

European Neighbourhood Partnership Instrument (Eastern Region)

Working Paper 9:

**REVIEW OF
WASTE CLASSIFICATION
PROCEDURES AND IDENTIFICATION
OF ALTERNATIVE APPROACHES**

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Waste Governance – ENPI East

Working Paper 9:

Review Of Waste Classification Procedures And Identification Of Alternative Approaches

What is ENPI?

The **European Neighbourhood Policy (ENP)** was developed in 2004, with the objective of avoiding the emergence of new dividing lines between the enlarged EU and its neighbours, and instead strengthening the prosperity, stability, and security of all concerned. The ENP goes beyond existing relationships to offer a deeper political relationship and economic integration. The level of ambition of the relationship will depend on the extent to which these values are shared. The ENP remains distinct from the process of enlargement although it does not prejudge, for European neighbours, how their relationship with the EU may develop in future, in accordance with Treaty provisions.

Until 31 December 2006, EC assistance to the countries of the European Neighbourhood Policy was provided under various geographical programmes, including Tacis - for the EU's eastern neighbours and Russia – and MEDA for the EU's southern neighbours. From 1 January 2007 onwards, as part of the reform of EC assistance instruments, MEDA and TACIS have been replaced by a single instrument – the **European Neighbourhood and Partnership Instrument (ENPI)**. This is a much more flexible, policy-driven instrument. It is designed to target sustainable development and approximation to EU policies and standards - supporting the agreed priorities within the Partner Countries. For 2007-2013, approximately €12 billion in EC funding is available to support these partners' reforms.

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Executive Summary

Scope of Work The scope of the review of current waste classification practices in all countries has included both an assessment of the requirements that are in place under the relevant legislation, and the way in which these requirements are implemented in practice. The scope of the identification of alternative approaches has focussed on approaches that are used in the EU member states.

The scope of the work has included consideration of the relevant international conventions that each country participates in. The relevant conventions include the Basel Convention on the Transboundary Movement of Hazardous Wastes and Their Management, the Stockholm Convention on Persistent Organic Pollutants and the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Methodology Local and international experts have reviewed waste classification practices in each country. An international expert has reviewed the EU waste classification practice. As far as possible, work has been conducted in close collaboration with the relevant national stakeholders. However, in some countries it has been necessary to undertake the substantial portion of the work before a National Coordinator/Project Focal Point has been established, and in other countries the National Coordinator with whom dialogue has taken place is not the main stakeholder in the country with respect to waste classification/reporting. In these cases in particular, as well as in other countries generally, it will be necessary to ensure a consultative and collaborative review of the draft documentation and analysis with the key stakeholders, and to make amendments to the documentation and analyses as appropriate to ensure buy-in from those stakeholders.

Discussion The waste classification system should provide a reporting system that will allow waste managers to accurately measure and report the amount and type of material that is being generated, received and processed within the waste management industry. This will assist decision makers in ensuring that future waste measurement and reporting will be based on accurate and consistent data gathering allowing for greater certainty in future infrastructure investment. At the international level, waste classification in accordance with international norms is essential to ensure a proper oversight of wastes that are regulated through conventions. The main elements of a proper waste classification and reporting system include a legal framework that:

- Establishes a common and well defined nomenclature that serves as the basis for an effective waste classification and reporting system.
- Sets out the obligations of the relevant stakeholders to report waste and waste management data and information.
- Provides the tools for a uniform system of waste and waste management data and information reporting.
- Imposes sanctions on those who fail to classify and report waste and waste management data and information.

An effective legal framework for waste and waste management classification and reporting is complemented by state administrative systems that routinely record and maintain received data and information in a manner that allow it to be used effectively for waste management policy and planning purposes, and to ensure that waste is not damaging the environment.

Main Findings The review of the current waste classification and reporting systems in the ENPI East countries has found:

- A strong focus on the classification and reporting of industrial waste, and particularly hazardous waste.
- The waste classification system used by the Basel Convention has been adopted in the ENPI East countries for the classification and reporting of hazardous waste transboundary movements.
- Household or municipal wastes are often not reported and there is little information on these wastes.
- A passport system for monitoring the transport of hazardous waste is generally in place.
- The key tools (i.e. standardized forms used within the country) necessary for a regulated waste generator to comply with legal requirements for waste classification and reporting are generally available.
- There is little follow up to determine whether wastes are in fact properly classified, reported or managed according to their classification.
- Systems for reporting rely on paper-based submission of waste data and information, although some countries are moving towards electronic submission of data and information.
- Sanctions for failure to classify and report waste are weak.

There is wide variation between ENPI East countries, however, in the specific legal requirements related to waste classification and reporting.

The identification of alternative approaches has focussed on the EU waste classification and reporting framework. This framework is characterized by, primarily, Directives at the level of the EU that member states must then transpose into their legal frameworks and the objectives of which they must meet using the methods and approaches that are appropriate to their context. While EU member states meet a standardized range of requirements that are defined at the EU level, therefore, a wide range of methods has been adopted by member states for meeting these requirements.

The main elements of alternative approaches to be considered for application in the ENPI East region include:

- An updated nomenclature including a definition of “waste” that reflects the definition in the EU.
- Enhanced reporting of wastes other than industrial and/or hazardous industrial wastes.
- Classification and reporting of waste based on actual waste generation, rather than waste generation that is determined through mass-balance assessments or similar calculations.
- Revised forms for classifying and reporting waste and waste management

- The development of capacity for electronic submission of waste and waste management reports.
- Enhanced administrative capacity within state entities responsible for managing waste and waste management data.
- Continuing support for the participation of countries in the Stockholm and Rotterdam Conventions, including support for relevant countries to join these conventions.

1.0 INTRODUCTION

1.1 Scope and Structure

This document reports on the work undertaken in each of the project countries to review the existing waste classification system in each and to identify alternative waste classification approaches.

This work has taken a pragmatic approach to waste classification in each country. Thus, the review and identification of alternative approaches has considered not only waste classification in a strict sense (i.e. the specific classes to which can be assigned) but has considered the application of waste classification to achieve more effective waste management. Consideration has therefore been given as well to mechanisms for effective reporting of waste and classes of waste by the waste generator and by others in the waste management chain. In this way, the work in each country considers the application of enhanced waste classification in the practice of enhanced waste management.

This document is structured to summarize:

- Current waste classification procedures in each country
- The identification of alternative waste classification procedures consistent with EU practices and in accordance with international norms.

The full documents produced by each country – including their recommendations for action to achieve enhanced waste classification – will be appended to Technical Report 2: Waste Classification for ENPI East Countries.

1.2 Methodology

Local and international experts have reviewed waste classification practices in each country. An international expert has reviewed the EU waste classification practice.. As far as possible, work has been conducted in close collaboration with the relevant national stakeholders. However, in some countries it has been necessary to undertake the substantial portion of the work before a National Coordinator/Project Focal Point has been established, and in other countries the National Coordinator with whom dialogue has taken place is not the main stakeholder in the country with respect to waste classification/reporting. In these cases in particular, as well as in other countries generally, it will be necessary to ensure a consultative and collaborative review of the draft documentation and analysis with the key stakeholders, and to make amendments to the documentation and analyses as appropriate to ensure buy-in from those stakeholders.

2.0 WASTE CLASSIFICATION IN THE ENPI EAST COUNTRIES

Waste classification in each of the ENPI East countries is summarized below in sequential order in accordance with the English language alphabet:

2.1 Armenia

The main legal instrument governing the waste management sector in Armenia is the Law on Waste (LoW) this law defines waste as industrial waste and household refuse. In addition, there are numerous decrees that support implementation of the LoW. Governmental Decree 97 contains a definition of waste and classifies waste in two types - "hazardous waste" and "other waste".

There are lists of waste that specify:

- hazardous waste
- forbidden hazardous waste
- hazardous waste classes
- specific indicators of the generation of main types of industrial and household waste and the waste generated within different technological processes

Submission of data on *household waste* is not regulated by legislation and there is no obligation for these wastes to be reported. Such information may be derived from initial information that is provided by the legal entities and private entrepreneurs involved in activities regarding utilization, disinfection, disposal transferring to or receiving from other entities of the waste. However, this information is not verifiable and is subject to margins of error.

Private entrepreneurs who generate waste (i.e. *waste generated by economic activities*) perform preliminary registration of generated, removed (eliminated, disinfected, and disposed) and recycled waste. The legal entities perform preliminary, common registration as well as inventory of generated, removed (eliminated, disinfected, and disposed) and recycled waste, and data are submitted to the state authorized body for environmental protection (i.e. Ministry of Nature Protection). Legal entities engaged in the transportation of waste also submit administrative statistical reports to the state authorized body.

Data is provided annually to the state authorized body in the area of environmental protection. Recording of information in the register of waste production, reprocessing and recycling is carried out by the state authorized body in the area of environmental protection based on reports of the waste producers. Data is forwarded to the State Statistical Department for management and collation.

The LoW requires a permit for sites for placement of waste including waste receiving points, landfills, complexes, buildings and structures, and for removal of waste. The LoW further requires that the Government of RA provides a procedure on licensing of activities in the area of hazardous waste reprocessing, treatment, storage, transportation and disposal, as well as carry out licensing of those activities. Accordingly,

- Ministry of Nature Protection submits proposals on issuance of permits for transboundary transportation of hazardous waste and approves sites for location of waste management facilities.
- Ministry of Healthcare approves location of sites for the waste management facilities.
- Authorities of territorial administration issue a permit for the allocation of waste i.e. the final placement of waste in the specially provided areas.

Under the LoW, the Ministry of Nature Protection provides monitoring of waste reports by carrying out the state waste cadastre. The enforcement of waste reporting provisions may be undertaken through administrative inspections and follow up in response to data submitted in accordance with law, or in response to failure to submit data. The Republic of Armenia Code on Administrative Delinquency provides for penalties if the waste is placed in an illegal place, and penalties for submission of wrong statistical data.

Armenia participates in the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, the *Stockholm Convention on Persistent Organic Pollutants*, and the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade*.

2.2 Azerbaijan

The basic law in respect of wastes in Azerbaijan is Law On Production and Domestic Wastes (LoPDW). There are several subsidiary rules that provide the basis for implementation of the law. In accordance with LoPDW, wastes are classified as:

1. Production (Industrial); or
2. Domestic wastes.

Wastes are further classified as:

1. Hazardous wastes; or
2. Non hazardous wastes.

Further, wastes are classified as:

1. useful – as having the potential to be recycled and
2. useless - not having potential to be recycled.

Production wastes are further classified according to the economic activity of origin:

1. Industrial wastes (oil, gas wastes and wastes from metallurgy and other industry and construction),
2. Agricultural production wastes
3. Medical wastes.

The legislation relating to wastes in Azerbaijan defines “The list of types of wastes” and a “Hazardous Wastes Classification System”, which sets out the following sequence of actions to be undertaken by the producer of a waste:

- Determination of wastes

- Designation of harmfulness of wastes
- Application of wastes identification and classification system

The identification of wastes should be carried based on tests, as necessary, to determine the type and features of wastes. Hazardous wastes must be characterized according to:

- Type of hazardous wastes
- Quantity of hazardous wastes
- Major hazard (harmfulness)
- Collateral hazard.

The hazardous waste classification system sets out a hierarchy of hazard level that is used to describe the hazardous nature of the waste. This information is then recorded by the generator and is submitted annually to the Ministry of Ecology and Natural Resources and is entered into the waste passport that must accompany the transport of hazardous waste.

In addition to this rule, the mechanism for collection, storage, processing, neutralization and removal of various types of wastes generated at health care centres and veterinary institutions is specified in the “Requirements on Medical Wastes Management” approved by the Cabinet of Ministers (28.12.2007, article 213). Medical and veterinary wastes are classified into 4 classes according to epidemiological and toxicological hazard.

Each year, state agencies perform the accounting of annually produced, recycled, utilized and disposed wastes for all producers and transporters of hazardous wastes by indicating their types, amounts, method of recycling and burial (disposal). The accounting is based on the records submitted by generators.

The accounting of *domestic wastes*, allows prediction of future wastes. In addition, accounting addresses waste composition, waste volume, waste treatment/disposal sites, employment in waste management, waste transportation, entities involved in waste management and other details.

The accounting of *production (industrial) wastes* is undertaken by authorized individuals in enterprises that generate waste, or by their agent. A materials balance is drawn up and a document is developed that reflects the source, type, capacity (amount), processing method, storage and transport of wastes produced in the enterprise. Where production takes place under an unchanged technology, the waste accounting is carried out one time per year, and a waste inventory is prepared at least once every 5 years.

As per the rule for the passport system of hazardous wastes, the passport is developed and certified by the owner and one copy thereof is submitted to Ministry of Ecology and Natural Resources for the purpose of organization of database. It is obligatory for the owner to fill in the passport.

Usually, the amount of waste is measured by its volume and weight for the purpose of waste transportation. In waste disposal sites, waste is measured by the volume.

Accounting of wastes produced in healthcare institutions (hospital, clinics etc) is carried out in conformity with separate requirements for healthcare wastes.

The authorities responsible for collection and storage of reports and information in respect of wastes are the Ministry of Ecology and Natural Resources, the Ministry of Economic Development,

the Ministry of Health, the State Statistics Committee, city and regional executive powers and municipalities. Reports and information in respect of wastes are mainly kept in paper files by the above-mentioned authorities. More recently, these reports and information have begun to be transmitted via electronic mail and kept in an electronic data bank.

