



Medway Local Plan - Waste Evidence Base

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Generated in Medway to 2041

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Abbreviations and Glossary of Terms

Abbreviations

C, D & E / CDEW	Construction, Demolition & Excavation Waste
CFC	Chlorofluorocarbon (gases)
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
ELVs	End of Life Vehicles
EWC	European Waste Catalogue
GVA	Gross value added
HTI	High Temperature Incineration
HWI	Hazardous Waste Interrogator
HWRCs	Household Waste Recycling Centres
IED	Industrial Emissions Directive
LACW	Local Authority Collected Waste
LDF	Local Development Framework
MRS	Metal Recycling Sites
nPPG	National Planning Practice Guidance
PI	Pollution Inventory
WDI	Waste Data Interrogator
WEEE	Waste Electrical & Electronic Equipment
WNA	Waste Needs Assessment
WPA	Waste Planning Authority

Glossary of Terms

Construction, Demolition & Excavation Waste	Waste arising from construction and demolition activities, including excavation during construction, mainly consisting of inert materials such as soils, stone, concrete, and brick. This waste stream also contains non-inert elements such as wood, metals, plastics, cardboard and plasterboard
DEFRA	The UK Government department responsible for developing national waste management policy.
Duty to Cooperate	The Duty to Cooperate is a legal test that requires cooperation between local planning authorities and other public bodies to maximise the effectiveness of policies for strategic matters in Local Plan making.
End of Life Vehicles	Vehicles classed as waste having been declared as no longer usable and for which a Certificate of Destruction has been issued by DVLA. Deemed hazardous until hazardous components removed via depollution processes.
Environment Agency	The body responsible for the regulation of waste management activities through issuing Environmental Permits permits to control activities that handle or produce waste. It also provides information on waste management matters and deals with other matters such as flood protection advice.
Hazardous Waste Landfill	Sites where hazardous waste may be disposed by landfill. This can be a dedicated site or a single cell within a non-hazardous landfill, which has been specifically designed and designated for depositing hazardous waste.
Hazardous Waste	Waste requiring special management under the Hazardous Waste Regulations 2005 due to it posing potential risk to public health or the environment (when improperly treated, stored, transported or disposed). This can be due to the quantity, concentration, or its characteristics.
Household Waste	Waste from households collected through kerbside rounds, bulky items collected from households and waste delivered by householders to household waste recycling centres and "bring recycling sites". along with waste from street sweepings, and public litter bins- referred to as Local Authority Collected Waste (LACW).
Household Waste Recycling Centres	A facility that is available to the public to deposit waste not collected through kerbside collection (otherwise known as a civic amenity site).
Incineration	The controlled combustion of waste. Energy may also be recovered in the form of electricity and heat (see Energy from Waste).
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).
Other Recovery	Subjecting waste to processes that recover value by means other than recycling and composting – mainly thermal treatment to recover energy.
Recovery	Subjecting waste to processes that recover value including recycling, composting or thermal treatment to recover energy.
Recycling	The sorting and separate storage of materials extracted from the waste stream for reprocessing either into the same product or a different one.
Vehicle depollution	Removal of hazardous components from End of Life vehicles. May only take place at authorised facilities permitted to do so.
Waste Planning Authority (WPA)	The local authority responsible for waste development planning and control. In this case Medway Council.
Waste Transfer Station	A site to which waste is delivered for bulking prior to transfer to another place for further processing or disposal.

1. Introduction

- 1.1 The Medway Waste Needs Assessment (WNA) 2024 Update consists of an overall main report, a review of strategic waste flows and five waste stream specific supporting reports which refresh the evidence base relating to projected management requirements for waste arising in Medway. The five waste stream specific reports are:
1. Local Authority Collected Waste;
 2. Commercial & Industrial Waste;
 3. Construction, Demolition & Excavation Waste;
 4. Hazardous Waste; and
 5. Scoping Review of Other Waste.
- 1.2 This report is concerned with assessing the management requirements for hazardous waste arising in Medway through to 2041, using 2022 data as a baseline.
- 1.3 The term ‘hazardous waste’ is used to describe waste that possesses properties considered to pose a threat to human health and/or the environment such as toxicity, flammability, corrosiveness and carcinogenicity. Hazardous waste arises from different sources so does not occur as a discrete waste stream, being more a collection of different materials that occur in different streams, which are generally collected separately and then managed according to their differing hazardous properties. For example, fridges containing CFC gases and cathode ray tubes used in TV and computer monitor screens are classed as hazardous and arise in LACW, while oily water, interceptor wastes arise principally in the C&I waste stream. Undepolluted scrap (‘End of Life’) vehicles occur in both. Each of these waste types often require management by distinctly different methods and hence provision of different types of management capacity regardless of their origin. Hence, the hazardous component of each of the main origin streams i.e. C, D & E, Commercial and Industrial (C&I) and LACW are considered together in this report, and to avoid double counting the quantity arising has been deducted from the estimate of the origin stream arisings reported elsewhere.

