and sewerage undertakers, so that proposed growth and environmental objectives, set out in the utility company business plans³ are taken account of in local plans, and vice versa.

Planning for Wastewater

- 2.4 Waste planning policy must consider two distinct aspects of wastewater management:
1. Wastewater treatment capacity – the ability of WwTWs and the wider network to accommodate existing and planned development.
 2. Bioresources (sludge) treatment capacity – the facilities required to treat or recycle the solid residues generated through wastewater treatment.

The Purpose of this Section

- 2.5 In view of the above two aspects of wastewater management are addressed in this report:
1. The sufficiency of capacity serving NEL to treat wastewater itself (and hence support wider growth plans); and

² AMP8 covers the period from 1st April 2025 to 31st March 2030. The Price Review in 2024 is where water companies will agree the AMP8 Business Plan with Ofwat for the following 5-year period.

³ <https://www.gov.uk/guidance/water-supply-wastewater-and-water-quality>

2. The sufficiency of capacity serving NEL to manage the solid wastes (sewage sludge) that arise from the wastewater treatment process (to manage any environmental effects).

Terminology

- 2.6 Sewage, specifically refers to wastewater containing human waste while wastewater is a broader term encompassing all water that has been used or contaminated by human activities, including domestic, industrial, and commercial sources that requires treatment. Both are treated and managed in WwTW. Sludge treatment refers to the processing and stabilisation of the semi-solid by-product produced during wastewater (or sewage) treatment, often to enable its use or disposal as a bioresource.
- 2.7 Facilities that undertake wastewater treatment may be referred to either as Sewage Treatment Works (STW) or Wastewater Treatment Works (WwTWs). This report uses WwTW as the default, although if sites are named as STWs, that acronym may appear when making specific reference to that particular facility. Facilities where wastes resulting from wastewater treatment are subsequently treated may be referred to as Sludge Treatment Centres (STCs) if stand alone.
- 2.8 Anglian Water Services Limited is the designated sewerage and water undertaker with statutory responsibility for providing wastewater treatment capacity, being responsible for wastewater collection, treatment and sludge management across the whole of NEL and beyond. This Waste Needs Assessment draws upon the following key evidence sources:
 - Anglian Water AMP8 (2025–2030) business plan, including investment commitments relevant to NEL.⁴
 - Anglian Water DWMP (2025-2050)⁵, outlining long-term capacity, resilience, climate-risk and environmental requirements. It sets out how wastewater systems, and the drainage networks that impact them, are to be maintained, improved and extended over the next 25 years. This DWMP covers 2025-2050 and supports the development of Anglian Water's Long Term Delivery Strategy and their Price Review 2024 Business Plan.

⁴ <https://www.anglianwater.co.uk/siteassets/household/about-us/pr24/anh01-our-plan-2025-2030.pdf>

⁵ <https://www.anglianwater.co.uk/corporate/strategies-and-plans/drainage-wastewater-management-plan/final-plan?>

Wastewater treatment capacity

- 2.9 This section sets out the plans of Anglian Water as the sewerage undertaker as they affect NEL.

Anglian Water

- 2.10 Figure 1 sets out Anglian Water's operating area. Within NEL, the company operates an extensive network of wastewater treatment works (WwTWs), pumping stations, combined sewer overflows (CSOs), storm storage assets, and Pyewipe, the bioresources facility linked to regional sludge-treatment centres.



Figure 1: Anglian Water operating area⁶
Source: Anglian Water

⁶ <https://www.anglianwater.co.uk/siteassets/household/new-report/aws-cross-sector-infrastructure-sm.pdf>

- 2.11 Anglian Water has proposed an £11 billion capital and operational programme for AMP8 (2025–2030)⁷ across its operating region. This includes major statutory programmes focused on:
- Reducing pollution incidents and storm overflow discharges
 - Compliance improvements at existing wastewater treatment works
 - Network resilience upgrades
 - Environmental water-quality enhancements
- 2.12 Pyewipe WwTW operated by Anglian Water and located on Moody Lane beside the Humber estuary at Grimsby, is the principal wastewater treatment facility serving NEL.