National reports on Azerbaijani environmental conditions are published at least once every 3 years, in accordance with law. These reports include wastes in the country.

Permitting in wastes management is prescribed in the LoPDW, and provisions of the Basel Convention on the Transboundary Movement of Hazardous Wastes and Their Management. Production activity must be licensed, and the application for obtaining a license includes information on the amount and type of produced wastes and its management. Destruction of hazardous wastes is carried out under permission and control of the Ministry of Ecology and Natural Resources.

Those carrying out waste transport bear responsibility for the environmental and human health safety of their operations from the time of loading the waste on the vehicle up to delivery to a legal entity and natural person.

Transport of hazardous wastes is carried out under the following terms:

- Notice on transport of hazardous wastes;
- Passports for hazardous wastes;
- Availability of vehicle provided with special equipment and signs;
- Compliance with safety requirements in respect of transport of hazardous wastes on vehicles;
- Availability of documents showing the quantity of hazardous wastes, their transport purpose and place of destination.

It is prohibited to import into the Republic of Azerbaijan wastes that cannot be safely destroyed in accordance with safety requirements. The Ministry of Ecology and Natural Resources oversees transboundary movements of hazardous wastes.

Waste management facility siting, design, construction, operation and closure conducted in conformity with the requirements of the Ministry of Ecology and Natural Resources and the Ministry of Health.

The siting of waste management facilities is undertaken in consideration of social and environmental factors, and there are prohibitions on the location of waste management facilities in locations where they are considered to be incompatible with local social or environmental conditions. Wastes disposal locations are included in the state registry of wastes disposal sites as defined by the cabinet of Ministers. The monitoring of wastes disposal sites is conducted by the proprietor in coordination with the Ministry of Ecology and Natural Resources and Ministry of Health. The Ministry of Ecology and Natural Resources is responsible for enforcement of waste classification and waste management requirements.

Azerbaijan participates in the *Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* and *Stockholm Convention on Persistent Organic Pollutants*.

2.3 Belarus

Waste is classified according to its origin into “production waste” and “consumption waste”.

For hazardous waste, four hazard classes are defined. Hazard degree and class are stated in the waste classifier. If the hazard degree is not stated in the Waste Classifier, then hazard degree and waste classification is to be determined by the waste producers. Waste collection and their classification by types is carried out by the waste producers or persons / companies on behalf of them. The classification according to the hazard classes is used for tax purposes.

The waste classifier structure is as follows:

- Block
 - Group
 - § Subgroup

In the waste classifier all wastes are allocated into one of five blocks. The waste code consists of seven digits from which the first corresponds to a waste block. A block, a group and subgroup are waste types, to which wastes are referred to according to their characteristics and the processes that result in their generation. Therefore the system is “source oriented”; i.e. the classification of a waste indicates the process or activity that has resulted in the generation of the waste..

Characterization of hazardous waste is based on the following properties:

- Ecotoxicity
- Toxicity (direct)
- Explosiveness
- Flammability
- Toxicity (of combustion products)
- Reactivity
- Infectious properties

Waste generators have to determine the list of properties subject for examination according to the Classifier and Appendix 1 of the (existing) Instruction.

Secondary material resources are not excluded from the waste regime. All waste management requirements are valid for them as well as statistical reporting. The definition of this type of waste is used for imposing special requirements for its management, for example, ban on its landfilling.

The body for collection and processing of waste data is RUP BelNITsEkologia (Republican Unitary Enterprise Belarusian Environment Scientific and Research Centre). Data have to be provided annually, before 15th of January for the preceding calendar year. Data have to be provided by waste producers as well as operators of waste treatment and disposal facilities for all types of wastes. The information is provided on paper and no electronic format is used. The requirement is that legal persons and individual entrepreneurs performing waste management activities have to submit primary statistical data.

Information collected by RUP BelNIITS Ekologiya are transferred in summarized form before 30th of March for the preceding year to the:

- Ministry of Natural Resources and Environmental Protection
- National Statistical Committee

A permitting process is required for stationary activities in the waste sector including construction and operation of recycling facilities, treatment facilities, transfer stations and landfills. For waste transportation, no permission is required. The generators of production waste have to prepare accompanying documents for transportation. These documents have to be kept during transportation and afterwards with the transportation company. The waste generator keeps one copy and the waste disposal facility also keeps one copy. These copies have to be shown to the authorities concerned upon request. The entity responsible for permitting is the Ministry of Natural Resources and Environmental Protection.

Monitoring and enforcement of waste classification and waste management requirements is carried out by the body that issues the permits – the Ministry of Natural Resources and Environmental Protection.

Belarus participates in *Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, and *Stockholm Convention on Persistent Organic Pollutants*, and the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade*.

2.4 Georgia

The main legal instrument for management of waste is the Law on Environment Protection, which is a framework law that is not specific to waste management. In addition, there is a Law on Waste Transit and Import within the Territory of Georgia that addresses transportation of waste. Other laws and legal instruments may be applied to aspects of waste management. A Waste Management Law has been drafted, but has not been enacted to date.

The *Law on Environment Protection* defines a number of principles relevant to waste management, including:

- “Polluter pays principle” – It is the obligation of any single person or entity to compensate for environmental damages;
- “Waste minimization principle” – when performing any activity, preference is given to those technologies which correspond minimize waste;
- “Risk minimization principle” – any legal person when planning and implementing an activities is obliged to take measures to minimize or avoid risks associated with environment and human health;
- “Recycling principle” - when performing activity the preference is given to reusable or recyclable materials;
- Any legal person shall ensure minimisation, treatment, utilization, disposal and dumping of industrial, municipal and other waste according to the environmental, sanitary-hygienic and epidemiologic norms;
- Municipal and industrial waste disposal and dumping is only allowed in specific locations that meet environmental, hygienic and epidemiologic norms;
- Toxic, radioactive and other hazardous waste disposal and dumping is only permitted at locations that meet stringent environmental and hygienic norms;
- A prohibition on the disposal of any waste in the sea or other water bodies.

Georgia has adopted EC regulation #259/93 (concerning the supervision and control of shipments of waste within, into and out of the European Community) for the purpose of classifying and regulating transboundary movement of hazardous wastes. When Georgia subsequently acceded to the Basel Convention the waste classification framework of that Convention was adopted. However, EC regulation #259/93 continues to be in force, and thus there is a dual classification system in place for the regulation of transboundary movement of waste.

In practice, this has generally not posed practical issues. The Ministry of Environmental Protection and Natural Resources is responsible for waste management under both sets of classification requirements. Georgia reports to the Basel Convention using the Basel Convention classification, and this is used for waste export regulation. However, there is no system of waste registration or reporting in Georgia for hazardous waste or for non-hazardous waste.

Within the land and sea territory of Georgia, it is prohibited to:

- Transit and import hazardous (including toxic), radioactive, industrial, municipal and other wastes for utilization, neutralization, treatment, disposal or any other purposes.
- To import non-hazardous (including non-toxic), non-radioactive industrial, municipal and other waste for the purposes of neutralization, disposal and dumping.

However, the import of non-hazardous and non-radioactive waste for treatment or re-exporting is permitted.

Activities that require, by law, specific ecological expertise include:

- Solid municipal waste treatment (including instalment of waste incineration plant) and/or establishment of landfill;
- Toxic and other hazardous waste disposal, arrangement of their storages and/or treatment/neutralization of those wastes.

Local communities plan and implement waste collection, disposal and treatment activities, and permits for waste management facilities are issued by the Ministry of Health, Labour and Social Affairs.

A draft Waste Management Law has been developed as a framework law. It addresses waste classification and reporting at both the domestic and international levels. The draft law has been awaiting implementation for several months, but a schedule for its enactment is not available.

Georgia participates in *Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, and *Stockholm Convention on Persistent Organic Pollutants*, and the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade*.

2.5 Moldova

Waste is defined by law to be either household waste or production (industrial) waste. In addition, waste may be either “hazardous” or “non-hazardous”.

Waste generators are required to document the waste they generate, its destination, transport and treatment method and provide this information to the competent authorities upon request. While reporting on waste is required, there is no legally approved waste classification system in place in

the country beyond the distinction between household and production waste, and hazardous and non-hazardous waste. The waste classification system that had been in place has been abandoned. Waste generators continue to use this classification system for reporting waste, however, in the absence of a new waste classification system. However, enforcement of this classification system is not legally possible.

Waste reports are collected by the State Ecological Inspectorate, which passes the information to the National Bureau of Statistics for collation and management, and this entity relays information to the Ministry of the Environment.

Permits are required for all waste management activities (collection, recycling, incineration, pyrolysis, treatment and trade of waste). These are issued by the central public authority responsible for natural resources and environmental protection (i.e. Ministry of the Environment). Permits are for a one year period.

Monitoring of waste reporting is carried out by the National Bureau of Statistics. Fines may be imposed on private or legal entities which break the rules on waste management reporting.

A new Waste Management Law has been developed in Moldova that transposes the EU waste classification system to the country, together with the overall EU legal framework for waste management. It is anticipated that the law may be implemented in 2011.

Moldova participates in *Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, and *Stockholm Convention on Persistent Organic Pollutants*, and the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade*.

2.6 Russian Federation

In accordance with law, the Federal Waste Classifier (FWC) classifies waste based on its origin, aggregative and physical state, hazardous properties and a class of environmental hazard. Depending on a level of negative impact on the environment the waste is classified in accordance with the criteria established by the Federal Executive Authority responsible for regulating environmental protection.

The Ministry of Environment and Natural Resources has developed and approved criteria for classifying environmentally hazardous waste; the form of the certificate of hazardous waste and regulations for completing the form; methodology for the development of draft waste generation norms and waste disposal limits; and the federal waste classifier catalogue.

The State Statistics Committee has approved the form for statistical reporting (2- P – waste) on generation, utilization, decontamination, transportation, and storage of production and consumption waste, and requirements for updating the state waste inventory (resolution of the State Statistics Committee of 25/07/2002, No 157).

The classifying catalogue for MSW generated by urban and rural infrastructure was approved by The State Construction and Housing Committee (resolution of the State Construction and Housing Committee of Russia of 27/12/2003, No 169) for the registration of the waste generation, handling, and recycling in the housing system and for updating the relevant section of the state waste inventory.

The main document regulating waste management at the federal level is the Federal Framework Law "On Production and Consumption Waste" of 24/06/1998, No 89-F ; this law is supported by secondary laws that support implementation of waste management requirements. The following clauses of the framework law are of fundamental importance:

- Specially designated federal executive authorities for waste management;
- The identification of the term "proprietor of waste" as the entity responsible for any operation and liable to administrative proceedings;
- Licensing of hazardous waste management;
- Determining the categories of hazardous waste;
- Certification procedures for hazardous waste;
- The basis for the state inventory of hazardous waste.

The Law also defines:

- General environmental requirements for waste management activities;
- Main principles of waste management including administrative proceedings and economic regulation;
- The authorities to manage the process of ecologically safe waste management and the distribution of roles between the federal executive bodies and corresponding bodies at the regional and municipal level.

Wastes are classified according to a 13-digit code, as follows:

- First 8 digits are used for coding a waste origin; e.g. 10000000 organic waste of natural origin (animal and vegetable origin);
- The 9th and 10th digits are used for coding a waste aggregative and physical state: 0 – no data; 1 – solid, 2 - liquid, 3 – paste-like, 4 – slug, 5 - gel, colloid, 6 - emulsion, 7 - suspension, 8 - loose, 9 – granulated material, 10 – powdered, 11 – dust-like, 12 - fibre, 13 – a finished product, a product that lost its consumer qualities, 99 – other);
- The 11th and 12th digits are used for coding hazardous properties and their combinations: 0 – no data, 1 – toxicity (), 2 – explosion hazard (), 3 – fire risk (), 4 – high reactivity (), 5 – contains infectious agents (), ...99 – no hazardous properties. There is no clear and distinct system of determining these properties.
- The 13th digit is used for coding waste hazard classes as following:
 - 0 – hazard class not identified,
 - 1 - Ist hazard class, (abnormally hazardous waste)
 - 2 – IInd hazard class, (high-hazard waste)
 - 3 – III^d hazard class, (medium hazard waste)
 - 4 – IVth hazard class, (low-hazard waste)
 - 5 – Vth hazard class; (practically non-hazard waste)

Healthcare waste classification is based on the level of its toxic, epidemiologic and radioactive hazard: there are 5 hazard classes. FWC does not provide a detailed list of healthcare waste.

The waste generator is responsible for waste classification and confirming the hazardous properties of a waste. The Ministry of Environment and Natural Resources and its territorial offices provide waste data collection, data aggregating and storage. Data is collected in accordance with State Statistical Form 2-TP-Waste ("Data on Waste Collection, Utilization, Treatment, Transportation and Disposal").

Hazardous waste classification is determined by the degree of possible harmful effects on the environment in accordance with established criteria. Hazardous waste is categorized within one of 5 classes of hazard ranging from “very high” hazard to “very low hazard”. Legal entities and individual entrepreneurs providing services for managing the top 4 classes of hazardous waste (including waste transportation, recycling, treatment and disposal) must have a license specifying a type of waste management activity. The license is granted by the Ministry of Natural Resources

Data that is collected by local offices of the Ministry of Natural Resources is transferred to Moscow annually, and is maintained by the Russian Statistics Committee. The State Waste Cadastre includes Federal Waste Classifier, State Register of Waste Disposal Sites and Data Bank on waste and technologies for use and treatment of different waste types. Primary focus is on the collection of waste data from “production’ activities; waste data collection related to consumption waste is not as well organized. The data is used for preparing Annual National Environmental Reports and Regional Environmental reports.