Previous Waste Needs Assessment for Medway

- 1.4 The WNA 2020 found hazardous waste arisings attributable to Medway for 2018 to be c24,500 tonnes as reported through the Hazardous Waste Interrogator (HWI).

2. Calculating a Baseline Arisings Estimate

- 2.1 To generate a baseline estimate of hazardous waste arising in Medway the following datasets have been accessed:
1. The Environment Agency (EA) Hazardous Waste Interrogator (HWI) 2022¹ - movements.
 2. The EA Waste Data Interrogator (WDI) 2022² – inputs to permitted management sites.
 3. The EA Waste Data Interrogator 2022 – outputs from permitted management sites.
 4. The EA Pollution Inventory Site outputs 2022 - waste from significant industrial sites.
- 2.2 Notably while the HWI always specifies the waste origin by Waste Planning Authority (WPA) it does not report waste received by specific facilities, whereas the WDI may only report by originating region but does report by specific facility. Hence both datasets have been accessed to get a comprehensive picture of destinations/fates of Medway's hazardous waste.
- 2.3 The relationships between the datasets are illustrated in Figure 2 and the findings derived from each dataset are considered below.

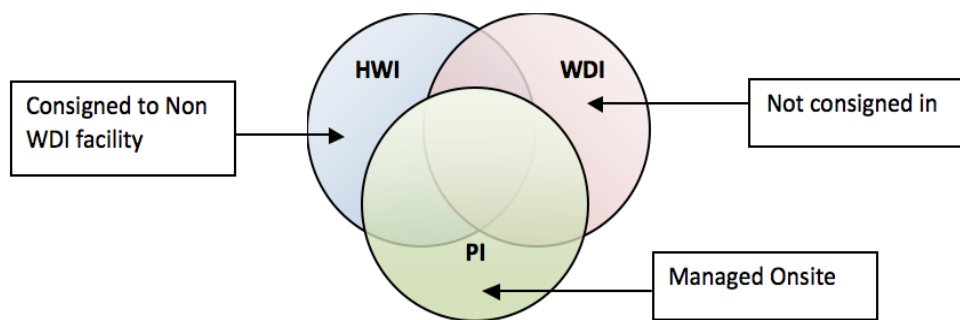


Figure 1: Relationship between Datasets for Hazardous Waste

The EA Hazardous Waste Interrogator (HWI) 2022

- 2.4 Legislation requires that the waste regulation authority³ be notified when hazardous waste is moved. The notification takes the form of a consignment note that details the quantities and destination of the waste. This means that the following movements of hazardous waste are recorded and reported to the regulatory body:
- From producer sites directly to disposal/treatment facilities;
 - from producer sites to transfer facilities for bulking up and onward management; and,
 - from treatment facilities to final disposal sites.
- 2.5 This data is then aggregated by the EA and made available in the HWI dataset that is published on an annual basis.

¹ This reports data for 2022 but was published in 2023 and is the latest data available.

² This reports data for 2022 but was published in 2023 and is the latest data available

³ For England this is The Environment Agency.

2.6 The reporting method applied means that the HWI dataset may be incomplete for the following reasons:

- Consignment notes are not issued when hazardous waste is managed on the site of its production if managed by the producer or same operator.
- Where the producer of hazardous waste is a householder the requirement to consign does not apply. Therefore, where the receiving site operates under an Environmental Permit, (and reports through the WDI⁴), waste will only either be recorded on arrival, or when it is removed. For example, undepolluted End of Life Vehicles (ELVs), which are classed as hazardous waste, will often not be consigned from their origin when being scrapped at a permitted vehicle de-pollution/ metal recycling site because the owner of a vehicle is not required to do so and hence this initial movement is not recorded in the HWI. However, it should be recorded as hazardous waste on arrival at the permitted site, as an input of waste to a site with an Environmental Permit, and it is then reported through the WDI. Another example is any hazardous waste such as a lead acid batteries brought to a community recycling centre (CRCs) will not be consigned in, but will normally be consigned out by the operator/permit holder.

