



Methodology summary:

Estimates of Residual Waste (excluding Major Mineral Wastes) and Municipal Residual Waste in England

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Introduction

The estimates of residual waste in this release for the calendar year 2019 and onwards use a treatment-based definition of residual waste that includes waste originating in England that is either:

- sent to landfill in the United Kingdom,
- put through incineration in the United Kingdom,
- used in energy recovery in the United Kingdom,
- sent outside the United Kingdom for energy recovery.

This means that only residual waste originating in England, regardless of where it is treated, is included in the estimates in this release, whereas waste treated in England that originated elsewhere is excluded.

Not all residual waste that is treated through one of the above methods is included in the scope of the measures in this release:

1. Tonnages of waste defined as ‘major mineral wastes’ (MMW) are **excluded** from the ‘residual waste excluding major mineral wastes’ measure.
2. Only tonnages of waste defined as ‘municipal’ waste are **included** in the municipal residual waste measure.

Tonnages of waste within the scope of the measures and for each of the above treatment methods are obtained using Environment Agency (EA) regulatory data on waste treatment, including [Waste Data Interrogator](#), incinerator monitoring reports, and [international waste shipments data](#). Further details about the usage of these datasets in determining the estimates of each measure of residual waste are described below.

Scope of residual waste measures in this release

As stated in the introduction to this section, the first residual waste measure included in this release excludes waste defined as ‘major mineral wastes’ (MMW). MMW are the predominant and largely inert wastes typically arising from the construction and demolition sector, such as concrete, bricks and sand, as well as soils and other mineral wastes from excavation and mining activities.

The second measure of residual waste included in this release only includes residual waste defined as municipal waste. For the purpose of this measure, municipal waste includes both household waste and waste from other sources which is similar in nature and composition to household waste, including “household-like” waste generated by businesses.

MMW and municipal waste are defined in the data using sets of [List of Waste](#) (LoW) categorisation codes. This classification of waste is used by permitted waste sites to report on tonnages of waste received and removed. All waste produced has a corresponding

LoW code. LoW codes can be further aggregated into larger chapters and sub-chapters that are mainly categorised by material or source.

MMW comprise construction and demolition wastes, mineral wastes, soils, and dredging spoils, and are listed in Annex 1. The definition of MMW also includes the waste code 19 12 09, which are 'minerals separated via mechanical treatment of waste'.

Municipal waste is defined in this release using a set of LoW codes as in Annex 3. Municipal waste categorised with the waste code 19 12 12, which is 'wastes from the mechanical treatment of waste', is reduced in tonnage by 20% to account for the non-municipal waste component. This assumption is consistent with the methodology for estimates of commercial and industrial (C&I) waste in [UK Statistics on Waste](#).

Further tonnages of residual waste are excluded from the measures of residual waste included in this release. These tonnages are identified using the waste codes listed in Annex 2 and are excluded to remove double counting. These codes comprise tonnages of wastes from incineration or pyrolysis of waste and landfill leachate. These tonnages would therefore have already been captured in the datasets through other waste codes prior to the waste being treated and so are excluded to avoid double counting tonnages of waste.

The LoW codes defining MMW, doubly counted waste, and municipal waste for the purpose of this release are included in Annexes 1, 2, and 3.

Determining estimates of residual waste

Each measure of residual waste in this release includes reported tonnages of waste originating in England that are sent to landfill or put through incineration in England or are sent to landfill or put through incineration in Northern Ireland, Scotland, Wales, or outside the United Kingdom. Tonnages of residual waste reported as sent to landfill or put through incineration in England but originated in Northern Ireland, Scotland, Wales, or outside the United Kingdom are not included in each measure.