Monitoring and enforcement of the waste classification, reporting and management requirements is the responsibility of the Ministry of Environment and Natural Resources.

Russia participates in *Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, and the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade* (but has not yet reported under this Convention).

Russia has signed, but has not ratified, the *Stockholm Convention on Persistent Organic Pollutants (POP’s)*. Russia has developed inventories of POP’s, but has not reported under the Convention.

2.7 Ukraine

The legislative basis for waste classification is the Law on Waste (LoW), and the legal basis for the classifier is enacted by the State Standard Committee of Ukraine¹.

The (LoW) defines “waste”, “hazardous waste”, “household waste” and “waste as secondary material”. By the definition established within the LoW, the state waste classifier is a systematized list of waste codes and names, intended for use in state statistics, for the purpose of yielding versatile and accurate information on the generation, accumulation, processing/recycling, neutralization, and disposal of waste. The classifier consists of two parts: the first part is the classification of waste and the second is the classification of services connected with waste.

The national waste catalogue has been established on the basis of EU codes identifying the source of generation of the waste type, the basic economic activities at the first level of grouping but the systems differ with respect to further classification details. The classifier addresses municipal waste and industrial waste. Methodical guidance to assist use of the classifier is provided².

To-date, the State waste classifier supports:

¹ In addition to the waste classification system set out by the LoW, various institutions may require waste classification for their own purposes. For example, public health services bodies legislatively establish waste classification systems based on human health hazard,

² An updated waste classifier that retains much of the current waste classification framework but which incorporates aspects of the EU waste classification system has been under consideration since 2002. A date for its adoption has not been established.

- The compilation and introduction of registers for the generation, processing and utilisation of wastes, and their disposal by local state administrations;
- Development of register cards for the generation of waste, processing and utilisation of wastes, and also certificates of disposal sites by the owners of these sites; and
- Development, approval and reconsideration of limits upon waste generation and disposal.

Waste generators are responsible for classifying their waste and for reporting their waste. In addition, waste generators are responsible for ensuring their wastes are managed in accordance with law, reporting improper management of their wastes and are liable for damages to the environment or property caused by their wastes. The system for classifying hazardous waste is based on the provisions of the *Basel Convention on the Transboundary Movement of Hazardous Wastes and Their Disposal* and it is developed and used separately and in parallel with the state waste classifier..

“Yellow” and “Green” waste lists in Ukrainian legislation provide the basic classifier for hazardous waste, not only for the control over its transboundary movement but also for the permitting of activities connected with hazardous waste. In addition to the yellow and green lists, a list of hazardous properties of waste has been established that is identical with Appendix III of the Basel Convention.

In conformity with the LoW, all wastes generated on the territory of Ukraine are, without fail, subject to state reporting and passportisation. Waste reporting by generators is done using a standardized form. The collection of data on waste generation, treatment and disposal is based on a series of forms that need to be filled in by the generators and the entities that are involved in waste management operations. The reports are submitted to local representatives of the Ministry of Environment and Protection (MoEP) and to the local state administration. The next level of data roll-up is done by the MoEP.

A register of waste generators is maintained by local administrations and MoEP. The register includes all but the smallest waste generators.

A register is also maintained by MoEP of waste storage and disposal sites. Operators of these sites must maintain a passport that identifies the technical-operational characteristics of each site, together with the environmental and safety standards of the sites. Operators of waste storage and disposal sites are required to report their waste management activities.

Management of waste is undertaken according to permits and licences issued by MoEP. Permits are required for all waste disposal sites. In addition, those engaged in hazardous waste management require a license. Permits and licences are used to place environmental and operational controls on waste management facilities, including limits on the volume of waste that may be managed at a facility.

The LoW specifies monitoring and enforcement instruments/penalties for failure to properly classify, report and manage waste in accordance with legal requirements. An infringement of requirements regarding waste collection, transportation, storage, processing, recycling, neutralisation, removal or disposal site will lead to penalties imposed on citizens ranging from 340 UAH to 1360 UAH, and to officials, citizens that own a small enterprise - from 850 UAH to 1700 UAH. This fining system is connected to the so called minimum wage that is 17 UAH so that the penalties imposed to citizens, range from twenty to eighty times the minimum wage “and to officials and small enterprise owners, this goes up from fifty to hundred times the “minimal income of citizens without VAT”.

Ukraine participates in *Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*. In this connection, Ukraine only permits the import of waste for the purpose of recycling, and has established an insurance scheme to ensure that financial resources are available to address environmental damages caused by an imported hazardous waste intended for recycling

Ukraine also participates in the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade* and the *Stockholm Convention on Persistent Organic Pollutants (POP's)*.

3.0 Waste Classification in the European Union Countries

3.1 Structure of the Legal Framework in the EU

The European Union is authorized to adopt legislation that is binding on its member states. The form that EU legislation takes includes “regulations”, “directives” and “decisions”. “Regulations” must be implemented by each member state according to the details of the regulations, and no adoption of the regulation to national law is required. “Directives”, on the other hand, establish policy and targets that must be met, but leave it for each member state to determine how it chooses to meet the policy and target(s) of the Directive; it is therefore necessary for member states to amend or adopt domestic legislation for the purpose of meeting the requirements of a Directive. Directives may therefore be considered as “framework legislation” that establish what must be achieved, but not how it must be achieved. “Decisions” are secondary legislation which are binding on member states and which typically provide a technical basis for implementation of a Regulation or Directive.

EU legislation relating to waste is mainly based on Directives. However, EU waste management legislation does not cover all aspects of waste management. Member states may therefore adopt their own legislation to address aspects of waste management that they believe are not adequately addressed by the EU legislation. Although a member state may adopt its own waste management legislation, it must still meet the requirements of the EU legislation.

In this section, waste management practices in Germany are presented to illustrate the practices that are relevant to waste classification and management but which fall beyond the scope of EU legislation.

3.2 Waste Management Practices in the EU

3.2.1 *Nomenclature and Classification*

Directive 98/2008/EC is the primary waste management Directive. This defines “waste” to mean “*any substance or object which the holder discards or intends or is required to discard*”. Among many other items, this Directive seeks to transform “waste” into a “resource” through the use of discarded materials (“waste”) as useful materials for (preferably) recycling or (less preferably) for other beneficial uses including energy recovery. According to this Directive an “end of waste status” is possible after the waste has undergone recovery (including recycling) operation. The purpose of this provision is to specify the point at which a “waste” is transformed into a “resource”.

The EU uses nomenclature for classifying waste for the purpose of achieving the following waste management policy objectives:

1. Creation of a database of waste that can be used for development of future policy measures.
2. The protection of human health and the environment from wastes that are deemed to be “hazardous” because of the inherent characteristics of the waste.

3. Minimizing environmental risk related to waste disposal and reduction of waste requiring disposal.

The basis for achieving these objectives is the EU “list of waste”. This list is periodically updated. The most recent list was updated in 2000 by Decision 2000/532/EC. The EU list of waste is shown in Annex 3.1-1. While the list serves as the basis for achieving the objectives identified above, it is complemented by other definitions and nomenclature as described following.

Creation of a database that can be used for future policy measures

The list of waste sets out categories of waste generated by different industries or processes associated with specific industries; for example, the list identifies 13 industrial groups (iron and steel, lead thermal metallurgy etc.) within the category of “inorganic waste generated by thermal processes”, and for each industrial group several types of waste are listed.

The categorization of waste in this way provides the basis for reporting waste and maintaining a database that can be used for future policy measures.

The protection of human health and the environment from wastes that are deemed to be “hazardous”

Within the list of waste, some wastes are identified to be defined as “hazardous”. Any waste identified on the list as “hazardous” must be managed according to hazardous waste management requirements established by the EU and international treaties. However, in addition to wastes identified as ‘hazardous’ in the list of waste, any waste may still be defined as hazardous if it has any of the following characteristics, as provided for in Directive 98/2008/EC.

- ‘Explosive’: substances and preparations which may explode under the effect of flame or which are more sensitive to shocks or friction than dinitrobenzene.
- ‘Oxidizing’: substances and preparations which exhibit highly exothermic reactions when in contact with other substances, particularly flammable substances.
- ‘Highly flammable’
 - liquid substances and preparations having a flash point below 21 °C (including extremely flammable liquids), or
 - substances and preparations which may become hot and finally catch fire in contact with air at ambient temperature without any application of energy, or
 - solid substances and preparations which may readily catch fire after brief contact with a source of ignition and which continue to burn or to be consumed after removal of the source of ignition, or
 - gaseous substances and preparations which are flammable in air at normal pressure, or
 - substances and preparations which, in contact with water or damp air, evolve highly flammable gases in dangerous quantities.
- ‘Flammable’: liquid substances and preparations having a flash point equal to or greater than 21 °C and less than or equal to 55 °C.
- ‘Irritant’: non-corrosive substances and preparations which, through immediate, prolonged or repeated contact with the skin or mucous membrane, can cause inflammation.
- ‘Harmful’: substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may involve limited health risks.
- ‘Toxic’: substances and preparations (including very toxic substances and preparations) which, if they are inhaled or ingested or if they penetrate the skin, may involve serious, acute or chronic health risks and even death.

- ‘Carcinogenic’: substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence.
- ‘Corrosive’: substances and preparations which may destroy living tissue on contact.
- ‘Infectious’: substances and preparations containing viable micro-organisms or their toxins which are known or reliably believed to cause disease in man or other living organisms.
- ‘Toxic for reproduction’: substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce non-hereditary congenital malformations or increase their incidence.
- ‘Mutagenic’: substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce hereditary genetic defects or increase their incidence.
- Waste which releases toxic or very toxic gases in contact with water, air or an acid.
- ‘Sensitizing’: substances and preparations which, if they are inhaled or if they penetrate the skin, are capable of eliciting a reaction of hypersensitization such that on further exposure to the substance or preparation, characteristic adverse effects are produced.
- ‘Ecotoxic’: waste which presents or may present immediate or delayed risks for one or more sectors of the environment.
- Waste capable by any means, after disposal, of yielding another substance, e.g. a leachate, which possesses any of the characteristics listed above.

If a generator of a waste can demonstrate that a listed hazardous waste does not display any of the above characteristics, the waste can be managed as a non-hazardous waste.

Minimizing environmental risk related to waste disposal and the reduction of waste requiring disposal

In addition to the categories of waste identified in the list of waste, the EU has adopted definitions and nomenclature that classify wastes for the purpose of minimizing environmental risk related to waste disposal and reducing the amount of waste requiring disposal. Thus the EU has defined, for example:

- “Biodegradable waste” as any waste capable of undergoing anaerobic or aerobic decomposition, such as food and garden waste, or paper and paperboard.
- “Inert waste” as a waste that does not undergo any significant physical, chemical or biological transformations.
- “Biowaste” as any of several types of waste that are individually identified in the list of waste.

3.2.2 Data/Information Management

All data and information within the EU is collected by Eurostat, which prepares statistics for official use. There is a list available of National Statistical Institutes and other national authorities responsible for providing the data to Eurostat.

The format for the transmission of data to Eurostat is given in the Commission regulation No 782/2005. The data to be given according to Regulation 2150/2002 have to be transmitted in electronic form.

According to Article 3 of EC Regulation No 2150/2002 the following data processing procedures are possible:

- Surveys
- Evaluation of administrative or other sources

- Statistical estimation procedures
- Combination of the above means

Based on EC regulation 2150/2002, the Commission provides a report every three years to the European Parliament and the Council on the statistics compiled pursuant to this regulation. This report is based on the statistics of Eurostat.

The waste data as well as the structure and waste category information is presented in Annex 3.2-1 and Annex 3.2-2:

- Annex 3.2-1 identifies the data collection and reporting format used in Germany, consistent with the requirements of Eurostat. Some of the tables in Annex 3.2-1 identify the data collection and reporting formats specifically for the “land” of Baden-Württemberg, and the same format is used in all other regions of the country; other tables identify the reporting formats for Germany as a whole.
- Annex 3.2-2 provides EC Regulation 2150/2002

Additionally to the activities of Eurostat and the supporting national organisations, each year or every two years Member States have to report to the Commission on the achievement of the collection, re-use, recycling and / or recovery targets for certain waste streams such as packaging waste, waste electrical and electronic equipment, and end-of-life vehicles. The reports are sent 18 months after the end of the reporting period.

The responsible organization for each member country is not defined in the EU regulations. In Germany the Statistische Bundesamt is the authority designated to fulfill the requirements of the European legislation. Federal Authorities and authorities on länder³ level have to support. Details are regulated in the German law on environmental statistics.

In Baden-Württemberg the data acquisition situation is as follows:

- There are 16 different types
- (type of treatment/disposal facility) of questionnaires, issued to waste treatment and disposal facilities every year.
- One questionnaire is sent to construction waste recycling facilities every 2 years
- One questionnaire is sent to asphalt recycling facilities every 2 years
- There is one questionnaire for packaging waste(yearly to all companies collecting packaging waste)
- Yearly questionnaires are sent to the responsible waste authorities of municipalities and counties
- Since 2006 (first time, not published, not issued to Eurostat) questionnaires have to be sent to commercial and industrial waste generators. In 2006, in Baden-Württemberg 3500 companies have been investigated (by questionnaire). The total quantities generated have been estimated based on the survey. The number of employees was a criteria for selection of the companies.