2.7 Both of the above circumstances can result in under-reporting of hazardous waste arisings through the HWI. However, this may be balanced by aspects of the hazardous waste consignment process that allows for the possibility of over-reporting. For example, if waste is moved to an intermediate management site within Medway and then moved on to a further site it will be consigned twice, when leaving its origin and then when leaving the intermediate site, and so double counted. Also, the person consigning hazardous waste may not have facilities to precisely measure the quantity of waste being passed on and so the amount per load may be estimated. This may result in a discrepancy between the quantity recorded as having been consigned from the source e.g. a half-full drum may be recorded by the drum's total capacity, and the quantity actually recorded as having been received at the waste management site which would normally have a reliable measurement method such as a weighbridge.

2.8 The EA HWI 2022 indicates the following:

- 41,586 tonnes of hazardous waste (of all types) were produced in Medway;
- Of this, 4,881 tonnes were managed in Medway; with the difference (36,704 tonnes) managed outside Medway i.e. exported.
- 30,269 tonnes of hazardous waste were imported to Medway for management.

2.9 To address the limitations associated with the HWI outlined above, and ensure use of the best available data (as required by national Planning Practice Guidance), data from the WDI and the Pollution Inventory (PI) has also been consulted.

⁴ Some permitting exemptions allow the receipt of certain hazardous wastes, and these sites do not report through the WDI.

The EA Waste Data Interrogator (WDI) 2022

2.10 While one might expect the values for inputs to permitted intermediate sites as reported through the WDI to correspond to outputs from those sites, there can be discrepancies. These can be attributed to the fact that some incoming hazardous wastes get rendered non-hazardous while processed at an intermediate site. For example, a whole ELV is classed as hazardous by virtue of the presence of oils, fluids and batteries within them. Once ELVs received at permitted vehicle depollution sites are depolluted, the ELV shell that represents the bulk of the waste ceases to be hazardous, and only the extracted hazardous components (essentially fluids and batteries) will leave the depollution site as hazardous waste for onward management. Hazardous components that arise from depollution sites operating in Medway will be reported as hazardous waste arising in Medway. This is illustrated in Figure 2.

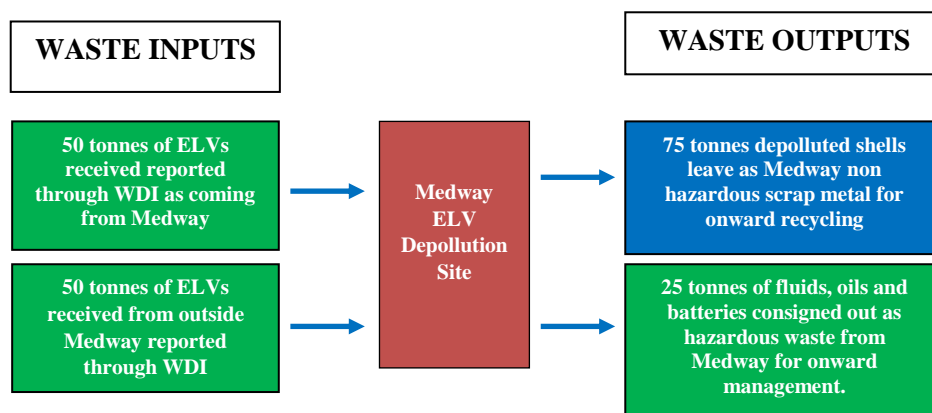


Figure 2: Illustrative Schematic of flows of ELV's to, and resulting from, a permitted ELV depollution site

Inputs from Medway to permitted sites reporting through WDI.

2.11 The EA WDI 2022 indicates the following:

- 15,221 tonnes of hazardous waste managed at permitted sites (both within and beyond Medway) were attributed to Medway as its source;
- of this, 892 tonnes were managed in Medway with the difference (14,329 tonnes) being managed outside Medway; and,
- 30,211 tonnes were imported for management in Medway.