Waste Data Interrogator is used to obtain reported tonnages of waste sent to permitted landfill sites in England as well as reported tonnages of waste originating in England that are sent to permitted landfill sites in Northern Ireland, Scotland, Wales, or outside the United Kingdom. Reported tonnages of waste received at permitted landfill sites in England that originated from Northern Ireland, Scotland, Wales, or outside the United Kingdom are subtracted. The 'origin region', 'destination region', and 'fate' information included in the 'waste received' and 'waste removed' datasets in Waste Data Interrogator are used in these parts of the calculation. Tonnages of waste treated at landfill sites in England that are exempt from permitting are not included.

Incinerator monitoring reports provided by the EA are used to obtain the reported tonnages of waste put through incineration in England, whilst Waste Data Interrogator is used to add reported tonnages of waste originating in England that are sent to permitted incinerator sites in Northern Ireland, Scotland, Wales, or outside the United Kingdom.

Reported tonnages of waste put through incineration includes Energy from Waste (incineration with energy generation in the form of electricity and/or heat).

The reported tonnages of waste put through incineration in England that originated from Northern Ireland, Scotland, Wales, or outside the United Kingdom are subtracted. However, the incinerator monitoring reports that are used to obtain the reported tonnages of waste put through incineration in England do not contain information about the origin of the waste. In order to subtract tonnages of waste put through incineration in England that originated in Northern Ireland, Scotland, Wales, or outside the United Kingdom, Waste Data Interrogator is used to obtain the proportion of waste sent to permitted incinerator sites in England and that had originated in England. This proportion is then applied to the tonnages of waste put through incineration in England, obtained from the incinerator monitoring reports. It is assumed that the proportion of waste originating in England that is sent to permitted incinerator sites in England is the same as the proportion of waste originating in England that is eventually put through incineration in England. The 'origin region', 'destination region', and 'fate' information included in Waste Data Interrogator are again used in these parts of the calculation. Tonnages of waste treated at incinerator or energy recovery sites in England that are exempt from permitting are not included.

Ferrous metals removed from bottom ash (IBA metals) which have been put through incineration or used in energy recovery in the United Kingdom but are then sent for treatment other than landfill or incineration are also subtracted for each measure. IBA metals are identified in Waste Data Interrogator using the LoW code 19 01 02.

Reported tonnages of waste sent outside the United Kingdom for use in energy recovery are obtained using EA international waste shipments data. The EA holds records of international shipments permitted under the Transfrontier Shipment of Waste Regulations 2007. Shipments into or out of the United Kingdom qualify as International Waste Shipments. They are registered to the country where the producer or receiver is registered, regardless of the exit or entrance point from/to the United Kingdom. The EA holds details of producers and receivers registered in England. This dataset includes waste that typically originates from the mechanical treatment of waste such as sorting, crushing, compacting, and pelletising and is known as refuse derived fuel (RDF). RDF consists largely of combustible components of both municipal and commercial industrial waste, such as plastics and biodegradable waste. Permit holders give indicative figures for how much waste they wish to have approved for import/export. Solid recovered fuel (SRF) is also included and is different to RDF as it is produced to reach a specific quality standard.

For the purpose of this release, waste put through incineration includes Energy from Waste (incineration with energy generation in the form of electricity and/or heat). Waste used in energy recovery other than conventional Energy from Waste is also included in the definition of residual waste. This includes any waste treatment (excluding anaerobic digestion) that generates energy such as electricity or heat or converts the waste into other energy products such as fuels and substitute natural gas. Though this end-of-life treatment is included in the definition of residual waste, waste treated through energy

recovery other than conventional Energy from Waste is not included in the estimates in this release as data is not yet available.

For estimates of residual waste in kilograms per person, estimates of each measure of residual waste are converted to kilograms and are then divided by the [mid-year population estimates for England](#) produced by the Office for National Statistics. These population figures include all ages and estimate the “usually resident population”. This is a standard United Nations definition that includes people of all ages residing in a country for 12 months or more whilst excluding visitors and short-term migrants.

The calculation method for each measure of residual waste included in this release is summarised in Figure 1.