Furthermore the data for hazardous waste (with proof of disposal) as well as the documents for transboundary movements have been evaluated by the authorities. Involved are the environmental agencies on “länder” level (evaluation of consignment notes) and the relevant county/city

³ Länder are semi-autonomous jurisdictions that together make up the Federal Republic of Germany.

administrations (issue of waste disposal document and collection of consignment notes) . Relevant county/city administrations are those where the generator and the disposal facility are based.

Data is maintained in electronic form. The responsible organizations for data collection and maintaining are listed in the "List of national statistical institutes (NSI) and other national authorities". For Germany, the Statistische Bundesamt is responsible for collection ,and aggregation of the data from the various agencies as well as for transfer to Eurostat.

3.2.3 Responsibilities of Waste Generators

There are no responsibilities defined in the European legislation for waste producers to provide any data concerning waste generation. European legislation provides only the request to national authorities to provide the relevant data. However, national laws provide further details about the responsibilities in the individual countries.

In Germany, the legal basis for the data collection is the law on environmental statistics (Umweltstatistikgesetz). Data on household waste is provided by the responsible authorities (e.g. the municipality) or third parties (e.g. a contractor) if responsibilities are transferred. For other wastes, the generator must inform. The law specifies the frequency with which information must be provided and details regarding how information must be provided. Further details for the duties of the involved parties in waste management activities are fixed in the "The Act for Promoting Closed Substance Cycle Waste Management and Ensuring Environmentally Compatible Waste Disposal" (Gesetz zur Förderung der Kreislaufwirtschaft und Sicherung der umweltverträglichen Beseitigung von Abfällen, Kreislaufwirtschafts- und Abfallgesetz-KrW-/AbfG).

Waste generators are responsible under the EU legal framework for the proper management of their waste. With regard to waste classification, this means that the holders of waste have the obligation to classify their waste in accordance with the established nomenclature. Moreover, the generator of waste is obliged to perform a new classification of its waste whenever a change occurs in the material and/or technology process that generates the waste. The holder of the waste is also required to ensure the proper management of waste in accordance with the administrative procedures and legally authorized management techniques for that classification of waste, and has financial responsibility for the waste.

3.2.4 Monitoring

Monitoring of data for waste statistics is the task of Eurostat. The national authority is responsible for data collection and for transferring the data to Eurostat according to the requirements of Eurostat.

The structure of the input data to be provided to Eurostat is presented in Annex 3.2-1.

3.2.5 Enforcement

European legislation does not contain special enforcement rules or measures for data collection. According to the Euratom Treaty several measures are possible. More details are described in Annex 3.7-1 concerning the infringement procedure.

Enforcement measures on national level are based on the national laws. As consequence of noncompliance to the legal requirements, fines, prison or other measures are possible. It is up to the national authorities to supervise implementation and enforcement of the legal requirements.

3.2.6 *Current Permitting System*

There is no special permitting system for waste generation at the level of the EU. Waste generation is part of the permitting procedure applied for the construction of any industrial facilities in the individual member states – a process which must also comply with EU requirements.

Furthermore, waste generation is subject to the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation No 1907/2006 concerning the registration, evaluation, authorization and restriction of chemicals. According to Article 6, any manufacturer or importer of a substance in quantities of 1 ton or more shall submit a registration to the Agency. Waste itself is not considered as a substance and therefore most obligations do not apply to waste, but suppliers of chemicals must show that risks can be properly managed also in the waste life cycle stage.

Concerning the transportation of waste, there are no regulations or directives in place on European level. This activity is regulated in national law of each member state.

In Germany, transportation of waste is regulated at the national (federal) level. Transportation of waste on professional basis is allowed without permission only:

- For inert material not contaminated.
- For authorities responsible for disposal or third parties on behalf of these authorities
- For small quantities.

Requirements for the permitting of waste treatment and disposal are also defined at the national level; there are no EU requirements in this regard. In Germany, the legal requirements for siting and building waste treatment or disposal facilities are less onerous for small facilities than they are for larger facilities.

3.2.7 *Conventions*

The member states of the EU determine which international agreements they will participate in. The EU itself does not participate in any international agreements relating to waste management.

Annex: Aspects of Waste Classification in the EU

Annex 3.1-1: List of waste

Annex 3.2-1: Format for data transfer

Annex 3.2-2: Waste categories for which waste statistics have to be prepared

Annex 3.7-1: Enforcement measures

Annex 3.1-1: List of Waste

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- 01 WASTES RESULTING FROM EXPLORATION, MINING, DRESSING AND FURTHER TREATMENT OF MINERALS AND QUARRY**
- 01 01 Wastes from mineral excavation**
- 01 01 01 Waste from mineral metalliferous excavation
- 01 01 02 Waste from mineral non-metalliferous excavation
- 01 02 Wastes from mineral dressing**
- 01 02 01 Wastes from the dressing of metalliferous minerals
- 01 02 02 Wastes from the dressing on non-metalliferous minerals
- 01 03 Wastes from further physical and chemical processing of metalliferous minerals**
- 01 03 01 Tailings
- 01 03 02 Dusty and powdery waste
- 01 03 03 Red mud from alumina production
- 01 03 99 Wastes not otherwise specified
- 01 04 Wastes from further physical and chemical processing on non-metalliferous minerals**
- 01 04 01 Waste gravel and crushed rocks
- 01 04 02 Waste sand and clays
- 01 04 03 Dusty and powdery waste
- 01 04 04 Waste from potash and rock-salt processing
- 01 04 05 Waste from washing and cleaning of minerals
- 01 04 06 Waste from stone cutting and sawing
- 01 04 99 Waste not otherwise specified
- 01 05 Drilling muds and other drilling wastes**
- 01 05 01 Oil-containing drilling muds and wastes
- 01 05 02 Barite-containing drilling muds and wastes
- 01 05 03 Chloride-containing drilling muds and wastes
- 01 05 04 Fresh-water drilling muds and wastes
- 01 05 99 Wastes not otherwise specified
- 02 WASTES FROM AGRICULTURAL, HORTICULTURAL, HUNTING, FISHING AND AQUACULTURAL PRIMARY PRODUCTION, FOOD PREPARATION AND PROCESSING**
- 02 01 Primary production wastes**
- 02 01 01 Sludges from washing and cleaning
- 02 01 02 Animal tissue waste
- 02 01 03 Plant tissue waste
- 02 01 04 Waste plastics (except packaging)
- 02 01 05* Agrochemical wastes
- 02 01 06 Animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
- 02 01 07 Waste from forestry exploitation
- 02 01 99 Waste not otherwise specified
- 02 02 Wastes from the preparation and processing of meat, fish and other foods of animal origin**
- 02 02 01 Sludges from washing and cleaning
- 02 02 02 Animal tissue waste
- 02 02 03 Material unsuitable for consumption or processing
- 02 02 04 Sludges from on-site effluent treatment
- 02 02 99 Waste not otherwise specified
- 02 03 Wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee and tobacco preparation and processing; tobacco processing; conserve production**
- 02 03 01 Sludges from washing, cleaning, peeling, centrifuging and separation
- 02 03 02 Waste from preserving agents
- 02 03 03 Waste from solvent extraction

- 02 03 04 Materials unsuitable for consumption or processing
- 02 03 05 Sludges from on-site effluent treatment
- 02 03 99 Wastes not otherwise specified
- 02 04 Wastes from sugar processing**
- 02 04 01 Soil from cleaning and washing beet
- 02 04 02 Off-specification calcium carbonate
- 02 04 03 Sludges from on-site effluent treatment
- 02 04 99 Wastes not otherwise specified
- 02 05 Wastes from the dairy products industry**
- 02 05 01 Materials unsuitable for consumption or processing
- 02 05 02 Sludges from on-site effluent treatment
- 02 05 99 Wastes not otherwise specified
- 02 06 Wastes from the baking and confectionery industry**
- 02 06 01 Materials unsuitable for consumption or processing
- 02 06 02 Wastes from preserving agents
- 02 06 03 Sludges from on-site effluent treatment
- 02 06 99 Wastes not otherwise specified
- 02 07 Wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)**
- 02 07 01 Waste from washing, cleaning and mechanical reduction of raw materials
- 02 07 02 Waste from spirits distillation
- 02 07 03 Waste from chemical treatment
- 02 07 04 Materials unsuitable for consumption or processing
- 02 07 05 Sludges from on-site effluent treatment
- 02 07 99 Wastes not otherwise specified
- 03 WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PAPER, CARDBOARD, PULP, PANELS AND FURNITURE**
- 03 01 Wastes from wood processing and the production of panels and furniture**
- 03 01 01 Waste bark and cork
- 03 01 02 Sawdust
- 03 01 03 Shaving, cuttings, spoiled timber/particle board/veneer
- 03 01 99 Wastes not otherwise specified
- 03 02 Wood preservation wastes**
- 03 02 01* Non-halogenated organic wood preservatives
- 03 02 02* Organochlorinated wood preservatives
- 03 02 03* Organometallic wood preservatives
- 03 02 04* Inorganic wood preservatives
- 03 03 Wastes from pulp, paper and cardboard production and processing**
- 03 03 01 Bark
- 03 03 02 Dregs and green liquor sludges (from black liquor treatment)
- 03 03 03 Bleaching sludges from hypochlorite and chlorine processes
- 03 03 04 Bleaching sludges from other bleaching processes
- 03 03 05 De-inking sludges from paper recycling
- 03 03 06 Fibre and paper sludge
- 03 03 07 Rejects from paper and cardboard recycling
- 03 03 99 Wastes not otherwise specified

04 WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES**04 01 Wastes from the leather and fur industry**

- 04 01 01 Fleshings and lime split waste
- 04 01 02 Liming waste
- 04 01 03* Degreasing waste containing solvents without a liquid phase
- 04 01 04 Tanning liquor containing chromium
- 04 01 05 Tanning liquor free of chromium
- 04 01 06 Sludges, in particular from on-site, effluent treatment containing chromium
- 04 01 07 Sludges, in particular from on-site effluent treatment free of chromium
- 04 01 08 Waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
- 04 01 09 Waste from dressing and finishing
- 04 01 99 Waste not otherwise specified

04 02 Wastes from the textile industry

- 04 02 01 Waste from unprocessed textile fibres and other natural fibrous substances mainly of vegetable origin
- 04 02 02 Waste from unprocessed textile fibres mainly of animal origin
- 04 02 03 Waste from unprocessed textile fibres mainly of artificial or synthetic origin
- 04 02 04 Waste from unprocessed mixed textile fibres before spinning and weaving
- 04 02 05 Waste from processed textile fibres mainly of vegetable origin
- 04 02 06 Waste from processed textile fibres mainly of animal origin
- 04 02 07 Waste from processed fibres mainly of artificial or synthetic origin
- 04 02 08 Waste from processed mixed textile fibres
- 04 02 09 Waste from composite materials (impregnated textile, elastomer, plastomer)
- 04 02 10 Organic matter from natural products (e.g. grease, wax)
- 04 02 14* Waste from finishing containing organic solvents
- 04 02 15 Waste from finishing other than mentioned in 04 02 14
- 04 02 16* Dyestuffs and pigments containing dangerous substances
- 04 02 17 Dyestuffs and pigments other than those mentioned in 04 02 16
- 04 02 19* Sludges from on-site effluent treatment containing dangerous substances
- 04 02 20 Sludges from on-site effluent treatment other than mentioned in 04 02 19
- 04 02 99 Wastes not otherwise specified

05 WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL**05 01 Oily sludges and solid wastes**

- 05 01 02 Desalter sludges
- 05 01 03* Tank bottom sludges
- 05 01 04* Acid alkyl sludges
- 05 01 05* Oil spills
- 05 01 06 Sludges from plant, equipment and maintenance operations
- 05 01 07* Acid tars
- 05 01 08* Other tars
- 05 01 09* Sludges from on-site effluent treatment containing dangerous substances
- 05 01 10 Sludges from on-site effluent treatment other than those mentioned in 05 01 09
- 05 01 99 Wastes not otherwise specified

05 02 Non oily sludges and solid wastes

- 05 02 01 Boiler feedwater sludges
- 05 02 02 Waste from cooling columns
- 05 02 99 Wastes not otherwise specified

05 04 Spent filter clays

05 04 01* Spent filter clays

05 05 Oil desulphurisation wastes

050501 Waste containing sulphur

05 05 99 Wastes not otherwise specified

05 06 Wastes from the pyrolytic treatment of coal

05 06 01* Acid tars

05 06 02 Asphalt

05 06 03* Other tars

05 06 04 Waste from cooling columns

05 06 99 Wastes not otherwise specified

05 07 Wastes from natural gas purification

05 07 01* Sludges containing mercury

05 07 02 Waste containing sulphur

05 07 99 Wastes not otherwise specified

05 08 Wastes from oil regeneration

05 08 01* Spent filter clays

05 08 02* Acid tars

05 08 03* Other tars

05 08 04* Aqueous liquid waste from oil regeneration

05 08 99 Wastes not otherwise specified

06 WASTES FROM INORGANIC CHEMICAL PROCESSES**06 01 Waste acidic solutions**

06 01 01* Sulphuric acid and sulphurous acid

06 01 02* Hydrochloric acid

06 01 03* Hydrofluoric acid

06 01 04* Phosphoric and phosphorous acid

06 01 05* Nitric acid and nitrous acid

06 01 99* Wastes not otherwise specified

0602 Waste alkaline solutions

06 02 01* Calcium hydroxide

06 02 02* Soda

06 02 03* Ammonia

06 02 99* Waste salts and their solutions

06 03 Waste salts and their solutions

06 03 01 Carbonates (except 02 04 02)