Outputs from Medway to permitted sites reporting through the WDI

2.12 Outputs of hazardous waste from Medway permitted sites reporting through the WDI will be identified as arising within Medway even if it originated from outside Medway. Given waste from outside Medway managed at Medway facilities should already be planned for by the origin WPA, to avoid double counting it may not be appropriate to count all outputs towards the quantity of waste to be planned for in the Medway Local Plan.

2.13 Moreover, comparing the WDI output value with the input value can reveal, for the same type of hazardous waste, output values are greater than input values. In these cases, the output value

may be capturing a more complete picture and hence result in a more accurate estimate of arisings. In the case of Medway, the WDI 2022 indicates that 13,702 tonnes of hazardous waste were removed from permitted sites operating within Medway as compared with c31,000 tonnes input⁵.

The Pollution Inventory (PI) 2022

2.14 The EA Pollution Inventory captures data on waste arising from certain industrial installations, regulated under the Industrial Emissions Directive (IED)⁶ permitting regime. Such installations may manage their waste onsite or send their waste for offsite management and include some larger waste management facilities. This dataset is considered for the following reasons:

1. As previously stated, the HWI may not capture all hazardous waste arisings as waste managed on the site of production through onsite treatment doesn't need to be consigned and it may be managed onsite by a method that is recorded in the PI;
2. As noted above, both the WDI input and output datasets can be prone to underreporting by misattribution of waste. The PI does record sources of outputs and so allows for a cross check of the WDI.

2.15 The PI 2022 was not available at the time of writing⁷, however, a check of the PI 2021 has been undertaken. This dataset shows only 103 tonnes of hazardous waste was produced by installations that were not waste management facilities⁸ operating in Medway reporting through this route in 2021. Therefore, this dataset has not been considered further.

Summary of Headline Data

2.16 The data from the HWI, WDI and PI shows that:

- WDI: Input of hazardous waste arising in Medway to all sites: 13,657 tonnes in 2022.
- HWI: Movements of waste arising in Medway: 23,121 tonnes in 2022.
- PI: Production on site in Medway: 103 tonnes in 2021.

2.17 The management routes as indicated by the WDI and HWI are displayed in Table 1.

⁵ The largest discrepancy is between the reported input of infectious waste c12,000 tonnes and output of c1,000 tonnes. This suggests that clinical waste is being segregated at the transfer site to distinguish between truly infectious waste requiring special management and general clinical waste.

⁶ Retained EU legislation

⁷ 10.01.2024

⁸ Outputs from waste management facilities are screened out as they are already counted in the WDI outputs. As a result, while the WNA 2020 reported 15,962 tonnes was produced by installations operating in Medway in 2018, a review of the PI 2018 reveals only 142 tonnes was produced when outputs from waste installations are screened out.

Table 1: Medway Hazardous Waste Arisings & Management Data
Blue indicates values contributing to arisings, pink to Medway management capacity
Source: HWI 2022 and WDI 2022 Environment Agency

Data source	Medway Hazardous Waste Arisings (tonnes)		Hazardous Waste Managed in Medway (tonnes)		
	Quantity Managed Attributed to Medway	Of which Quantity Managed outside Medway (exports)	Quantity Managed in Medway Attributed to Medway	Quantity Managed in Medway from outside (imports)	Total Managed
HWI	41,586	36,704	4,881	30,269	35,150
WDI (inputs from Medway to all facilities inc. outputs from Medway facilities)	15,221	14,329	892	30,211	31,103
WDI (outputs from Medway facilities)	13,702	13,683	19	n/a	

2.18 Table 1 clearly shows that more waste is recorded as arising in Medway in the HWI than the WDI input (41,586 vs 15,221 tonnes) and marginally less waste is being managed within Medway according to WDI than is reported in the HWI (31,103 vs 35,150 tonnes).

2.19 The WDI may be underreporting arisings particularly if inputs to receiving permitted sites are not recorded down to Plan area level i.e. Medway. As HWI entries are not site specific, to understand the possible source of this discrepancy it is necessary to assess the tonnages by waste code and fate. The findings of the comparison exercise is shown in Table 2 below.