Management of Sewage Sludge from NEL Wastewater Treatment Works

- 2.13 Sludge resulting from the treatment of wastewater at a WwTW is normally termed 'sewage sludge' or in some cases 'bioresources'. Sewage undergoes three stages of treatment: primary treatment is the first phase of sewage treatment; followed by secondary and finally tertiary treatment. Some WwTW only offer primary treatment capacity and so the resulting sludge may then be moved on to sites that offer secondary and tertiary treatment capacity. These 'next step' sites are often referred to as Sludge Treatment Centres (STCs). The WDI 2024 shows that 112,573 tonnes of sewage sludge was managed at the Pyewipe WwTW in 2024, indicating it also operates as a STC. No permitted WwTWs located outside NEL reported received sewage sludge arising specifically from NEL during the 2024 reporting year.

Inputs of Other Waste to Wastewater Treatment Works in NEL

- 2.14 WwTWs can provide a valuable function in managing wastes, other than wastewater, that arise in liquid and sludge form such as septic tank emptyings. WwTWs that receive such waste through tanker delivery (rather than sewer) normally require an environmental permit. Review of the data presented in the WDI 2024 indicates that Pyewipe WwTW is the only WwTW in NEL to report waste receipts in 2024. It received waste other than wastewater and sludges for treatment as shown in Table 1.

Table 1: >500 tonnes Inputs of Other Waste to Pyewipe WwTW (exc. 19 08 05⁸)

Source: WDI 2024

Site Name	Waste Code	EWG Waste Description	Total Tonnes
Pyewipe Treatment Facility	19 02 06	Sludges from physico/chemical treatment	30,738
	20 03 04	Septic tank sludge	15,634
	19 09 02	Sludges from water clarification	5,664
	16 10 02	Aqueous liquid wastes	1,068
Total			53,103

⁷ <https://www.anglianwater.co.uk/corporate/plans-and-reports/our-plan-2025-to-2030-pr24>

⁸ 19 08 05 waste totalled 113,190t in 2024, 112,573t of which was recorded to have originated from Lincolnshire Council.

Conclusion

- 2.15 This review of evidence, from current and emerging AMPs, Water Resources Management Plans and Drainage and Wastewater Management Plans indicates that Anglian Water is planning substantial investment in wastewater infrastructure during AMP8 (2025–2030) across its area of operation.
- 2.16 Sewage sludge from the area is managed within Anglian Water’s wider bioresources network; in 2024, 112,573 tonnes were processed at Pyewipe WwTW, which also operates as a Sludge Treatment Centre.
- 2.17 The available data does not identify an apparent strategic requirement for new standalone wastewater treatment works within NEL. Instead, future capacity needs are expected to be met through optimisation and enhancement of existing assets, supported by regional sludge treatment arrangements that extend beyond administrative boundaries. This may mean intensification of the use of Pyewipe WwTW.

3 Agricultural Waste

- 3.1 Agricultural land use is extensive and remains a defining feature of North East Lincolnshire. Arable farmland forms the dominant land use across much of the rural Plan area, with only limited areas of permanent pasture and grassland⁹. This predominantly arable profile shapes the agricultural waste arising in the Plan area, which consists mainly of crop residues and field wastes.

Context

- 3.2 *The Waste Management (England and Wales) Regulations 2006* brought agricultural waste under legislative control for the first time. Prior to this a significant proportion was managed on farms by burning or depositing into farm tips which became illegal under the 2006 Regulations.
- 3.3 In advance of the introduction of the regulations the following research projects were undertaken in an attempt to establish quantities and composition of arisings from this stream and understand management arrangements in place at the time, with a view to identifying management needs at the national level:
- 1998 survey reported in a 2001 Environment Agency report.¹⁰
 - Agricultural Waste Survey reported in 2003 Environment Agency report.¹¹

These remain the most current sources of data available for the stream as a whole and therefore continue to be relied upon when seeking to generate local estimates for planning purposes.