06 03 02 Saline solutions containing sulphates, sulphites or sulphides

06 03 03 Solid salts containing sulphates, sulphites or sulphides

06 03 04 Saline solutions containing chlorides, fluorides and halides

06 03 05 Solid salts containing chlorides, fluorides and other halogenated solid salts

06 03 06 Saline solutions containing phosphates and related solid salts

06 03 07 Phosphates and related solid salts

06 03 08 Saline solutions containing nitrates and related compounds

06 03 09 Solid salts containing nitrides (nitrometallic)

06 03 10 Solid salts containing ammonium

06 03 11* Salts and solutions containing cyanides

06 03 12 Salts and solutions containing organic compounds

06 03 99 Wastes not otherwise specified

- 06 04 Metal-containing wastes**
- 06 04 01 Metallic oxides
 - 06 04 02* Metallic salts (except 06 03)
 - 06 04 03* Waste containing arsenic
 - 06 04 04* Waste containing mercury
 - 06 04 05* Waste containing other heavy metals
 - 06 04 99 Wastes not otherwise specified
- 06 05 Sludges from on-site effluent treatment**
- 06 05 02* Sludges from on-site effluent treatment containing dangerous substances
 - 06 05 03 Sludges from on-site effluent treatment other than those mentioned in 06 05 02
- 06 06 Wastes from sulphur chemical processes (production and transformation) and desulphurisation processes**
- 06 06 01 Waste containing sulphur
 - 06 06 99 Wastes not otherwise specified
- 06 07 Wastes from halogen chemical processes**
- 06 07 01* Waste containing asbestos from electrolysis
 - 06 07 02* Activated carbon from chlorine production
 - 06 07 99 Wastes not otherwise specified
- 06 08 Waste from production of silicon and silicon derivatives**
- 06 08 01 Waste from production of silicon and silicon derivatives
- 06 09 Wastes from phosphorus chemical processes**
- 06 09 01 Phosphogypsum
 - 06 09 02 Phosphorous slag
 - 06 09 99 Wastes not otherwise specified
- 06 10 Waste from nitrogen chemical processes and fertiliser manufacture**
- 06 10 01 Waste from nitrogen chemical processes and fertiliser manufacture
- 06 11 Waste from the manufacture of inorganic pigments and opacifiers**
- 06 11 01 Gypsum from titanium dioxide production
 - 06 11 99 Wastes not otherwise specified
- 06 13 Wastes from other inorganic chemical processes**
- 06 13 01* Inorganic pesticides, biocides and wood preserving agents
 - 06 13 02* Spent activated carbon (except 06 07 02)
 - 06 13 03 Carbon black
 - 06 13 04* Waste from asbestos processing
 - 06 13 99 Wastes not otherwise specified
- 07 WASTES FROM ORGANIC CHEMICAL PROCESSES**
- 07 01 Wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals**
- 07 01 01* Aqueous washing liquids and mother liquors
 - 07 01 03* Organic halogenated solvents, washing liquids and mother liquors
 - 07 01 04* Other organic solvents, washing liquids and mother liquors
 - 07 01 07* Halogenated still bottoms and reaction residues
 - 07 01 08* Other still bottoms and reaction residues
 - 07 01 09* Halogenated filter cakes, spent absorbents
 - 07 01 10* Other filter cakes, spent absorbents
 - 07 01 11* Sludges from on-site effluent treatment containing dangerous substances
 - 07 01 12 Sludges from on-site effluent treatment other than those mentioned in 07 01 11
 - 07 01 99 Wastes not otherwise specified

07 02 Wastes from the MFSU of plastics, synthetic rubber and man-made fibres

- 07 02 01* Aqueous washing liquids and mother liquors
- 07 02 03* Organic halogenated solvents, washing liquids and mother liquors
- 07 02 04* Other organic solvents, washing liquids and mother liquors
- 07 02 07* Halogenated still bottoms and reaction residues
- 07 02 08* Other still bottoms and reaction residues
- 07 02 09* Halogenated filter cakes, spent absorbents
- 07 02 10* Other filter cakes, spent absorbents
- 07 02 11* Sludges from on-site effluent treatment containing dangerous substances
- 07 02 12 Sludges from on-site effluent treatment other than those mentioned in 07 02 11
- 07 02 13 Waste plastic
- 07 02 99 Wastes not otherwise specified

07 03 Wastes from the MFSU of organic dyes and pigments (except 06 11)

- 07 03 01* Aqueous washing liquids and mother liquors
- 07 03 03* Organic halogenated solvents, washing liquids and mother liquors
- 07 03 04* Other organic solvents, washing liquids and mother liquors
- 07 03 07* Halogenated still bottoms and reaction residues
- 07 03 08* Other still bottoms and reaction residues
- 07 03 09* Halogenated filter cakes, spent absorbents
- 07 03 10* Other filter cakes, spent absorbents
- 07 03 11* Sludges from on-site effluent treatment containing dangerous substances
- 07 03 12 Sludges from on-site effluent treatment other than those mentioned in 07 03 11
- 07 03 99 Wastes not otherwise specified

07 04 Wastes from the MFSU of organic pesticides (except 02 0105)

- 07 04 01* Aqueous washing liquids and mother liquors
- 07 04 03* Organic halogenated solvents, washing liquids and mother liquors
- 07 04 04* Other organic solvents, washing liquids and mother liquors
- 07 04 07* Halogenated still bottoms and reaction residues
- 07 04 08* Other still bottoms and reaction residues
- 07 04 09* Halogenated filter cakes, spent absorbents
- 07 04 10* Other filter cakes, spent absorbents
- 07 04 11* Sludges from on-site effluent treatment containing dangerous substances
- 07 04 12 Sludges from on-site effluent treatment other than those mentioned in 07 04 11
- 07 04 99 Wastes not otherwise specified

07 05 Wastes from the MFSU of pharmaceuticals

- 07 05 01* Aqueous washing liquids and mother liquors
- 07 05 03* Organic halogenated solvents, washing liquids and mother liquors
- 07 05 04* Other organic solvents, washing liquids and mother liquors
- 07 05 07* Halogenated still bottoms and reaction residues
- 07 05 08* Other still bottoms and reaction residues
- 07 05 09* Halogenated filter cakes, spent absorbents
- 07 05 10* Other filter cakes, spent absorbents
- 07 05 11* Sludges from on-site effluent treatment containing dangerous substances
- 07 05 12 Sludges from on-site effluent treatment other than those mentioned in 07 05 11
- 07 05 99 Wastes not otherwise specified

- 07 06 Wastes from the MFSU of fats, grease, soaps, detergents disinfectants and cosmetics**
- 07 06 01* Aqueous washing liquids and mother liquors
 - 07 06 03* Organic halogenated solvents, washing liquids and mother liquors
 - 07 06 04* Other organic solvents, washing liquids and mother liquors
 - 07 06 07* Halogenated still bottoms and reaction residues
 - 07 06 08* Other still bottoms and reaction residues
 - 07 06 09* Halogenated filter cakes, spent absorbents
 - 07 06 10* Other filter cakes, spent absorbents
 - 07 06 11* Sludges from on-site effluent treatment containing dangerous substances
 - 07 06 12 Sludges from on-site effluent treatment other than those mentioned in 07 06 11
 - 07 06 99 Wastes not otherwise specified
- 07 07 Wastes from the MFSU of fine chemicals and chemical products not otherwise specified**
- 07 07 01* Aqueous washing liquids and mother liquors
 - 07 07 03* Organic halogenated solvents, washing liquids and mother liquors
 - 07 07 04* Other organic solvents, washing liquids and mother liquors
 - 07 07 07* Halogenated still bottoms and reaction residues
 - 07 07 08* Other still bottoms and reaction residues
 - 07 07 09* Halogenated filter cakes, spent absorbents
 - 07 07 10* Other filter cakes, spent absorbents
 - 07 07 11* Sludges from on-site effluent treatment containing dangerous substances
 - 07 07 12 Sludges from on-site effluent treatment other than those mentioned in 07 07 11
 - 07 07 99 Wastes not otherwise specified
- 08 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS**
- 08 01 Wastes from MFSU and removal of paint and varnish**
- 08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances
 - 08 01 12 Waste paint and varnish other than those mentioned in 08 01 11
 - 08 01 13* Sludges from paint or varnish containing organic solvents or other dangerous substances
 - 08 01 14 Sludges from paint or varnish other than those mentioned in 08 01 13
 - 08 01 15* Aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances
 - 08 01 16
 - 08 01 17* Aqueous sludges containing paint or varnish other than those mentioned in 08 01 15
 - 08 01 18 Waste from paint or varnish removal other than those mentioned in 08 01 17
 - 08 01 19* Aqueous suspensions containing paint or varnish containing organic solvents or other dangerous substances
 - 08 0120 Aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19
 - 08 01 21* Waste paint or varnish remover
 - 08 01 99 Wastes not otherwise specified
- 08 02 Wastes from MFSU of other coatings (including ceramic materials)**
- 08 02 01 Waste coating powders
 - 08 02 02 Aqueous sludges containing ceramic materials
 - 08 02 03 Aqueous suspensions containing ceramic materials
 - 08 02 99 Wastes not otherwise specified
- 08 03 Wastes from MFSU of printing inks**
- 08 03 01* Waste ink containing halogenated solvents
 - 08 03 02* Waste ink containing non-halogenated solvents
 - 08 03 03 Waste from water-based ink
 - 08 03 04 Dried ink

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- 08 03 05* Ink sludges containing halogenated solvents
- 08 03 06* Ink sludges containing non-halogenated solvents
- 08 03 07 Aqueous sludges containing ink
- 08 03 08 Aqueous liquid waste containing ink
- 08 03 09 Waste printing toner (including cartridges)
- 08 03 10* Waste organic solvents used for cleaning
- 08 03 11* Waste etching solutions
- 08 03 99 Wastes not otherwise specified
- 0804 Wastes from MFSU of adhesives and sealants (including waterproofing products)**
- 08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances
- 080410
- 08 04 11* Adhesive and sealant sludges containing organic solvents or other dangerous substances
- 08 04 12 Adhesive and sealant sludges other than those mentioned in 08 04 11
- 08 04 13* Aqueous sludges containing adhesives or sealants containing organic solvents or other dangerous substances
- 08 04 14 Aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13
- 08 04 15* Aqueous liquid waste containing adhesives or sealants with organic solvents or other dangerous substances
- 08 04 16 Aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15
- 08 04 99 Wastes not otherwise specified
- 08 05 Wastes not otherwise specified**
- 08 05 01* Waste isocyanates
- 09 WASTES FROM THE PHOTOGRAPHIC INDUSTRY**
- 09 01 Wastes from the photographic industry**
- 09 01 01* Water-based developer and activator solutions
- 09 0102* Water-based offset plate developer solutions
- 09 01 03* Solvent-based developer solutions
- 09 01 04* Fixer solutions
- 09 01 05* Bleach solutions and bleach fixer solutions
- 09 01 06* Waste containing silver from on-site treatment of photographic waste
- 09 01 07 Photographic film and paper containing silver or silver compounds
- 09 01 08 Photographic film and paper free of silver or silver compounds
- 09 01 10 Single-use cameras without batteries
- 09 01 11* Single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03
- 09 01 12 Single-use cameras containing batteries other than those mentioned in 09 01 11
- 09 01 99 Wastes not otherwise specified
- 10 INORGANIC WASTES FROM THERMAL PROCESSES**
- 10 01 Wastes from power stations and other combustion plants (except 19)**
- 10 01 01 Bottom ash
- 10 01 02 Coal fly ash
- 10 01 03 Peat and (untreated) wood fly ash
- 10 01 04* Oil fly ash
- 10 01 05 Calcium-based reaction waste from flue gas desulphurisation in solid form
- 10 01 06 Other solid waste from gas treatment
- 10 01 07 Calcium-based reaction waste from flue gas desulphurisation in sludge form
- 10 01 08 Other sludges from gas treatment
- 10 0109* Sulphuric acid
- 10 01 11 Aqueous sludges from boiler cleansing
- 10 01 12 Spent linings and refractories
- 10 01 13* Fly ash from emulsified hydrocarbons used as fuel
- 10 01 99 Wastes not otherwise specified

10 02 Wastes from the iron and steel industry

- 10 02 01 Waste from the processing of slag
- 10 02 02 Unprocessed slag
- 10 02 05 Other sludges
- 10 02 06 Spent linings and refractories
- 10 02 07* Solid waste from gas treatment of electrical arc furnaces containing dangerous substances
- 10 02 08 Solid waste from gas treatment of electrical arc furnaces other than those mentioned in 10 02 07
- 10 02 09 Solid waste from gas treatment of other iron and steel processes
- 10 02 10 Mill scales
- 10 02 11* Waste from cooling water treatment containing oil
- 10 02 12 Other waste from cooling water treatment
- 10 02 13* Sludges from gas treatment containing dangerous substances
- 10 02 14 Sludges from gas treatment other than those mentioned in 10 02 13
- 10 02 99 Wastes not otherwise specified