Table 2: WPAs Receiving Hazardous Waste from Medway (500t or more in either dataset)⁹
Source: Environment Agency 2022. In order of HWI inputs largest to smallest

Deposit WPA	HWI Total (tonnes)	WDI Total (tonnes)	Difference	Hazardous Waste Management Detail
Cambridgeshire	10,464	0	-10,464	Hazardous construction waste for treatment
Suffolk ¹⁰	10,212	10,352	140	Oil for transfer
Medway	4,881	892	-3,990	Other waste for recovery and transfer
Surrey	3,265	13	-3,252	Soils and stones for treatment
Kent	3,040	2,469	-571	Waste from grit chambers for treatment and infectious waste for recovery and transfer
Thurrock	2,271	0	-2,271	Bituminous mixtures containing coal tar for treatment
Wolverhampton	1,882	0	-1,882	Soils and stones for treatment
Stockton-on-Tees	783	628	-155	Oils for recovery and transfer
Northamptonshire	747	0	-747	Soils and stones for transfer

⁹ Including Medway to Medway movements.

¹⁰ All arising from the Kingsnorth Waste Oil Treatment Facility whose inputs originate from outside Medway. Therefore, it could be said this waste does not actually arise in Medway itself.

Hampshire	606	0	-606	Cytotoxic and cytostatic medicines for incineration
Total	38,152	14,354		

- 2.20 Table 2 indicates that in a number of cases inputs recorded as coming from Medway in the HWI are not being attributed to Medway in the WDI. This could be because the facilities do not report through the WDI (reporting separately under the HWI regime or not permitted at all e.g. for bitumous materials managed under a permitting exemption) or that inputs are not being attributed correctly down to the origin WPA level - in this case Medway. There is only one case where the HWI underreports which is that reported in Suffolk but the difference is insignificant.
- 2.21 The outcome of this exercise confirms that the HWI dataset for Medway hazardous waste arising is the most comprehensive and hence represents the 'best available' data for the purposes of forward planning for this waste stream in Medway.

Conclusions

- 2.22 Hazardous waste arisings attributable to Medway for 2022 have been found to be c41,500 tonnes as reported in the HWI 2022. This value compares with that for 2021 of c23,000 tonnes.
- 2.23 Although the HWI shows less hazardous waste was managed in Medway than arose, the WDI reports that in 2022 the quantity of hazardous waste managed within Medway exceeded the quantity of hazardous waste arising within Medway, by a significant margin – c31,000 tonnes managed vs c15,000 tonnes produced according to the WDI.
- 2.24 There is no expectation in national policy that hazardous waste as a stream should be provided for on an exclusively local basis, and reliance of some waste types on management capacity in other Plan areas can make it a ‘larger than local’ strategic. This is considered in more detail in Section 5 of this report.

3. Forecasting Future Hazardous Waste Arisings

Arisings of Medway Hazardous Waste by Type

3.1 A comparison of the 2022 hazardous waste arisings with the baseline produced in the WNA 2020 using 2018 data is shown in Table 3 below along with the growth rate indicated.

Table 3: 2022 Baseline Compared with WNA 2020 Hazardous Waste Arising Baseline in Medway By Waste Type

Source: HWI

Hazardous Waste Type/Source	WNA 2020	WNA 2023 update	Growth p.a.
	2018	2022	
Vehicle Maintenance inc ELV components ¹¹	12,938	13,040	0.20%
Construction, Demolition & Excavation	4,540	18,183	+75.13%
Oil & Liquid Fuel Waste	2,069	1,602	-5.64%
Clinical Waste	1,667	1,854	+2.80%
WEEE	894	645	-6.86%
<i>Subtotal</i>	22,108	35,324	+14.94%
Other wastes	2,387	6,261 ¹²	+40.57%
Total Projected Arisings	24,495	41,586	17.44%

Conclusion

3.2 Table 3 reveals the following

- Vehicle maintenance including ELV components have increased by an average of 0.20% per annum. With the transition to electric vehicles, vehicle maintenance including ELV components can be expected to fall. Notably lithium-ion batteries are not classed as hazardous. While some of the current conventional vehicle stock will remain in use beyond 2035, the gradual shift can be expected to depress any growth in arisings in this sector. Therefore, it would be justified to apply the average growth rate of +0.20% per annum to the 2022 arisings value up to the end of 2032 before applying a constant per annum growth rate until 2041.
- C, D & E waste has increased significantly in the period by an average of 75.13% per annum. However, one of the principal sources of hazardous C, D & E waste in 2022 was hazardous soils and stones at c6,000 tonnes which is an increase from c3,500 tonnes in 2018. Hazardous soils and stones arise principally from redevelopment of brownfield sites that are contaminated. Given it is not possible to predict when such sites will be redeveloped each year and there is little fluctuation of the other hazardous C, D & E waste