Figure 1: Summary graphic of the calculation method for the estimates of residual waste in this release

MEASURE	1. Residual waste excluding major mineral wastes 2. Municipal residual waste			
TREATMENT METHOD	Sent to landfill	Put through incineration (including Energy from Waste)	Sent outside the UK for energy recovery	Other energy recovery
DATA SOURCE	Waste Data Interrogator (waste received and removed; Environment Agency)	Waste Data Interrogator (waste received and removed), incinerator monitoring reports (Environment Agency)	International Waste Shipments exported from England (Environment Agency)	Not currently included in estimates
ADD TO ESTIMATE	+ Waste sent to landfill in England + Waste originating from England sent to landfill in Northern Ireland, Scotland, Wales, or outside the UK	+ Waste put through incineration in England + Waste originating from England put through incineration to Northern Ireland, Scotland, Wales, or outside the UK	+ Waste sent outside the UK for energy recovery	
SUBTRACT FROM ESTIMATE	- Waste sent to landfill in England originating from Northern Ireland, Scotland, Wales, or outside the UK	- Waste put through incineration in England that likely originated from Northern Ireland, Scotland, Wales, or outside the UK - Ferrous metals removed from bottom ash sent for recycling		
UNITS	Where estimates are reported kilograms per person, convert tonnages to kilograms and divide estimates by mid-year population estimates for England (Office for National Statistics)			

Material composition for estimates of material-specific municipal residual waste

In this release, estimates of municipal residual waste are provided for specific materials, including food, plastic, paper and card, metal, and glass. The datasets used to determine the estimates of municipal residual waste described above classify tonnages of waste by LoW code. It is not possible to use the LoW codes that categorise the datasets with these specific materials, so the required tonnages of material-specific municipal residual waste are not obtained through a categorisation using LoW codes.

Instead, estimates of municipal residual waste using the datasets and method described above are multiplied by the estimated proportion of each material in the municipal residual waste stream. These proportions are obtained from a synthesis of analyses using data

from 2017, published by the [Waste and Resources Action Programme](#) (WRAP) in 2020. The proportions are derived from tonnages of local authority collected municipal waste at point-of-collection for both households and commercial sources and it is assumed that these proportions remain the same for all municipal residual waste treated through the different methods considered in this release. The material composition proportions used in determining the estimates in this release are shown in Table 1.

Table 1: Municipal residual waste composition, WRAP, 2017, percentage

Material	Municipal residual composition
Food	27.0%
Paper and card	21.1%
Plastic	16.0%
Metal	3.5%
Glass	2.6%
Other	29.7%

Source: Waste & Resources Action Programme

Note: The material composition proportions are rounded in this table from the original source.

Annex 1: List of Waste codes defining major mineral wastes

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	01 01 01	Wastes from mineral metalliferous excavation	Wastes from mineral excavation
Major mineral wastes	01 01 02	Wastes from mineral non-metalliferous excavation	Wastes from mineral excavation
Major mineral wastes	01 03 04	Acid-generating tailings from processing of sulphide ore	Wastes from physical and chemical processing of metal-liferous minerals
Major mineral wastes	01 03 05	Other tailings containing dangerous substances	Wastes from physical and chemical processing of metal-liferous minerals
Major mineral wastes	01 03 06	Tailings other than those mentioned in 01 03 04 and 01 03 05	Wastes from physical and chemical processing of metal-liferous minerals
Major mineral wastes	01 03 07	Other wastes containing dangerous substances from physical and chemical processing of metalliferous minerals	Wastes from physical and chemical processing of metal-liferous minerals
Major mineral wastes	01 03 08	Dusty and powdery wastes other than those mentioned in 01 03 07	Wastes from physical and chemical processing of metal-liferous minerals
Major mineral wastes	01 03 09	Red mud from alumina production other than the wastes mentioned in 01 03 07	Wastes from physical and chemical processing of metal-liferous minerals
Major mineral wastes	01 04 07	Wastes containing dangerous substances from physical and chemical processing of non-metalliferous minerals	Wastes from physical and chemical processing of non-metalliferous minerals
Major mineral wastes	01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07	Wastes from physical and chemical processing of non-metalliferous minerals