1003 Wastes from aluminium thermal metallurgy

- 10 03 01* Tars and other carbon-containing wastes from anode manufacture
- 10 03 02 Anode scraps
- 10 03 04* Primary smelting slags/white drosses
- 10 03 05 Alumina dust
- 10 03 06 Used carbon strips and fireproof materials from electrolysis
- 10 03 07* Spent pot linings
- 10 03 08* Salt slags from secondary smelting
- 10 03 09* Black drosses from secondary smelting
- 10 03 10* Waste from treatment of salt slags and black drosses
- 10 03 11 Flue gas dust
- 10 03 12 Other particulates and dust (including ball mill dust)
- 10 03 13 Solid waste from gas treatment
- 10 03 14 Sludges from gas treatment
- 10 03 15* Skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantities
- 10 03 16 Skimmings other than those mentioned in 10 03 15
- 10 03 99 Wastes not otherwise specified

10 04 Wastes from lead thermal metallurgy

- 10 04 01* Slags (first and second smelting)
- 10 04 02* Dross and skimmings (first and second smelting)
- 10 04 03* Calcium arsenate
- 10 04 04* Flue gas dust
- 10 04 05* Other particulates and dust
- 10 04 06* Solid waste from gas treatment
- 10 04 07* Sludges from gas treatment
- 10 04 08 Spent linings and refractories
- 10 04 99 Wastes not otherwise specified

10 05 Wastes from zinc thermal metallurgy

- 10 05 01* Slags (first and second smelting)
- 10 05 02 Dross and skimmings (first and second smelting)
- 10 05 03* Flue gas dust
- 10 05 04 Other particulates and dust
- 10 05 05* Solid waste from gas treatment
- 10 05 06* Sludges from gas treatment
- 10 05 07 Spent linings and refractories
- 10 05 99 Wastes not otherwise specified

10 06	Wastes from copper thermal metallurgy
10 06 01	Slags (first and second smelting)
10 06 02	Dross and skimmings (first and second smelting)
10 06 03*	Flue gas dust
10 06 04	Other particulates and dust
10 06 05*	Waste from electrolytic refining
10 06 06*	Solid waste from gas treatment
10 06 07*	Sludges from gas treatment
10 06 08	Spent linings and refractories
10 06 99	Wastes not otherwise specified
10 07	Wastes from silver, gold and platinum thermal metallurgy
10 07 01	Slags (first and second smelting)
10 07 02	Dross and skimmings (first and second smelting)
10 07 03	Solid waste from gas treatment
10 07 04	Other particulates and dust
10 07 05	Sludges from gas treatment
10 07 06	Spent linings and refractories
10 07 99	Wastes not otherwise specified
10 08	Wastes from other non-ferrous thermal metallurgy
10 08 01	Slags (first and second smelting)
10 08 02	Dross and skimmings (first and second smelting)
10 08 03	Flue gas dust
10 08 04	Other particulates and dust
10 08 05	Solid waste from gas treatment
10 08 06	Sludges from gas treatment
10 08 07	Spent linings and refractories
10 08 99	Wastes not otherwise specified
10 09	Wastes from casting of ferrous pieces
10 09 01	Casting cores and moulds containing organic binders which have not undergone pouring
10 09 02	Casting cores and moulds containing organic binders which have undergone pouring
10 09 03	Furnace slag
10 09 04	Furnace dust
10 09 99	Wastes not otherwise specified
10 10	Wastes from casting of non-ferrous pieces
10 10 01	Casting cores and moulds containing organic binders which have not undergone pouring
10 10 02	Casting cores and moulds containing organic binders which have undergone pouring
10 10 03	Furnace slag
10 10 04	Furnace dust
10 10 99	Wastes not otherwise specified
10 11	Wastes from manufacture of glass and glass products
10 11 01	Waste preparation mixture before thermal processing
10 11 02	Waste glass
10 11 03	Waste glass-based fibrous materials
10 11 04	Flue gas dust
10 11 05	Other particulates and dust
10 11 06	Solid waste from gas treatment
10 11 07	Sludges from gas treatment
10 1 108	Spent linings and refractories
10 11 99	Wastes not otherwise specified

10 12 Wastes from manufacture of ceramic goods, bricks, tiles and construction products

- 10 12 01 Waste preparation mixture before thermal processing
- 10 12 02 Flue gas dust
- 10 12 03 Other particulates and dust
- 10 12 04 Solid waste from gas treatment
- 10 12 05 Sludges from gas treatment
- 10 12 06 Discarded moulds
- 10 12 07 Spent linings and refractories
- 10 12 99 Wastes not otherwise specified

10 13 Wastes from manufacture of cement, lime and plaster and articles and products made from them

- 10 13 01 Waste preparation mixture before thermal processing
- 10 13 02 Waste from asbestos-cement manufacture
- 10 13 03 Waste from other cement-based composite materials
- 10 13 04 Waste from calcination and hydration of lime
- 10 13 05 Solid waste from gas treatment
- 10 13 06 Other particulates and dust
- 10 13 07 Sludges from gas treatment
- 10 13 08 Spent linings and refractories
- 10 13 99 Wastes not otherwise specified

11 INORGANIC METAL-CONTAINING WASTES FROM METAL TREATMENT AND THE COATING OF METALS, AND NON-FERROUS HYDROMETALLURGY**11 01 Liquid wastes and sludges from metal treatment and coating of metals, (e.g. galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing)**

- 11 01 01* Cyanidic (alkaline) waste containing heavy metals other than chromium
- 11 01 02* Cyanidic (alkaline) waste not containing heavy metals
- 11 01 03* Cyanide-free wastes containing chromium
- 11 01 04 Cyanide-free wastes not containing chromium
- 11 01 05* Acidic pickling solutions
- 11 01 06* Acids not otherwise specified
- 11 01 07* Alkalis not otherwise specified
- 11 01 08* Phosphatising sludges

11 02 Wastes and sludges from non-ferrous hydrometallurgical processes

- 11 02 01 Sludges from copper hydrometallurgy
- 11 02 02* Sludges from zinc hydrometallurgy (including jarosite, goethite)
- 11 02 03 Waste from the production of anodes for aqueous electrolytical processes
- 11 02 04 Sludges not otherwise specified

11 03 Sludges and solids from tempering processes

- 11 03 01* Waste containing cyanide
- 11 03 02* Other wastes

11 04 Other inorganic metal-containing wastes not otherwise specified

- 11 04 01 Other inorganic metal-containing wastes not otherwise specified

12 WASTES FROM SHAPING AND SURFACE TREATMENT OF METALS AND PLASTICS**12 01 Wastes from shaping (including forgoing, welding, pressing, drawing, turning, cutting and filing)**

- 12 01 01 Ferrous metal filings and turnings
- 12 01 02 Other ferrous metal particles
- 12 01 03 Non-ferrous metal filings and turnings
- 12 01 04 Other non-ferrous metal particles

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- 12 01 05 Plastics particles
 - 12 01 06* Waste machining oils containing halogens (except emulsions)
 - 12 01 07* Waste machining oils free of halogens (except emulsions)
 - 12 01 08* Waste machining emulsions containing halogens
 - 12 01 09* Waste machining emulsions free of halogens
 - 12 01 10* Synthetic machining oils
 - 12 01 11* Machining sludges
 - 12 01 12* Spent waxes and fats
 - 12 01 13 Welding waste
 - 12 01 99 Wastes not otherwise specified
 - 12 02 Wastes from mechanical surface treatment processes (blasting, grinding, honing, lapping, polishing)**
 - 12 02 01 Spent blasting grit
 - 12 02 02 Sludges from grinding, honing and lapping
 - 12 02 03 Polishing sludges
 - 12 02 99 Wastes not otherwise specified
 - 12 03 Wastes from water and steam degreasing processes (except 11)**
 - 12 03 01* Aqueous washing liquids
 - 12 03 02* Steam degreasing waste
 - 13 OIL WASTES (except edible oils, 05 and 12)**
 - 13 01 Waste hydraulic oils and brake fluids**
 - 13 01 01* Hydraulic oils, containing PCBs or PCTs
 - 13 01 02* Other chlorinated hydraulic oils (except emulsions)
 - 13 01 03* Non-chlorinated hydraulic oils (except emulsions)
 - 13 01 04* Chlorinated emulsions
 - 13 01 05* Non-chlorinated emulsions
 - 13 01 06* Hydraulic oils containing only mineral oil
 - 13 01 07* Other hydraulic oils
 - 13 01 08* Brake fluids
 - 13 02 Waste engine, gear and lubricating oils**
 - 13 02 01* Chlorinated engine, gear and lubricating oils
 - 13 02 02* Non-chlorinated engine, gear and lubricating oils
 - 13 02 03* Other engine, gear and lubricating oils
 - 1303 Waste insulating and heat transmission oils and other liquids**
 - 13 03 01* Insulating or heat transmission oils and other liquids containing PCBs or PCTs
 - 13 03 02* Other chlorinated insulating and heat transmission oils and other liquids
 - 13 03 03* Non-chlorinated insulating and heat transmission oils and other liquids
 - 13 03 04* Synthetic insulating and heat transmission oils and other liquids
 - 13 03 05* Mineral insulating and heat transmission oils
 - 13 04 Bilge oils**
 - 13 04 01* Bilge oils from inland navigation
 - 13 04 02* Bilge oils from jetty sewers
 - 13 04 03* Bilge oils from other navigation
 - 13 05 Oil/water separator contents**
 - 13 05 01* Oil/water separator solids
 - 13 05 02* Oil/water separator sludges
 - 13 05 03* Interceptor sludges
 - 13 05 04* Desalter sludges or emulsions
 - 13 05 05* Other emulsions

- 13 06 Oil waste not otherwise specified**
13 06 01* Oil waste not otherwise specified
- 14 WASTES FROM ORGANIC SUBSTANCES USED AS SOLVENTS (except 07 and 08)**
- 14 01 Wastes from metal degreasing and machinery maintenance**
14 01 01* Chlorofluorocarbons
14 01 02* Other halogenated solvents and solvent mixes
14 01 03* Other solvents and solvent mixes
14 01 04* Aqueous solvent mixes containing halogens
14 01 05* Aqueous solvent mixes free of halogens
14 01 06* Sludges or solid wastes containing halogenated solvents
14 01 07* Sludges or solid wastes free of halogenated solvents
- 140 2 Wastes from textile cleaning and degreasing of natural products**
14 02 01* Halogenated solvents and solvent mixes
14 02 02* Solvent mixes or organic liquids free of halogenated solvents
14 02 03* Sludges or solid waste containing halogenated solvents
14 02 04* Sludges or solid waste containing other solvents
- 14 03 Wastes from the electronic industry**
14 03 01* Chlorofluorocarbons
14 03 02* Other halogenated solvents
14 03 03* Solvents and solvent mixes free of halogenated solvents
14 03 04* Sludges or solid wastes containing halogenated solvents
14 03 05* Sludges or solid wastes containing other solvents
- 14 04 Wastes from coolants, foam/aerosol propellents**
14 04 01* Chlorofluorocarbons
14 04 02* Other halogenated solvents and solvent mixes
14 04 03* Other solvents and solvent mixes
14 04 04* Sludges or solid waste containing halogenated solvents
14 04 05* Sludges or solid waste containing other solvents
- 14 05 Wastes from solvent and coolant recovery (still bottoms)**
14 05 01* Chlorofluorocarbons
14 05 02* Halogenated solvents and solvent mixes
14 05 03* Other solvents and solvent mixes
14 05 04* Sludges containing halogenated solvents
14 05 05* Sludges containing other solvents
- 15 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**
- 15 01 Packaging**
15 01 01 Paper and cardboard packaging
15 01 02 Plastic packaging
15 01 03 Wooden packaging
15 01 04 Metallic packaging
15 01 05 Composite packaging
15 01 06 Mixed packaging
15 01 07 Glass packaging
15 01 08* Packaging containing residues of or contaminated by dangerous substances

- 15 02 Absorbents, filter materials, wiping cloths and protective clothing**
- 15 02 02* Absorbents, filter materials, wiping cloths, protective clothing contaminated by dangerous substances
- 15 02 03 Absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
- 16 WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
- 16 01 End-of-life vehicles and their components**
- 16 01 03 End-of-life tyres
- 16 01 04 Discarded vehicles
- 16 01 06 End-of-life vehicles, drained of liquids and emptied of other hazardous components
- 16 01 99 Wastes not otherwise specified
- 16 02 Discarded equipment and its components**
- 16 02 09* Transformers and capacitors containing PCBs or PCTs
- 16 02 10* Discarded equipment containing or contaminated by PCBs or PCTs other than those mentioned in 16 02 09
- 16 02 11* Discarded equipment containing chlorofluorocarbons
- 16 02 12* Discarded equipment containing free asbestos
- 16 02 13* Discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
- 16 02 14 Discarded equipment other than those mentioned in 16 02 09 to 16 02 13
- 16 02 15* Hazardous components removed from discarded equipment
- 16 02 16 Components removed from discarded equipment other than those mentioned in 16 02 15
- 16 03 Off-specification batches**
- 16 03 01 Inorganic off-specification batches
- 16 03 02 Organic off-specification batches
- 16 04 Waste explosives**
- 16 04 01* Waste ammunition
- 16 04 02* Fireworks waste
- 16 04 03* Other waste explosives
- 16 05 Chemicals and gases in containers**
- 16 05 01 Industrial gases in high pressure cylinders, LPG containers and industrial aerosol containers (including halons)
- 16 05 02 Other waste containing inorganic chemicals, e.g. lab chemicals not otherwise specified, fire extinguishing powders
- 16 05 03 Other waste containing organic chemicals, e.g. lab chemicals not otherwise specified
- 16 06 Batteries and accumulators**
- 16 06 01* Lead batteries
- 16 06 02* Ni-Cd batteries
- 16 06 03* Mercury-containing batteries
- 16 06 04 Alkaline batteries (except 16 06 03)
- 16 06 05 Other batteries and accumulators
- 16 06 06* Electrolyte from batteries and accumulators
- 16 07 Wastes from transport and storage tank cleaning (except 05 and 12)**
- 16 07 01* Waste from marine transport tank cleaning, containing chemicals
- 16 07 02* Waste from marine transport tank cleaning, containing oil
- 16 07 03* Waste from railway and road transport tank cleaning, containing oil
- 16 07 04* Waste from railway and road transport tank cleaning, containing chemicals
- 16 07 05* Waste from storage tank cleaning, containing chemicals
- 16 07 06* Waste from storage tank cleaning, containing oil
- 16 07 07 Solid waste from ship cargoes
- 16 07 99 Wastes not otherwise specified