- 3.4 Following the introduction of the regulations, certain agricultural waste was considered likely to be managed in the same way as the commercial and industrial waste stream, thus placing some additional capacity requirements on the network used to manage this stream.
- 3.5 In order to identify whether waste from agricultural sources needs separate consideration in the emerging Local Plan, the following three aspects have been considered:
1. The nature of different agricultural wastes;
 2. the likely current level of arisings;
 3. the way in which the arisings are managed.

⁹ Pg 48 <https://www.nelincs.gov.uk/assets/uploads/2020/10/North-East-Lincolnshire-Landscape-Character-Assessment-Sensitivity-and-Capacity-Study-sections-5-to-6.pdf>

¹⁰ Environment Agency (2001). *Towards Sustainable Agricultural Waste Management*. Environment Agency R&D Technical Report P1-339. <https://www.gov.uk/government/uploads/.../geho0003bieo-e-e.pdf>

¹¹ Environment Agency *Agricultural Waste Survey 2003*
www.voluntaryinitiative.org.uk/importedmedia/library/1082_s4.pdf

The Nature of Different Agricultural Wastes

- 3.6 To be regarded as agricultural, waste must have been produced on a 'farm' in the course of 'farming'. Agricultural waste takes both 'natural' (or organic) and 'non-natural' forms.

Natural Agricultural Waste Arisings

- 3.7 Agricultural waste largely comprising manures and slurries from livestock farming. Under long-standing UK practice, when these materials are spread on land as fertiliser they are considered by-products rather than waste and therefore their management arrangements fall outside control the waste planning system.¹² However, a recent High Court judgment in *NFU v Herefordshire Council* has clarified that manures may be classified as 'waste' under the retained EU Waste Framework Directive where they are not used directly as fertiliser, are moved off-farm for treatment, or are handled in ways that go beyond normal agricultural activity.¹³ This case was in the context of a local plan that included policies relating to the development of intensive livestock units giving rise to such wastes¹⁴. Since other natural wastes remain outside formal control, it is considered that they are unlikely to enter the formal waste management system and therefore need to be planned for through the NEL Local Plan. Therefore, this report focuses on non-natural waste arisings.

Non-Natural Agricultural Waste Arisings

- 3.8 'Non-natural' agricultural waste is waste other than 'natural' organic waste arising from farming activities. This includes discarded pesticide containers, plastics, tyres, batteries, clinical waste, old machinery, waste oil and packaging waste. Non-natural waste arisings may also include organic waste such as crop residues.
- 3.9 The only recognised source of national estimates for arisings of non-natural agricultural waste available is the 2001 Environment Agency Report which presents estimates of arisings down to the regional level for 1998. For the Yorkshire and the Humber region as a whole, the report estimated that approximately 12,100 tonnes (packaging 3,460 t; silage plastic 1,388 t; spent sheep dip 7,273 t)¹⁵ of non-natural agricultural waste was produced on an annual basis.

¹² Defra, *Farming Rules for Water* and associated guidance on manure use (regulatory controls outside waste planning).

¹³ *National Farmers Union v Herefordshire Council* [2023] EWHC (Admin) – clarification of manure classification under the Waste Framework Directive.

¹⁴ The Environment Agency's public register shows that there were 2 intensive livestock rearing units permitted as installations in 2024 in NEL (Manor Farm Poultry Unit and Meadow Farm House)

¹⁵ <https://assets.publishing.service.gov.uk/media/5a74be3aed915d502d6caa08/geho0003bieo-e-e.pdf>

Agricultural Waste Management Options

- 3.10 The 2006 Defra ‘*Waste Minimisation Manual: A Practical Guide for Farmers & Growers*’,¹⁶ identifies three principal routes for managing agricultural waste as follows:
1. arrange for removal to an appropriately permitted facility.
 2. apply for a permit to manage waste on farm.
 3. register an appropriate exemption to recover or dispose of certain waste on farm.
- Each route is considered below.

Agricultural Waste managed at Permitted Sites

- 3.11 The tonnage of waste falling under the EWC code for agricultural waste arising from NEL reported in the WDI 2024 was negligible – 0.009 tonnes going to a metal recycling site operated by Unimetals (EWC 02 01 10).