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	01 04 09	Waste sand and clays	Wastes from physical and chemical processing of non-metalliferous minerals
Major mineral wastes	01 04 10	Dusty and powdery wastes other than those mentioned in 01 04 07	Wastes from physical and chemical processing of non-metalliferous minerals
Major mineral wastes	01 04 11	Wastes from potash and rock salt processing other than those mentioned in 01 04 07	Wastes from physical and chemical processing of non-metalliferous minerals
Major mineral wastes	01 04 12	Tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11	Wastes from physical and chemical processing of non-metalliferous minerals
Major mineral wastes	01 04 13	Wastes from stone cutting and sawing other than those mentioned in 01 04 07	Wastes from physical and chemical processing of non-metalliferous minerals
Major mineral wastes	01 05 04	Freshwater drilling muds and wastes	Drilling muds and other drilling wastes
Major mineral wastes	01 05 06	Drilling muds and other drilling wastes containing dangerous substances	Drilling muds and other drilling wastes
Major mineral wastes	01 05 07	Barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06	Drilling muds and other drilling wastes
Major mineral wastes	01 05 08	Chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06	Drilling muds and other drilling wastes

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	02 04 01	Soil from cleaning and washing beet	Wastes from sugar processing
Major mineral wastes	02 04 02	Off-specification calcium carbonate	Wastes from sugar processing
Major mineral wastes	05 01 05	Oil spills	Wastes from petroleum refining
Major mineral wastes	06 07 01	Wastes containing asbestos from electrolysis	Wastes from the manufacture, formulation, supply and use (MFSU) of halogens and halogen chemical processes
Major mineral wastes	06 09 03	Calcium-based reaction wastes containing or contaminated with dangerous substances	Wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes
Major mineral wastes	06 09 04	Calcium-based reaction wastes other than those mentioned in 06 09 03	Wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes
Major mineral wastes	06 11 01	Calcium-based reaction wastes from titanium dioxide production	Wastes from the manufacture of inorganic pigments and opacifiers
Major mineral wastes	06 13 04	Wastes from asbestos processing	Wastes from inorganic chemical processes not otherwise specified
Major mineral wastes	08 02 02	Aqueous sludges containing ceramic materials	Wastes from MFSU of other coatings (including ceramic materials)
Major mineral wastes	08 02 03	Aqueous suspensions containing ceramic materials	Wastes from MFSU of other coatings (including ceramic materials)
Major mineral wastes	10 03 05	Waste alumina	Wastes from aluminium thermal metallurgy

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	10 09 05	Casting cores and moulds which have not undergone pouring containing dangerous substances	Wastes from casting of ferrous pieces
Major mineral wastes	10 09 06	Casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05	Wastes from casting of ferrous pieces
Major mineral wastes	10 09 07	Casting cores and moulds which have undergone pouring containing dangerous substances	Wastes from casting of ferrous pieces
Major mineral wastes	10 09 08	Casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07	Wastes from casting of ferrous pieces
Major mineral wastes	10 09 14	Waste binders other than those mentioned in 10 09 13	Wastes from casting of ferrous pieces
Major mineral wastes	10 10 05	Casting cores and moulds which have not undergone pouring, containing dangerous substances	Wastes from casting of non-ferrous pieces
Major mineral wastes	10 10 06	Casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05	Wastes from casting of non-ferrous pieces
Major mineral wastes	10 10 07	Casting cores and moulds which have undergone pouring, containing dangerous substances	Wastes from casting of non-ferrous pieces
Major mineral wastes	10 10 08	Casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07	Wastes from casting of non-ferrous pieces