¹¹ Substantial tonnage c10,000 tonnes arises from the Kingsnorth Waste Oil Treatment Facility whose inputs originate from outside Medway. Therefore, it could be said this waste does not actually arise in Medway itself.

¹² Includes c4,000 tonnes of hazardous process residues.

types, it is suggested that this waste stream is kept constant to 2041 taking the average of hazardous C, D & E waste arisings across the four-year period of c11,500 tonnes.

- Oil and Liquid Fuel Waste has decreased by an average of minus 5.64% per annum. It is suggested to apply this to the 2022 arisings value to 2041.
- Clinical Waste has increased by an average of 2.80% per annum. It is suggested to apply this to 2041.
- WEEE waste has decreased by an average of minus 6.96% per annum. It is suggested to apply this to the 2022 arisings value to 2041.
- Other wastes have increased significantly by an average of 40.57% per annum. Given this is a number of waste types, it is suggested that this waste stream is kept constant to 2041 taking the average of hazardous other waste arisings across the four-year period of c4,500 tonnes.

3.3 The growth forecasts based in the above is presented in Table 4 below.

Table 4: Forecast Hazardous Waste Arisings in Medway

Hazardous Waste Type/Source	Milestone Year			
	2027	2032	2037	2041
Vehicle Maintenance inc ELV	13,169	13,299	13,299	13,299
Construction, Demolition & Excavation	11,362	11,362	11,362	11,362
Oil & Liquid Fuel Waste	1,198	896	670	531
Clinical Waste	2,129	2,445	2,807	3,136
WEEE	450	313	218	164
<i>Subtotal</i>	28,307	28,315	28,357	28,492
Other wastes	4,324	4,324	4,324	4,324
Total Projected Arisings	32,631	32,639	32,681	32,816

Conclusion

3.4 The growth forecast above results in a decrease in the quantity of hazardous waste to arise in Medway from the 2022 baseline arising value of c41,500 tonnes to c33,000 tonnes in 2041. This reflects the best available data combined with an understanding of factors likely to affect arisings as set out above. These values have therefore been used to project capacity requirements based on an assessment of existing capacity within Medway and management routes followed, in Section 5 within the context that net self-sufficiency in hazardous waste management capacity is not a requirement for a Plan area.

4. Hazardous Waste Management Capacity in Medway

4.1 This section considers the availability of capacity within Medway for managing hazardous waste in 2022. It provides the basis on which the quantum of existing hazardous waste management capacity has been established and, subsequently, from which specific management capacity needs might be identified. The HWI is not used for this purpose because it does not expressly identify receiving sites, just the host WPA and type of receiving facility. Quantities of hazardous waste inputs to sites recorded in the WDI across 5-years has been reviewed to establish the most representative capacity i.e., the notional capacity for each site managing hazardous waste in Medway. The sites identified as non-hazardous waste transfer stations have been ignored (even if they managed some hazardous waste), as hazardous inputs will only be accepted on an incidental basis, as well as any CRCs on the basis that they will be principally accepting other waste streams, particularly LACW.

Table 5: Hazardous Waste Inputs to Medway Facilities Reporting through the WDI in 2022 (tonnes)

Source: WDI 2018, 2019, 2020, 2021 & 2022 Environment Agency plus permit register

Facility Type	Facility Name	Peak input (2018-2022)	Permitted Capacity	Preferred Value
Hazardous Waste Treatment	Kingsnorth Oil Treatment Plant	17,239	40,000	17,239
	Rochester Clinical Waste Treatment Facility	13,854	24,000	24,000
Vehicle Depollution Facility	EMR, Whitewall Road	9,211	4,999	9,211
Haz Waste Transfer	Kingsnorth Oil TP	2,238	-	2,238
			Total	52,688

4.2 Comparing the notional overall capacity value (c52,500 tonnes) to the peak arising value for Medway (c41,500 tonnes) suggests a surplus of c11,000 tpa of management capacity for hazardous waste might exist within Medway.