Applying for a permit

- 3.12 Where agricultural waste is being managed on a farm on an ongoing basis or in sufficient quantities an environmental permit may be required. Where a permit is granted by the Environment Agency the quantities of waste managed through such facilities would be reported through the WDI and hence captured for the purposes of quantifying this waste stream. Permitted facilities may also require express planning consent. A check of the Environment Agency permit register for such facilities shows no farm based facilities permitted in NEL.

Agricultural Waste Managed via Exempt Activities

- 3.13 Exemptions that apply include the ability to burn waste in the open (D7), spreading waste to benefit agricultural land (U10) and the use of waste in construction (U1), which covers the use of waste hardcore to maintain farm tracks and roads. However, these exemptions may also be used to cover activities taking place on farmland involving waste from non-agricultural sources. The specific exemptions that relate solely to the management of agricultural waste are as follows:
- Deposit of agricultural waste consisting of plant tissue under a Plant Health notice.
 - Treatment of sheep dip for disposal.
 - Treatment of non-hazardous pesticide washings by carbon filtration for disposal.
 - Spreading pig and poultry ash mixed with manure on farmland.¹⁷
- 3.14 While exemptions are subject to quantity limits, they do not report, so quantities of waste managed through these routes can only be estimated. It should also be noted that the Government has undertaken an extensive review of permitting exemptions and is introducing charging and other changes¹⁸ that may affect the availability of these outlets in the future.

¹⁶ Defra 2006 Product code PB 11674

¹⁷ <https://www.gov.uk/government/publications/waste-exemptions-how-to-choose-register-and-pay/waste-exemption-charges#annex-b>

¹⁸ Reforming the waste exemptions system, Defra, July 2025. <https://www.gov.uk/government/publications/reforming-the-waste-exemptions-system/reforming-the-waste-exemptions-system>

Table 2: North East Lincolnshire Registered Exemptions

Source: Environment Agency Exemption Register 2026

Exemption	Activity	Registrations
D4	Depositing agricultural waste consisting of plant tissue under a Plant Health Notice	5
D7	Burning waste in the open	46
T29	Treatment of non-hazardous pesticide washings by carbon filtration for disposal	1
T32	Treatment of waste in a biobed or biofilter	2
U10	Spreading waste to benefit agricultural land	26
U14	Incorporating ash into soil	12
U15	Spreading of pig and poultry ash	7

- 3.15 Table 2 sets out the number of exemptions for specific agricultural activities registered at locations identified as falling within NEL in 2024.
- 3.16 Due to the imprecise and non-specific nature of registered exemptions it is not possible to attribute tonnages managed through these routes. However, it may be reasonable to assume that some of the waste managed through some exemptions that don't involve the final fate (S, T and U categories) eventually ends up at permitted facilities and the tonnages are recorded in the WDI. The waste may have been mixed with non-agricultural waste during the course of collection and may therefore not be declared as coming from agricultural sources at the 'next step' site. Due to this, no attempt to calculate the total agricultural waste managed at exempt sites has been made.

Conclusion

- 3.17 Based on the data review the quantity of agricultural waste arising from NEL in 2024 that may require formal management is likely to be very small if not negligible. The tonnages managed through exemptions may add to the arisings figure but the quantities are unknown and it is likely that some is reported in the WDI as non-agricultural at 'next step' sites.
- 3.18 Overall, there is no evidence to suggest a specific shortfall in management capacity for agricultural waste within NEL exists or is likely to arise. Existing permitted and exempt arrangements indicate that the current system is capable of managing agricultural waste arisings effectively. There is therefore no identified need for the emerging Local Plan to allocate additional sites specifically for agricultural waste management, beyond maintaining a supportive policy framework that enables appropriate on-farm facilities to come forward where justified.