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	10 11 03	Waste glass-based fibrous materials	Wastes from manufacture of glass and glass products
Major mineral wastes	10 11 05	Particulates and dust	Wastes from manufacture of glass and glass products
Major mineral wastes	10 11 09	Waste preparation mixture before thermal processing, containing dangerous substances	Wastes from manufacture of glass and glass products
Major mineral wastes	10 11 10	Waste preparation mixture before thermal processing, other than those mentioned in 10 11 09	Wastes from manufacture of glass and glass products
Major mineral wastes	10 11 13	Glass-polishing and -grinding sludge containing dangerous substances	Wastes from manufacture of glass and glass products
Major mineral wastes	10 11 14	Glass-polishing and -grinding sludge other than those mentioned in 10 11 13	Wastes from manufacture of glass and glass products
Major mineral wastes	10 12 01	Waste preparation mixture before thermal processing	Wastes from manufacture of ceramic goods, bricks, tiles and construction products
Major mineral wastes	10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)	Wastes from manufacture of ceramic goods, bricks, tiles and construction products
Major mineral wastes	10 12 11	Wastes from glazing containing heavy metals	Wastes from manufacture of ceramic goods, bricks, tiles and construction products

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	10 12 12	Wastes from glazing other than those mentioned in 10 12 11	Wastes from manufacture of ceramic goods, bricks, tiles and construction products
Major mineral wastes	10 13 01	Waste preparation mixture before thermal processing	Wastes from manufacture of cement, lime and plaster and articles and products made from them
Major mineral wastes	10 13 04	Wastes from calcination and hydration of lime	Wastes from manufacture of cement, lime and plaster and articles and products made from them
Major mineral wastes	10 13 06	Particulates and dust (except 10 13 12 and 10 13 13)	Wastes from manufacture of cement, lime and plaster and articles and products made from them
Major mineral wastes	10 13 09	Wastes from asbestos-cement manufacture containing asbestos	Wastes from manufacture of cement, lime and plaster and articles and products made from them
Major mineral wastes	10 13 10	Wastes from asbestos-cement manufacture other than those mentioned in 10 13 09	Wastes from manufacture of cement, lime and plaster and articles and products made from them
Major mineral wastes	10 13 11	Wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10	Wastes from manufacture of cement, lime and plaster and articles and products made from them
Major mineral wastes	10 13 14	Waste concrete and concrete sludge	Wastes from manufacture of cement, lime and plaster and articles and products made from them
Major mineral wastes	11 02 02	Sludges from zinc hydrometallurgy (including jarosite, goethite)	Wastes from non-ferrous hydrometallurgical processes

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	12 01 16	Waste blasting material containing dangerous substances	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
Major mineral wastes	12 01 17	Waste blasting material other than those mentioned in 12 01 16	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
Major mineral wastes	12 01 20	Spent grinding bodies and grinding materials containing dangerous substances	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
Major mineral wastes	12 01 21	Spent grinding bodies and grinding materials other than those mentioned in 12 01 20	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
Major mineral wastes	15 01 11	Metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	Packaging (including separately collected municipal packaging waste)
Major mineral wastes	16 01 11	Brake pads containing asbestos	End-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
Major mineral wastes	16 02 12	Discarded equipment containing free asbestos	Wastes from electrical and electronic equipment
Major mineral wastes	16 11 01	Carbon-based linings and refractories from metallurgical processes containing dangerous substances	Waste linings and refractories

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	16 11 02	Carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01	Waste linings and refractories
Major mineral wastes	16 11 03	Other linings and refractories from metallurgical processes containing dangerous substances	Waste linings and refractories
Major mineral wastes	16 11 04	Other linings and refractories from metallurgical processes other than those mentioned in 16 11 03	Waste linings and refractories
Major mineral wastes	16 11 05	Linings and refractories from non-metallurgical processes containing dangerous substances	Waste linings and refractories
Major mineral wastes	16 11 06	Linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05	Waste linings and refractories
Major mineral wastes	17 01 01	Concrete	Concrete, bricks, tiles and ceramics
Major mineral wastes	17 01 02	Bricks	Concrete, bricks, tiles and ceramics
Major mineral wastes	17 01 03	Tiles and ceramics	Concrete, bricks, tiles and ceramics
Major mineral wastes	17 01 06	Mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances	Concrete, bricks, tiles and ceramics