Management Capacity Conclusion

4.3 Medway hosts a number of facilities that manage hazardous waste including final fate treatment. The combined capacity offered by facilities within Medway to manage hazardous waste equates to at least 52,500 tonnes per annum. There are a number of niche operators solely accepting specific types of hazardous wastes which provide capacity that can be considered strategically significant, in particular: Kingsnorth Oil Treatment Plant and Rochester Clinical Waste Treatment Facility.

4.4 It is important to ensure that each type of hazardous waste produced within Medway in significant quantities will be adequately catered for throughout the Plan period. For this reason, the role of facilities beyond Medway in the management of certain types hazardous waste arising in the area is considered in the following section.

5. Management Routes Followed by Medway Hazardous Waste

- 5.1 This section assesses the management routes followed by hazardous waste that arises in Medway managed elsewhere. The HWI is used as the primary data source, but cross checked with the WDI to identify specific receiving sites where possible. This exercise is important to identify WPAs hosting receiving facilities with whom Medway should engage to establish if the current patterns of management may continue for the Plan period. If such engagement suggests that certain types of waste cannot continue to be managed at certain facilities in future, then this may require Medway to plan for the management of that waste type within its own boundaries.
- 5.2 Of the c41,500 tonnes of hazardous waste produced in Medway in 2022, c36,500 tonnes ultimately left Medway for management at facilities located outside Medway. Applying a significance threshold, whereby WPAs only receiving over 100 tonnes of waste are considered¹³, reduces the number of receiving WPAs down to 21. Table 5 shows those recipient WPAs ranked in terms of quantity of waste received and fate.

¹³ 100t is SEWPAG significance threshold for DtC purposes.

Table 6: WPAs Receiving over 100 tonnes of Hazardous Waste from Medway (in rank order) with inputs by fate exceeding 100t highlighted

Source: HWI 2022 Environment Agency

Deposit WPA	Incineration without energy recovery	Landfill	Recovery	Transfer (D)	Transfer (R)	Treatment	Total
Cambridgeshire	0	183	<100	190	800	9,241	10,464
Suffolk	0	<100	0	0	10,208	0	10,212
Surrey	0	<100	<100	<100	<100	3,229	3,265
Kent	<100	163	721	340	330	1,395	3,040
Thurrock	0	0	<100	<100	<100	2,223	2,271
Wolverhampton	0	0	0	0	0	1,882	1,882
Stockton-on-Tees	0	0	451	0	331	0	783
Northamptonshire	0	0	<100	<100	742	0	747
Hampshire	560	0	0	<100	<100	<100	606
Worcestershire	347	0	<100	<100	<100	0	384
Peterborough	0	342	0	0	0	0	342
East Sussex	0	0	293	0	<100	0	299
Essex	0	0	131	<100	<100	0	218
Derbyshire	0	0	196	0	0	0	196
Kingston Upon Hull City	0	0	186	0	0	0	186
Walsall	0	0	102	<100	<100	0	178
Dorset	0	0	<100	114	<100	0	177
Sefton	0	0	156	0	0	0	156
Bexley	<100	0	<100	<100	<100	0	129
Sandwell	0	0	0	<100	<100	<100	120
Bristol City	0	0	<100	<100	<100	0	103
Leicestershire	0	0	<100	<100	<100	0	102
Grand Total	1,024	717	2,421	850	12,820	18,010	22,133

5.3 As the HWI does not identify receiving sites, it is necessary to undertake a cross checking exercise with WDI entries to ascertain the receiving site identity. The outcome of this exercise is presented in Table 7 below. In some cases, it has not been possible to identify one specific site as more than one is shown as receiving a tonnage of the waste type reported through the HWI. In that case the probable site, or multiple sites, have been identified for confirmation with the host WPA. In some cases it has not been possible to identify a site as the WDI does not report any of the waste type in that specific WPA.