4 Low-Level Radioactive Waste

Context

- 4.1 Solid radioactive waste is categorised into three principal categories (and a sub category) according to its level of radioactivity (and the consequential heat) it produces. These categories are:
- **High-level radioactive waste (HLW)** waste which can generate significant heat as a result of its radioactivity, and so this factor has to be taken into account in the design of storage or disposal facilities.
 - **Intermediate level radioactive waste (ILW)** has lower levels of radioactivity than HLW and does not generate sufficient heat for this to determine the design of storage or disposal facilities.
 - **Low level radioactive waste (LLW)** is radioactive waste having a low radioactive content. LLW makes up more than 90% of the UK's radioactive waste by volume but contains less than 0.1% of the total radioactivity. Within the definition of LLW, there is a sub-classification, known as Very Low-Level radioactive waste (VLLW).
 - **VLLW** is a sub-category of low-level radioactive waste containing very small amounts of radioactivity. The 2024 *Managing Radioactive Substances and Nuclear Decommissioning* policy framework distinguishes between **low-volume VLLW**, which may be disposed of with ordinary refuse subject to authorisation, and **high-volume VLLW**, which may be disposed of in suitably permitted landfill or on-site disposal facilities, with controls focused on the total quantity disposed of at a site.¹⁹

Context in NEL

- 4.2 NEL does not host any nuclear industry sites. The adopted NEL Local Plan (2018) identifies Low Level Radioactive Waste (LLRW) as one of seven waste streams arising in the Borough (para 16.2). The Local Plan notes at paragraph 16.4 that:
- "The quantities of agricultural waste, and low-level radioactive waste generated in North East Lincolnshire are considered to be small."*

The Local Plan further states that:

"Low level radioactive waste is produced primarily at healthcare premises in North East Lincolnshire, and there is not expected to be a significant increase in production requiring treatment capacity to be identified."

As a result, there are no policies specifically related to the management of this waste stream.

¹⁹ Department for Energy Security and Net Zero (DESNZ) (2024), *Managing Radioactive Substances and Nuclear Decommissioning: UK Policy Framework*, para. 8.19, pp. 38–39.

Policy Relevant to NEL Arisings

- 4.3 Although NEL does not host nuclear industry facilities, national policy on the management of low-level radioactive waste is relevant to the extent that non-nuclear LLW arises within the Borough. The primary national Government policy document relevant to NEL due to the presence of nuclear sector facilities is the ‘*UK Strategy for the Management of Solid Low-Level Waste from the Nuclear Industry*’²⁰ published in February 2016. The three main strategic themes include:
- the application of the waste hierarchy;
 - the best use of existing LLW management assets;
 - the need for new fit-for-purpose waste management routes
- 4.4 The LLW strategy is relevant to non-nuclear industry waste producers, the environment agencies and waste planning bodies and:
- Provides guidance and background information to enable planning authorities to make informed decisions on planning applications and to respond to concerns from their communities;
 - clarifies the respective roles of waste producers, the environment agencies, planning authorities and the Nuclear Decommissioning Authority to enable decisions to be made that properly recognise the responsibilities of others; and,
 - informs waste producers and regulators of how the regulatory framework applies to LLW, particularly the need for producers of LLW to produce waste management plans, consider waste minimisation at source and apply the waste hierarchy.
- 4.5 In May 2024, the Department of Energy Security and Net Zero (DESNZ) published *Managing Radioactive Substances and Nuclear Decommissioning*, which replaces earlier policy statements on the management of solid low-level radioactive waste and related nuclear decommissioning policies.²¹ The framework confirms that low-level radioactive waste (LLW) should continue to be managed through a range of disposal routes, including treatment and disposal via the Low-Level Waste Repository (LLWR) at Drigg, appropriately permitted landfill facilities, and, where justified, on-site disposal as part of nuclear site decommissioning. The policy also clarifies that Geological Disposal Facilities (GDFs) are not expected to manage significant quantities of LLW. The updated framework, therefore, reinforces the need for flexibility in planning for LLW management, consistent with the waste hierarchy and the principles of proximity and self-sufficiency.

²⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/497114/NI_LLW_Strategy_Final.pdf

²¹ Department for Energy Security and Net Zero (DESNZ) (2024), *Managing Radioactive Substances and Nuclear Decommissioning: UK Policy Framework*, para. 8.19, pp. 38–39.