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	Concrete, bricks, tiles and ceramics
Major mineral wastes	17 02 04	Glass, plastic and wood containing or contaminated with dangerous substances	Wood, glass, and plastic
Major mineral wastes	17 03 01	Bituminous mixtures containing coal tar	Bituminous mixtures, coal tar and tarred products
Major mineral wastes	17 03 02	Bituminous mixtures other than those mentioned in 17 03 01	Bituminous mixtures, coal tar and tarred products
Major mineral wastes	17 03 03	Coal tar and tarred products	Bituminous mixtures, coal tar and tarred products
Major mineral wastes	17 05 03	Soil and stones containing dangerous substances	Soil (including excavated soil from contaminated sites), stones and dredging spoil
Major mineral wastes	17 05 04	Soil and stones other than those mentioned in 17 05 03	Soil (including excavated soil from contaminated sites), stones and dredging spoil
Major mineral wastes	17 05 05	Dredging spoil containing dangerous substances	Soil (including excavated soil from contaminated sites), stones and dredging spoil
Major mineral wastes	17 05 06	Dredging spoil other than those mentioned in 17 05 05	Soil (including excavated soil from contaminated sites), stones and dredging spoil
Major mineral wastes	17 05 07	Track ballast containing dangerous substances	Soil (including excavated soil from contaminated sites), stones and dredging spoil

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	17 05 08	Track ballast other than those mentioned in 17 05 07	Soil (including excavated soil from contaminated sites), stones and dredging spoil
Major mineral wastes	17 06 01	Insulation materials containing asbestos	Insulation materials and asbestos-containing construction materials
Major mineral wastes	17 06 03	Other insulation materials consisting of or containing dangerous substances	Insulation materials and asbestos-containing construction materials
Major mineral wastes	17 06 04	Insulation materials other than those mentioned in 17 06 01 and 17 06 03	Insulation materials and asbestos-containing construction materials
Major mineral wastes	17 06 05	Construction materials containing asbestos	Insulation materials and asbestos-containing construction materials
Major mineral wastes	17 08 01	Gypsum-based construction materials contaminated with dangerous substances	Gypsum-based construction material
Major mineral wastes	17 08 02	Gypsum-based construction materials other than those mentioned in 17 08 01	Gypsum-based construction material
Major mineral wastes	17 09 01	Construction and demolition wastes containing mercury	Other construction and demolition wastes
Major mineral wastes	17 09 03	Other construction and demolition wastes (including mixed wastes) containing dangerous substances	Other construction and demolition wastes
Major mineral wastes	17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	Other construction and demolition wastes
Major mineral wastes	19 08 02	Waste from desanding	Wastes from waste water treatment plants not otherwise specified

Scope	Waste code	Description of waste code	Sub-chapter description
Major mineral wastes	19 09 01	Solid waste from primary filtration and screenings	Wastes from the preparation of water intended for human consumption or water for industrial use
Major mineral wastes	19 12 09	Minerals (for example sand, stones)	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Major mineral wastes	19 13 01	Solid wastes from soil remediation containing dangerous substances	Wastes from soil and groundwater remediation
Major mineral wastes	19 13 02	Solid wastes from soil remediation other than those mentioned in 19 13 01	Wastes from soil and groundwater remediation
Major mineral wastes	20 02 02	Soil and stones	Garden and park wastes (including cemetery waste)
Major mineral wastes	20 02 03	Other non-biodegradable wastes	Garden and park wastes (including cemetery waste)