16 08 Spent catalysts

- 16 08 01 Spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08 07)
- 16 08 02* Spent catalysts containing dangerous transition metals ⁽¹⁾ or transition metal compounds
- 16 08 03 Spent catalysts containing other transition metals ⁽²⁾ or transition metal compounds (except 16 08 07)
- 16 08 04 Spent fluid catalytic cracking catalysts
- 16 08 05* Spent catalysts containing phosphoric acid
- 16 08 06* Spent liquids used as catalysts
- 16 08 07* Spent catalysts contaminated with dangerous substances

17 CONSTRUCTION AND DEMOLITION WASTES (INCLUDING ROAD CONSTRUCTION)**17 01 Concrete, bricks, tiles, ceramics, and gypsum-based materials**

- 17 01 01 Concrete
- 17 01 02 Bricks
- 17 01 03 Tiles and ceramics
- 17 01 04 Gypsum-based construction materials
- 17 01 05 Asbestos-based construction materials

17 02 Wood, glass and plastic

- 17 02 01 Wood
- 17 02 02 Glass
- 17 02 03 Plastic

17 03 Asphalt, tar and tarred products

- 17 03 01 Asphalt containing tar
- 17 03 02 Asphalt not containing tar
- 17 03 03 Tar and tar products

17 04 Metals (including their alloys)

- 17 04 01 Copper, bronze, brass
- 17 04 02 Aluminium
- 17 04 03 Lead
- 17 04 04 Zinc
- 17 04 05 Iron and steel
- 17 04 06 Tin
- 17 04 07 Mixed metals
- 17 04 08 Cables

17 05 Soil and dredging spoil

- 17 05 03* Soil and stones containing dangerous substances
- 17 05 04 Soil and stones other than those mentioned in 17 05 03
- 17 05 05* Dredging spoil containing dangerous substances
- 17 05 06 Dredging spoil other than those mentioned in 17 05 05

17 06 Insulation materials

- 17 06 01* Insulation materials containing asbestos
- 17 06 02 Other insulation materials

17 07 Mixed construction and demolition waste

- 17 07 02* Mixed construction and demolition waste or separated fractions containing dangerous substances
- 17 07 03 Mixed construction and demolition waste other than those mentioned in 17 07 02

- 18 WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)**
- 18 01 Wastes from natal care, diagnosis, treatment or prevention of disease in humans**
- 18 01 01 Sharps (except 18 0103)
- 18 01 02 Body parts and organs including blood bags and blood preserves (except 18 0103)
- 18 01 03* Waste whose collection and disposal is subject to special requirements in view of the prevention of infection
- 18 01 04 Waste whose collection and disposal is not subject to special requirements in view of the prevention of infection, (e.g. dressings, plaster casts, linen, disposable clothing, diapers)
- 18 01 06* Chemicals consisting of or containing dangerous substances
- 18 01 07 Chemicals other than those mentioned in 18 0106
- 18 01 08* Cytotoxic and cytostatic medicines
- 18 01 09 Medicines other than those mentioned in 18 010 8
- 18 01 10* Amalgam waste from dental care
- 18 02 Wastes from research, diagnosis, treatment or prevention of disease involving animals**
- 18 02 01 Sharps (except 18 02 02)
- 18 02 02* Waste whose collection and disposal is subject to special requirements in view of the prevention of infection
- 18 02 03 Waste whose collection and disposal is not subject to special requirements in view of the prevention of infection
- 18 02 05* Chemicals consisting of or containing dangerous substances
- 18 02 06 Chemicals other than those mentioned in 18 02 05
- 18 02 07* Cytotoxic and cytostatic medicines
- 18 02 08 Medicines other than those mentioned in 18 02 07
- 19 WASTES FROM WASTE TREATMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE WATER INDUSTRY**
- 19 01 Wastes from incineration or pyrolysis of waste**
- 19 01 02 Ferrous materials removed from bottom ash
- 19 01 05* Filter cake from gas treatment
- 19 01 06* Aqueous liquid waste from gas treatment and other aqueous liquid waste
- 19 01 07* Solid waste from gas treatment
- 19 01 10* Spent activated carbon from flue gas treatment
- 19 01 11* Bottom ash and slag containing dangerous substances
- 19 01 12 Bottom ash and slag other than those mentioned in 19 01 11
- 19 01 13* Fly ash containing dangerous substances
- 19 01 14 Fly ash other than those mentioned in 19 01 13
- 19 01 15* Boiler dust containing dangerous substances
- 19 01 16 Boiler dust other than those mentioned in 19 01 15
- 19 01 17* Pyrolysis waste containing dangerous substances
- 19 01 18 Pyrolysis waste other than those mentioned in 19 01 17
- 19 01 99 Wastes not otherwise specified
- 19 02 Wastes from specific physico/chemical treatments of industrial waste, (e.g. dechromatation, decyanidation, neutralisation)**
- 19 02 01* Metal hydroxide sludges and other sludges from metal insolubilisation treatment
- 19 02 03 Premixed waste composed only of wastes not marked as hazardous
- 19 02 04* Premixed waste composed of at least one waste marked as hazardous

- 19 03 Stabilised/solidified wastes** ⁽³⁾
- 19 03 04* Waste marked as hazardous, partly stabilised ⁽⁴⁾
- 19 03 05 Stabilised waste other than those mentioned in 19 03 04
- 19 03 06* Waste marked as hazardous, solidified
- 19 03 07 Solidified waste other than those mentioned in 19 03 06
- 19 04 Vitrified waste and wastes from vitrification**
- 19 04 01 Vitrified waste
- 19 04 02* Fly ash and other flue gas treatment waste
- 19 04 03* Non-vitrified solid phase
- 19 04 04 Aqueous liquid waste from vitrified waste tempering
- 19 05 Wastes from aerobic treatment of solid wastes**
- 19 05 01 Non-composted fraction of municipal and similar waste
- 19 05 02 Non-composted fraction of animal and vegetable waste
- 19 05 03 Off-specification compost
- 19 05 99 Wastes not otherwise specified
- 19 06 Wastes from anaerobic treatment of waste**
- 19 06 01 Anaerobic treatment sludges of municipal and similar waste
- 19 06 02 Anaerobic treatment sludges of animal and vegetal waste
- 19 06 99 Wastes not otherwise specified
- 19 07 Landfill leachate**
- 19 07 01 Landfill leachate
- 19 08 Wastes from waste water treatment plants not otherwise specified**
- 19 08 01 Screenings
- 19 08 02 Waste from desanding
- 19 08 03* Grease and oil mixture from oil/waste water separation
- 19 08 04 Sludges from the treatment of industrial waste water
- 19 08 05 Sludges from treatment of urban waste water
- 19 08 06* Saturated or spent ion exchange resins
- 19 08 07* Solutions and sludges from regeneration of ion exchangers
- 19 08 99 Wastes not otherwise specified
- 19 09 Wastes from the preparation of drinking water or water for industrial use**
- 19 09 01 Solid waste from primary filtration and screenings
- 19 09 02 Sludges from water clarification
- 19 09 03 Sludges from decarbonation
- 19 09 04 Spent activated carbon
- 19 09 05 Saturated or spent ion exchange resins
- 19 09 06 Solutions and sludges from regeneration of ion exchangers
- 19 09 99 Wastes not otherwise specified
- 19 10 Wastes from shredding of metal-containing waste**
- 19 10 01 Iron and steel waste
- 19 10 02 Non-ferrous waste
- 19 10 03* Fluff — light fraction containing dangerous substances
- 19 10 04 Fluff — light fraction other than those mentioned in 19 10 03
- 19 10 05* Dust and other fractions containing dangerous substances
- 19 10 06 Dust and other fractions other than those mentioned in 19 10 05

20 MUNICIPAL WASTES AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES INCLUDING SEPARATELY COLLECTED FRACTIONS**20 01 Separately collected fractions**

- 20 01 01 Paper and cardboard
- 20 01 02 Glass
- 20 01 03 Small plastics
- 20 01 04 Other plastics
- 20 01 05 Small metals (cans, etc.)
- 20 01 06 Other metals
- 20 01 07 Wood
- 20 01 08 Organic kitchen waste
- 20 01 10 Clothes
- 20 01 11 Textiles
- 20 01 13* Solvents
- 20 01 14* Acids
- 20 01 15* Alkalines
- 20 01 17* Photochemicals
- 20 01 19* Pesticides
- 20 01 21* Fluorescent tubes and other mercury-containing waste
- 20 01 22 Aerosols
- 20 01 23* Discarded equipment containing chlorofluorocarbons
- 20 01 25 Edible oil and fat
- 20 01 26* Oil and fat other than those mentioned in 20 04 25
- 20 01 27* Paint, inks, adhesives and resins containing dangerous substances
- 20 01 28 Paint, inks, adhesives and resins other than those mentioned in 20 01 27
- 20 01 29* Detergents containing dangerous substances
- 20 01 30 Detergents other than those mentioned in 20 01 29
- 20 01 31* Cytotoxic and cytostatic medicines
- 20 01 32 Medicines other than those mentioned in 20 01 31
- 20 01 33* Mixed batteries and accumulators containing batteries or accumulators included in 16 06 01, 16 06 02 or 16 06 03
- 20 01 34 Batteries and accumulators other than those mentioned in 20 01 33
- 20 01 35* Discarded equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
- 20 01 36 Discarded equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35

20 02 Garden and park wastes (including cemetery waste)

- 20 02 01 Compostable waste
- 20 02 02 Soil and stones
- 20 02 03 Other non-compostable wastes

20 03 Other municipal wastes

- 20 03 01 Mixed municipal waste
- 20 03 02 Waste from markets
- 20 03 03 Street cleaning residues
- 20 03 04 Septic tank sludge

(1) Transition metals are: scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum, tantalum, rhenium.

(2) See footnote 1.

(3) Stabilisation processes change the dangerousness of the constituents in the waste and thus transform hazardous waste into non-hazardous waste. Solidification processes only change the physical state of the waste by using additives, (e.g. liquid into solid) without changing the chemical properties of the waste.

(4) A waste is considered as partly stabilised if after the stabilisation process dangerous constituents which have not been changed completely into non-dangerous constituents could be released into the environment in short, middle or long term.

Annex 3.2-1: Format for data transfer

Table 1: WStatR – Waste Generation By Economic Sector (Tonnes)
(according to Annex I of WStatR)

		WASTE ACTIVITY			CA00000	CB00000	CC00000	Create Columns for all waste activity codes							
		NACE Rev 2 > EWC-Stat Version 3 V	Hazardous	Wet / Dry	1			2			3			Create columns for all 2-digit economic activity codes	Total
Code	WASTE ITEM	Description			2008			2008			2008			For each economic activity code, create columns for each quarter	2008
10.2	C1020	Mixed and undifferentiated materials	HZ	W											
10.3	C1030	Sorting residues	NH	W											
10.3	C1030	Sorting residues	HZ	W											
12 (excl. 11.3)	C1100	Common sludges (excl. dredging spoils)	NH	D											
11.3	C1130	Dredging spoils	NH	D											
12 (excl. 12.4, 12.6)	C1200	Mineral wastes	NH	W											
12 (excl. 12.4, 12.6)	C1200	Mineral wastes	HZ	W											
12.4	C1240	Combustion wastes	NH	W											
12.4	C1240	Combustion wastes	HZ	W											
12.6	C1260	Contaminated soils and poll. dredging spoils	HZ	W											
13	C1300	Solidified, stabilised or vitrified wastes	NH	W											
13	C1300	Solidified, stabilised or vitrified wastes	HZ	W											
	C0000	Total, non-hazardous	NH		0			0				0			
	C0000	Total, hazardous	HZ		0			0				0			
	C0000	Total, general	TH		0			0				0			

Table 2: WStatR – Waste incineration (tonnes) : Example for Baden—Württemberg, Germany

(according to Annex II of WStatR)

EWC-Stat Version 3	WASTE ITEM	Description	HAZARDOUS INDICATOR	WASTE OPERATION	ENEREC				INCLAN					
				Wet / Dry	Energy recovery (R1)				Incineration on land (D10)					
Code														
BADEN- WÜRTTEMBERG					2008				2008					
01, 02, 03	C0100	Chemical wastes	NH	W										
01, 02, 03 (excl. 01.3)	C0100	Chemical wastes excluding used oils	HZ	W										
01.3	C0130	Used oils	HZ	W										
05	C0500	Health care and biological wastes	NH	W										
05	C0500	Health care and biological wastes	HZ	W										
07.7	C0770	Waste containing PCB	HZ	W										
10.1	C1010	Household and similar wastes	NH	W										
10.2	C1020	Mixed and undifferentiated materials	NH	W										
10.2	C1020	Mixed and undifferentiated materials	HZ	W										
10.3	C1030	Sorting residues	NH	W										
10.3	C1030	Sorting residues	HZ	W										
11	C1100	Common sludges	NH	D										
06, 07, 08, 09, 12, 13	C9999	Other wastes	NH	W										
06, 07, 08, 09, 12, 13, excl. 07.7	C9999	Other wastes	HZ	W										
	C0000	Total incineration	NH									0		
	C0000	Total incineration	HZ									0		
	C0000	Total incineration	TH									0		