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**Table 7: WPA's receiving over 100 tonnes of hazardous waste from Medway in 2022 and the permitted site it is managed at where known.
(Highlighted cells/entries represent additional sites since 2020)**

Source: HWI 2022 & WDI 2022 Environment Agency. In rank order of receiving Planning Region (largest to smallest)

Planning Region	WPA	Waste Description	HWI	WDI	Site Name
East of England	Cambridgeshire	Hazardous C, D & E waste	9,045	0	Site details unknown
		Oil filters	359	0	
		Antifreeze fluids	181	0	
		Hazardous packaging	174	0	
		Absorbents, filter materials, wiping cloths, PPE	171	0	
		Hazardous soil and stones	140	0	
		Bilge oils	112	0	
	Suffolk	Mineral-based non-chlorinated engine, gear and lubricating oils	9,952	9,924	Hollywell Waste Oil Treatment Facility
		Oily water from oil/water separators	226	226	Site details unknown
		Bilge oils	30	175	
		Thurrock	Bituminous waste	2,223	
Peterborough		Asbestos	342	0	
Essex	Various wastes sub 100 tonnes	218	15	Asbestos Collection Services	
South East	Surrey	Hazardous soil and stones	3,229	0	Site details unknown
	Kent	Wastes from grit chambers and oil/water separators	990	0	
		Infectious waste	718	40	Oakwood Yard Hazardous Waste Transfer Station
		Oily water from oil/water separators	299	0	Site details unknown
		Mineral-based non-chlorinated insulating and heat transmission oils	254	0	
Asbestos	191	5	Oakwood Yard Hazardous Waste		

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					Transfer Station
		WEEE	186	685	Aylesford Metals Recycling Facility or Sweep Kuusakoski Ltd or London & Kent Metals
	Hampshire	Cytotoxic and cytostatic medicines	406	0	Site details unknown
		Hazardous chemicals	141	0	
	East Sussex	Discarded equipment containing CFCs	293	0	
West Midlands	Wolverhampton	Hazardous soil and stones	1,882	0	Brownhills Environmental Management Facility Bullock Street or ERQ - STC
	Worcestershire	Infectious waste	340	0	
	Walsall	Various wastes sub 100 tonnes	178	104	
	Sandwell		120	172	
East Midlands	Northamptonshire	Hazardous soil and stones	742	0	Site details unknown
	Derbyshire	Lead batteries	196	0	
	Leicestershire	Various wastes sub 100 tonnes	102	14	Labwaste Hinckley
North East	Stockton-on-Tees	Mineral-based non-chlorinated engine, gear and lubricating oils	590	569	Billingham Treatment
		Oily water from oil/water separators	158	58	
South West	Dorset	Various wastes sub 100 tonnes	177	60	Shaftesbury Oil and Water
	Bristol City		103	0	Site details unknown
Yorks & Humber	Kingston Upon Hull City	Mineral-based non-chlorinated engine, gear and lubricating oils	113	113	Air Street Site or Ann Watson Street Site
North West	Sefton		134	0	Site details unknown
London	Bexley	Various wastes sub 100 tonnes	129	38	9 Optima Park

6. Conclusion on Medway's Hazardous Waste Management Capacity Requirement

- 6.1 The updated hazardous waste baseline for 2022 of c41,500 shows a rise from 2021 levels of c23,000 tonnes. Although the WNA 2020 predicted hazardous waste to fall from the baseline value of c24,500 tonnes in 2018, to c14,500 tonnes by the end of the Plan Period, the rise in 2022 was principal due to an increase in hazardous waste from the construction sector. As discussed in paragraph 3.2 this may have been a one-off project, thus the growth predicted in WNA 2020 is considered to remain valid. Currently all reported hazardous waste arising in Medway appears to be effectively managed and there are no obvious stresses in the system.
- 6.2 The capacity assessment indicates that the combined notional capacity of the principal sites receiving hazardous waste in Medway is c52,500 tpa, indicating a theoretical surplus of capacity for the management of Medway's hazardous waste throughout the Plan period. This assumes all sites identified continue to offer capacity for the duration of the plan period. It is recommended that the principal sites be safeguarded through policy whereby potential loss of capacity in future, through either redevelopment or constraints, is discouraged unless equivalent compensatory capacity is demonstrated.
- 6.3 Notwithstanding the above, given the varying management requirements of particular waste types, the continued availability of capacity for the Plan period at facilities outside the Plan area identified as managing significant quantities since 2018 (highlighted in Table 7) should be confirmed through contact with the host WPA.