Low-Level Radioactive Waste Sources

- 4.6 The majority of radioactive waste that is not classed as high or intermediate level is produced by sectors outside the nuclear industry and hence is termed 'non-nuclear'. Most radioactive waste produced by non-nuclear sources contains very low levels of radioactivity and is therefore classed as VLLW. The majority of this material is similar in its physical and chemical nature to general wastes from household, commercial or industrial sources.

Non-Nuclear Sources

- 4.7 Non-nuclear sources of LLW include healthcare, pharmaceuticals, research, higher education establishments, as well as oil and gas facilities, occasional industrial users and land contamination sites. Individually, these sectors generate relatively small volumes of radioactive waste, but collectively they constitute a consistent, nationally significant waste stream.
- **Hospitals and Healthcare** – Solid LLW arises primarily from traces of radiopharmaceuticals used in diagnostic and therapeutic medicine. This includes used syringes, vials, absorbent materials, and protective equipment contaminated with minute amounts of radioactive material. While much of this waste is managed through the clinical waste stream (typically incineration), hospitals are increasingly encouraged to segregate LLW from non-radioactive clinical waste to ensure that only materials requiring radioactive disposal are treated as such.²²
 - **Pharmaceutical and Biotechnology Industry** – These sectors use radioactive isotopes for product development, research, and quality control. Resulting LLW typically consists of laboratory plastics, sharps, gloves, and absorbent materials. The volume is modest but continuous. Waste is managed under the *Environmental Permitting (England and Wales) Regulations 2016* through permits issued by the Environment Agency.
 - **Research and Education** – Universities and research institutions use radioactive tracers to study chemical and biological processes. Their LLW is similar in composition to hospital waste, consisting of disposable laboratory materials and small amounts of scintillation fluids. In agricultural and veterinary research, waste may also include contaminated plant material or animal bedding, which requires special packaging and disposal through authorised facilities.²³
 - **Contaminated Land** – Radioactive waste can also arise from the remediation of sites historically affected by legacy industrial or medical activities. These wastes are often bulky soils with very low but measurable levels of contamination. The Government's LLW strategy does not expect waste planning authorities to make specific site allocations for such arisings, given their sporadic and site-specific nature, but recommends that local plans acknowledge the potential for such waste and ensure that appropriate disposal routes (e.g., permitted landfill) are available if required.²⁴

²² Environment Agency (2023) *Guidance on the Management of Radioactive Waste from Hospitals and Medical Practices*, EA Regulatory Guidance Note RGN 2.

²³ UK Radioactive Waste Inventory (2022) *Detailed Data Report*, Department for Energy Security and Net Zero and Nuclear Decommissioning Authority, February 2023.

²⁴ Department for Levelling Up, Housing and Communities (2021) *National Planning Policy for Waste*, Paragraph 7, and DESNZ et al. (2021) *UK LLW Strategy* (Section 3.2.2).

- **Oil and Gas Decommissioning** - The decommissioning of oil and gas facilities can generate low-level radioactive waste (LLW), particularly where naturally occurring radioactive materials (NORM) have accumulated within equipment, pipework, tanks or associated infrastructure. The 2024 *Managing Radioactive Substances and Nuclear Decommissioning* policy framework recognises oil and gas as an established but generally low-volume waste stream, which is typically managed through permitted treatment and disposal routes, including specialist facilities and, where appropriate, suitably authorised landfill. Waste planning authorities are not expected to allocate specific sites for this waste stream but should ensure that local policy allows access to appropriate permitted facilities where required.²⁵

Management of LLW and VLLW

Low-Level Waste

- 4.8 When considered on its own, the small quantity of LLW produced in the UK is insufficient to drive the provision of dedicated management facilities via the market. Therefore, the national LLW Strategy concludes that producers of these wastes will nearly always have to rely on waste management networks provided for other large volume wastes. This can be problematic as the public perception of the risks associated with the management of LLW can deter waste facility operators from providing such a service.
- 4.9 Most disposal of LLW requires a permit to be held by both the waste producer and the operator of the waste management facility that receives it. LLW can go either to: a landfill as a 'controlled burial'; the national Low Level Waste Repository (LLWR) located in Cumbria at Drigg; or may be dealt with by incineration (with or without energy recovery). Use of the national LLWR is reserved for particular types of LLW, so LLW disposal usually takes place at facilities used for the management of other types of waste that are specially authorised. While operators of appropriate facilities may apply to take LLW at any time, in England there are currently only three landfill sites granted permits to do so as was the case in 2026^{26, 27}.