Table 3: WStatR – Operations which may lead to recovery (tonnes) : Example for Baden—Württemberg, Germany
(according to Annex II of WStatR)

EWC-Stat Version 3	WASTE ITEM	Description	HAZARDOUS INDICATOR	WASTE_OPERATION	RECOV			
				Wet / Dry	Recovery (excl. energy recovery) (R2, R3, R4, R5, R6, R7, R8, R9, R10, R11)			
Code					2008			
BADEN- WÜRTTEMBERG								
01.3	C0130	Used oils	HZ	W				
06	C0600	Metallic wastes	NH	W				
06	C0600	Metallic wastes	HZ	W				
07.1	C0710	Glass wastes	NH	W				
07.1	C0710	Glass wastes	HZ	W				
07.2	C0720	Paper and cardboard wastes	NH	W				
07.3	C0730	Rubber wastes	NH	W				
07.4	C0740	Plastic wastes	NH	W				
07.5	C0750	Wood wastes	NH	W				
07.6	C0760	Textile wastes	NH	W				
09 excl. 09.11, 09.3	C0900	Animal and vegetal wastes	NH	W				
09.11	C0911	Animal waste of food preparation and products	NH	W				
09.3	C0930	Animal faeces, urine and manure	NH	W				
12	C1200	Mineral wastes	NH	W				
12	C1200	Mineral wastes	HZ	W				
01, 02, 03, 05, 08, 10, 11, 13	C9999	Other wastes	NH	W				
01, 02, 03, 05, 07.5, 07.7, 08, 10, 11, 13	C9999	Other wastes	HZ	W				
	C0000	Total, non-hazardous	NH			0		
	C0000	Total, hazardous	HZ			0		
	C0000	Total	TH			0		

Table 4: WStatR – Disposal other than incineration (tonnes) : Example for Baden—Württemberg, Germany
(according to Annex II of WStatR)

EWC-Stat Version 3	WASTE ITEM	Description	HAZARDOUS INDICATOR	WASTE OPERATION	DEPLAN				LANTRE					
				Wet / Dry	Deposit onto or into land (D1, D3, D4, D5, D12)				Land treatment and release into water bodies (D2, D6, D7)					
Code					2008				2008					
BADEN- WÜRTTEMBERG														
01, 02, 03	C0100	Chemical wastes	NH	W										
01, 02, 03 (excl. 01.3)	C0100	Chemical wastes excluding used oils	HZ	W										
01.3	C0130	Used oils	HZ	W										
09 excl. 09.11, 09.3	C0900	Animal and vegetal wastes	NH	W										
09.11	C0911	Animal waste of food preparation and products	NH	W										
09.3	C0930	Animal faeces, urine and manure	NH	W										
10.1	C1010	Household and similar wastes	NH	W										
10.2	C1020	Mixed and undifferentiated materials	NH	W										
10.2	C1020	Mixed and undifferentiated materials	HZ	W										
10.3	C1030	Sorting residues	NH	W										
10.3	C1030	Sorting residues	HZ	W										
11	C1100	Common sludges	NH	D										
12	C1200	Mineral wastes	NH	W										
12	C1200	Mineral wastes	HZ	W										
05, 06, 07, 08, 13	C9999	Other wastes	NH	W										
05, 06, 07, 08, 13	C9999	Other wastes	HZ	W										
	C0000	Total, non-hazardous	NH									0		
	C0000	Total, hazardous	HZ									0		
	C0000	Total, general	TH									0		

**Table 5: WStatR – Number And Capacity Of Recovery And Disposal Operations Per Region, Population Served By Collection
(National Totals by District and “Land” for Germany)**

WASTE_OPERATION	ENEREC		ENEREC		POP SER				
Regions (NUTS level 2)	Energy recovery (R1)*				Identical columns have to be provided for the following topics: Recovery (excl. energy recovery) (R2, R3, R4, R5, R6, R7, R8, R9, R10, R11)	Population served by collection (P)			
UNIT	N		C			P			
UNIT_MULTIPLIER	1		1			1			
DECIMALS	0		0			0			
	no. of facilities		capacity (t/a)			%			
	2008		2008			2008			
Stuttgart									
Karlsruhe									
Freiburg									
Tübingen									
BADEN-WÜRTTEMBERG									
Oberbayern									
Niederbayern									
Oberpfalz									
Oberfranken									
Mittelfranken									
Unterfranken									
Schwaben									
BAYERN									
Berlin									
BERLIN									
Brandenburg - Nordost									
Brandenburg - Südwest									
BRANDENBURG									
Bremen									
BREMEN									
Hamburg									
HAMBURG									
Darmstadt									
Gießen									
Kassel									
HESSEN									
Mecklenburg-Vorpommern									

Deposit onto or into land (D1, D3, D4, D5, D12)

Land treatment and release into water bodies (D2, D6, D7)

MECKLENBURG-VORPOMMERN				
Braunschweig				
Hannover				
Lüneburg				
Weser-Ems				
NIEDERSACHSEN				
Düsseldorf				
Köln				
Münster				
Detmold				
Arnsberg				
NORDRHEIN-WESTFALEN				
Koblenz				
Trier				
Rheinessen-Pfalz				
RHEINLAND-PFALZ				
Saarland				
SAARLAND				
Chemnitz				
Dresden				
Leipzig				
SACHSEN				
Sachsen-Anhalt				
SACHSEN-ANHALT				
Schleswig-Holstein				
SCHLESWIG-HOLSTEIN				
Thüringen				
THÜRINGEN				
National total				

Notes:

White cells:

Data is mandatory. Estimates may be used though they should be based on empirical data and explained in the description of the methodology.

Yellow cells:

Data is calculated but cell can be edited as well.

Annex 3.2.2:
Waste Categories For Which Waste Statistics Have To Be Prepared
(According To EC Regulation 2150/2002)

ANNEX I

SECTION 2

Waste categories

1. Statistics on the following waste categories are to be produced:

Aggregates list

Item No	EWC-Stat/Version 3		Hazardous/Non-hazardous waste
	Code	Description	
1	01.1	Spent solvents	Hazardous
2	01.2	Acid, alkaline or saline wastes	Non-hazardous
3	01.2	Acid, alkaline or saline wastes	Hazardous
4	01.3	Used oils	Hazardous
5	01.4	Spent chemical catalysts	Non-hazardous
6	01.4	Spent chemical catalysts	Hazardous
7	02	Chemical preparation wastes	Non-hazardous
8	02	Chemical preparation wastes	Hazardous
9	03.1	Chemical deposits and residues	Non-hazardous
10	03.1	Chemical deposits and residues	Hazardous
11	03.2	Industrial effluent sludges	Non-hazardous
12	03.2	Industrial effluent sludges	Hazardous
13	05	Health care and biological wastes	Non-hazardous
14	05	Health care and biological wastes	Hazardous
15	06	Metallic wastes	Non-hazardous
16	06	Metallic wastes	Hazardous
17	07.1	Glass wastes	Non-hazardous
18	07.1	Glass wastes	Hazardous
19	07.2	Paper and cardboard wastes	Non-hazardous
20	07.3	Rubber wastes	Non-hazardous
21	07.4	Plastic wastes	Non-hazardous
22	07.5	Wood wastes	Non-hazardous
23	07.5	Wood wastes	Hazardous
24	07.6	Textile wastes	Non-hazardous
25	07.7	Waste containing PCB	Hazardous
26	08	Discarded equipment	Non-hazardous

Aggregates list			
Item No	EWC-Stat/Version 3		Hazardous/Non-hazardous waste
	Code	Description	
27	08	Discarded equipment	Hazardous
28	08.1	Discarded vehicles	Non-hazardous
29	08.1	Discarded vehicles	Hazardous
30	08.41	Batteries and accumulators wastes	Non-hazardous
31	08.41	Batteries and accumulators wastes	Hazardous
32	09	Animal and vegetal wastes (excluding animal waste of food preparation and products; and excluding animal faeces, urine and manure)	Non-hazardous
33	09.11	Animal waste of food preparation and products	Non-hazardous
34	09.3	Animal faeces, urine and manure	Non-hazardous
35	10.1	Household and similar wastes	Non-hazardous
36	10.2	Mixed and undifferentiated materials	Non-hazardous
37	10.2	Mixed and undifferentiated materials	Hazardous
38	10.3	Sorting residues	Non-hazardous
39	10.3	Sorting residues	Hazardous
40	11	Common sludges (excluding dredging spoils)	Non-hazardous
41	11.3	Dredging spoils	Non-hazardous
42	12.1 + 12.2 + 12.3 + 12.5	Mineral wastes (excluding combustion wastes, contaminated soils and polluted dredging spoils)	Non-hazardous
43	12.1 + 12.2 + 12.3 + 12.5	Mineral wastes (excluding combustion wastes, contaminated soils and polluted dredging spoils)	Hazardous
44	12.4	Combustion wastes	Non-hazardous
45	12.4	Combustion wastes	Hazardous
46	12.6	Contaminated soils and polluted dredging spoils	Hazardous
47	13	Solidified, stabilised or vitrified wastes	Non-hazardous
48	13	Solidified, stabilised or vitrified wastes	Hazardous'

Annex 3.7-1: Enforcement measures

(source: http://ec.europa.eu/community_law/infringements/infringements_en.htm)

Infringements of EU law

Each Member State is responsible for the implementation of Community law (adoption of implementing measures before a specified deadline, conformity and correct application) within its own legal system. Under the Treaties (Article 226 of the EC Treaty; Article 141 of the Euratom Treaty), the Commission of the European Communities is responsible for ensuring that Community law is correctly applied. Consequently, where a Member State fails to comply with Community law, the Commission has powers of its own (action for non-compliance) to try to bring the infringement to an end and, where necessary, may refer the case to the European Court of Justice.

The Commission takes whatever action it deems appropriate in response to either a complaint or indications of infringements which it detects itself. Non-compliance means failure by a Member State to fulfil its obligations under Community law. It may consist either of action or omission. The term State is taken to mean the Member State which infringes Community law, irrespective of the authority - central, regional or local - to which the compliance is attributable.

Under the non compliance procedure started by the Commission, the first phase is the pre litigation administrative phase also called "Infringement proceedings" The purpose of this pre-litigation stage is to enable the Member State to conform voluntarily with the requirements of the Treaty, There are several formal stages in the infringement procedure. The Commission may first have to carry out some investigation, namely when infringement procedures are launched further to a complaint.

The letter of formal notice represents the first stage in the pre-litigation procedure, during which the Commission requests a Member State to submit its observations on an identified problem regarding the application of Community law within a given time limit.

The purpose of the reasoned opinion is to set out the Commission's position on the infringement and to determine the subject matter of any action, requesting the Member State to comply within a given time limit. The reasoned opinion must give a coherent and detailed statement, based on the letter of formal notice, of the reasons that have led it to conclude that the Member State concerned has failed to fulfil one or more of its obligations under the Treaties or secondary legislation. Referral by the Commission to the Court of Justice opens the litigation procedure.

In this respect, the Commission must point out that, in accordance with the established case-law of the Court of Justice, it enjoys a discretionary power in deciding whether or not to commence infringement proceedings and to refer a case to the Court. The Court has also acknowledged the Commission's power to decide at its own discretion when to commence an action.

Opening of an infringement procedure: formal contacts between the Commission and the Member State concerned

If the Commission considers that there may be an infringement of Community law which warrants the opening of an infringement procedure, it addresses a "letter of formal notice" to the Member State concerned, requesting it to submit its observations by a specified date.

The Member State has to adopt a position on the points of fact and of law on which the Commission bases its decision to open the infringement procedure.

In the light of the reply or absence of a reply from the Member State concerned, the Commission may decide to address a "reasoned opinion" to the Member State, clearly and definitively setting out the reasons why it considers there to have been an infringement of Community law and calling on the Member State to comply with Community law within a specified period (normally two months).

The purpose of those formal contacts is to determine whether there is indeed an infringement of Community law and, if so, to resolve the case at this stage without having to take it to the Court of Justice.

In the light of the reply, the Commission may also decide not to proceed with the infringement procedure, for example where the Member State provides credible assurances as to its intention to amend its legislation or administrative practice. Most cases can be resolved in this way.

Referral to the Court of Justice of the European Communities

If the Member State fails to comply with the reasoned opinion, the Commission may decide to bring the case before the Court of Justice of the European Communities.

On average, it takes about two years for the Court of Justice to rule on cases brought by the Commission.

Judgments of the Court of Justice differ from those of national courts.

At the close of the procedure, the Court of Justice delivers a judgment stating whether there has been an infringement.

The Court of Justice can neither annul a national provision which is incompatible with Community law, nor force a national administration to respond to the request of an individual, nor order the Member State to pay damages to an individual adversely affected by an infringement of Community law.

It is up to a Member State against which the Court of Justice has given judgment to take whatever measures are necessary to comply with it, particularly to resolve the dispute which gave rise to the procedure.

If the Member State does not comply, the Commission may again bring the matter before the Court of Justice seeking to have periodic penalty payments until such time as it puts an end to the infringement and/or a lump sum payment imposed on the Member State.