Annex 2: List of Waste codes excluded for double counting

Scope	Waste code	Description of waste code	Sub-chapter description
Doubly counted	19 01 02	Ferrous materials removed from bottom ash	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 05	Filter cake from gas treatment	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 06	Aqueous liquid wastes from gas treatment and other aqueous liquid wastes	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 07	Solid wastes from gas treatment	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 11	Bottom ash and slag containing dangerous substances	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 12	Bottom ash and slag other than those mentioned in 19 01 11	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 13	Fly ash containing dangerous substances	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 14	Fly ash other than those mentioned in 19 01 13	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 15	Boiler dust containing dangerous substances	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 16	Boiler dust other than those mentioned in 19 01 15	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 17	Pyrolysis wastes containing dangerous substances	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 18	Pyrolysis wastes other than those mentioned in 19 01 17	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 19	Sands from fluidised beds	Wastes from incineration or pyrolysis of waste
Doubly counted	19 01 99	Wastes not otherwise specified	Wastes from incineration or pyrolysis of waste

Scope	Waste code	Description of waste code	Sub-chapter description
Doubly counted	19 07 02	Landfill leachate containing dangerous substances	Landfill leachate
Doubly counted	19 07 03	Landfill leachate other than those mentioned in 19 07 02	Landfill leachate

Annex 3: List of Waste codes defining municipal residual waste for this release

Scope	Waste code	Description of waste code	Sub-chapter description
Municipal waste	15 01 01	Paper and cardboard packaging	Packaging (including separately collected municipal packaging waste)
Municipal waste	15 01 02	Plastic packaging	Packaging (including separately collected municipal packaging waste)
Municipal waste	15 01 05	Composite packaging	Packaging (including separately collected municipal packaging waste)
Municipal waste	15 01 06	Mixed packaging	Packaging (including separately collected municipal packaging waste)
Municipal waste	15 01 07	Glass packaging	Packaging (including separately collected municipal packaging waste)
Municipal waste	15 01 09	Textile packaging	Packaging (including separately collected municipal packaging waste)
Municipal waste	19 05 01	Non-composted fraction of municipal and similar wastes	Wastes from aerobic treatment of solid wastes
Municipal waste	19 05 02	Non-composted fraction of animal and vegetable waste	Wastes from aerobic treatment of solid wastes
Municipal waste	19 05 03	Off-specification compost	Wastes from aerobic treatment of solid wastes
Municipal waste	19 05 99	Wastes not otherwise specified	Wastes from aerobic treatment of solid wastes
Municipal waste	19 06 03	Liquor from anaerobic treatment of municipal waste	Wastes from anaerobic treatment of waste
Municipal waste	19 06 04	Digestate from anaerobic treatment of municipal waste	Wastes from anaerobic treatment of waste

Scope	Waste code	Description of waste code	Sub-chapter description
Municipal waste	19 06 05	Liquor from anaerobic treatment of animal and vegetable waste	Wastes from anaerobic treatment of waste
Municipal waste	19 06 06	Digestate from anaerobic treatment of animal and vegetable waste	Wastes from anaerobic treatment of waste
Municipal waste	19 06 99	Wastes not otherwise specified	Wastes from anaerobic treatment of waste
Municipal waste	19 12 01	Paper and cardboard	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Municipal waste	19 12 02	Ferrous metal	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Municipal waste	19 12 03	Non-ferrous metal	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Municipal waste	19 12 04	Plastic and rubber	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Municipal waste	19 12 05	Glass	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified

Scope	Waste code	Description of waste code	Sub-chapter description
Municipal waste	19 12 06	Wood containing dangerous substances	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Municipal waste	19 12 07	Wood other than that mentioned in 19 12 06	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Municipal waste	19 12 08	Textiles	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Municipal waste	19 12 10	Combustible waste (refuse derived fuel)	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Municipal waste	19 12 11	Other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Municipal waste	19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
Municipal waste	20 01 01	Paper and cardboard	Separately collected fractions (except 15 01)
Municipal waste	20 01 02	Glass	Separately collected fractions (except 15 01)
Municipal waste	20 01 08	Biodegradable kitchen and canteen waste	Separately collected fractions (except 15 01)