²⁵ Department for Energy Security and Net Zero (DESNZ) (2024), *Managing Radioactive Substances and Nuclear Decommissioning: UK Policy Framework*, paragraph 8.123, page 64.

²⁶ The EA permit register indicates there are five incinerators permitted to dispose of LLW in England.

²⁷ Low Level Waste Repository Ltd (LLWR Ltd) (2024), *About us*, GOV.UK; Department for Energy Security and Net Zero (DESNZ) (2024), *Managing Radioactive Substances and Nuclear Decommissioning: UK Policy Framework*.

Very Low-Level Waste (Exempt Waste)

- 4.10 A site producing or managing less than 50 m³ of VLLW per year is classed as a 'low volume VLLW source' and as such is exempt from reporting quantities of waste produced and managed. VLLW from such sources is not required to be managed separately and so is expected to be managed in the same manner as general waste produced on the source site. As a result, any waste management facility in the UK may accept small volumes of VLLW mixed in with the other wastes depending on whether source sites fall within their catchment. However, VLLW is rarely (if ever) declared as such in any waste returns submitted so there are no specific records of its management to draw on. The LLW strategy states that Government considers that the present arrangements for low volumes of exempt VLLW are satisfactory and does not expect WPAs to make specific provision for the management of VLLW in their waste plans.

Planning for the Management of LLW in NEL

- 4.11 The UK Strategy for the Management of Solid Low-Level Waste from the Nuclear Industry *"recognised that appropriate clean-up targets and waste management solutions at one site may be different to those at another site. As such, this strategy is not prescriptive about which management solutions should be used in specific circumstances."*²⁸
- 4.12 A review of radioactive source permit records granted by the EA shows 5 authorisations held by 5 entities within NEL as shown in Table 3 below.

Table 3: Entities holding Radioactive Substance Permits

Source: Environment Agency Permit Register accessed June 2026

Location Address	Permit Holder
Diana Princess of Wales Hospital, Scartho Road, Grimsby	Northern Lincolnshire & Goole NHS Foundation Trust
Immingham East Terminal, East Riverside, Immingham Dock	FCC Recycling (UK) Ltd
Grimsby Power Station, Moody Lane, Pyewipe, Grimsby	RWE Generation UK Plc
Immingham East Terminal, East Riverside, Immingham Dock	Exolum Immingham Ltd
Laporte Road, Grimsby	Tronox Pigment UK Ltd

Conclusion

- 4.13 This review has found that the position regarding radioactive waste in NEL remains consistent with the position set out in the adopted Local Plan (2018). The quantities of LLW arising in NEL are small. There is no identified need for additional specialist waste management capacity within NEL. Given nothing substantial has changed regarding radioactive waste in NEL since the WNA 2015 the findings of the previous WNA and consequential policy in the adopted Local Plan still hold.

²⁸ https://assets.publishing.service.gov.uk/media/5a8087a3ed915d74e622efc0/NI_LLW_Strategy_Final.pdf

5 Overall Conclusion

5.1 Review of the above data sources allows the following conclusions to be reached:

- Wastewater treatment and the management of the associated sludge appear to be catered for adequately through arrangements made by Anglian Water Services Limited, the statutory sewerage undertaker for NEL. It is considered that the findings should be confirmed with Anglian Water to ensure policy on wastewater and sewage treatment capacity provision remains sound.
- Agricultural waste – due to the limited agricultural base NEL does not generate enough of such waste that would warrant a specific separate provision, assuming the continuation of the existing arrangements, including the exemption regime.
- Radioactive waste – This review has found a small number of permitted sources of non-nuclear radioactive waste within NEL. There is no evidence of a need for additional specialist waste management capacity within NEL, and this is consistent with the position in the adopted Local Plan (2018).

5.2 Based on the above, it is considered that there is no need for the WNA to undertake further in-depth assessment of the ‘other waste’ streams arising in NEL.