Scope	Waste code	Description of waste code	Sub-chapter description
Municipal waste	20 01 10	Clothes	Separately collected fractions (except 15 01)
Municipal waste	20 01 11	Textiles	Separately collected fractions (except 15 01)
Municipal waste	20 01 13	Solvents	Separately collected fractions (except 15 01)
Municipal waste	20 01 14	Acids	Separately collected fractions (except 15 01)
Municipal waste	20 01 15	Alkalines	Separately collected fractions (except 15 01)
Municipal waste	20 01 17	Photochemicals	Separately collected fractions (except 15 01)
Municipal waste	20 01 19	Pesticides	Separately collected fractions (except 15 01)
Municipal waste	20 01 21	Fluorescent tubes and other mercury-containing waste	Separately collected fractions (except 15 01)
Municipal waste	20 01 23	Discarded equipment containing chlorofluorocarbons	Separately collected fractions (except 15 01)
Municipal waste	20 01 25	Edible oil and fat	Separately collected fractions (except 15 01)
Municipal waste	20 01 26	Oil and fat other than those mentioned in 20 01 25	Separately collected fractions (except 15 01)
Municipal waste	20 01 27	Paint, inks, adhesives and resins containing dangerous substances	Separately collected fractions (except 15 01)
Municipal waste	20 01 28	Paint, inks, adhesives and resins other than those mentioned in 20 01 27	Separately collected fractions (except 15 01)
Municipal waste	20 01 29	Detergents containing dangerous substances	Separately collected fractions (except 15 01)

Scope	Waste code	Description of waste code	Sub-chapter description
Municipal waste	20 01 30	Detergents other than those mentioned in 20 01 29	Separately collected fractions (except 15 01)
Municipal waste	20 01 31	Cytotoxic and cytostatic medicines	Separately collected fractions (except 15 01)
Municipal waste	20 01 32	Medicines other than those mentioned in 20 01 31	Separately collected fractions (except 15 01)
Municipal waste	20 01 33	Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries	Separately collected fractions (except 15 01)
Municipal waste	20 01 34	Batteries and accumulators other than those mentioned in 20 01 33	Separately collected fractions (except 15 01)
Municipal waste	20 01 35	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components (6)	Separately collected fractions (except 15 01)
Municipal waste	20 01 36	Discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	Separately collected fractions (except 15 01)
Municipal waste	20 01 37	Wood containing dangerous substances	Separately collected fractions (except 15 01)
Municipal waste	20 01 38	Wood other than that mentioned in 20 01 37	Separately collected fractions (except 15 01)
Municipal waste	20 01 39	Plastics	Separately collected fractions (except 15 01)
Municipal waste	20 01 40	Metals	Separately collected fractions (except 15 01)

Scope	Waste code	Description of waste code	Sub-chapter description
Municipal waste	20 01 41	Wastes from chimney sweeping	Separately collected fractions (except 15 01)
Municipal waste	20 01 99	Other fractions not otherwise specified	Separately collected fractions (except 15 01)
Municipal waste	20 02 01	Biodegradable waste	Garden and park wastes (including cemetery waste)
Municipal waste	20 02 02	Soil and stones	Garden and park wastes (including cemetery waste)
Municipal waste	20 02 03	Other non-biodegradable wastes	Garden and park wastes (including cemetery waste)
Municipal waste	20 03 01	Mixed municipal waste	Other municipal wastes
Municipal waste	20 03 02	Waste from markets	Other municipal wastes
Municipal waste	20 03 03	Street-cleaning residues	Other municipal wastes
Municipal waste	20 03 04	Septic tank sludge	Other municipal wastes
Municipal waste	20 03 06	Waste from sewage cleaning	Other municipal wastes
Municipal waste	20 03 07	Bulky waste	Other municipal wastes
Municipal waste	20 03 99	Municipal wastes not otherwise specified	Other municipal wastes