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Directorate E: Sectoral and regional statistics
Unit E-3: Environment and forestry



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**Quality Report
on Waste Statistics 2012**

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2 Identification

Country name **Croatia**

Reference year **2012**

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Data set 2: Waste treatment by waste category (EWC-STAT) and treatment category, tonnes/year

Data set 3: Number and capacity of recovery and disposal facilities (per NUTS 2 region) and population served by collection scheme (national)

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3 Contact information on the person(s) responsible for the quality of waste statistics

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4 Description of the parties involved/sources used in the data collection

Table 1: Institutions involved and distribution of tasks

Name of institution	Description of key responsibilities
Croatian Environment Agency (CEA)	Collects, checks and delivers (submits) data according to WSR. Maintains the Waste Management Information System (Environmental Pollution Register (EPR), Waste Management Permits Register, Landfill register, Database on transboundary movement of waste, Database on some special waste streams etc).
The 20 county offices and office of the City of Zagreb	In cooperation with the competent inspection ensure the checking of reported data to EPR in terms of their completeness, consistency and credibility. Permits for non-hazardous waste and municipal waste management.
Ministry of Environmental and	Collects data on transboundary shipment of waste.

Nature Protection	Permits for hazardous waste management and incineration of waste.
Environmental Protection and Energy Efficiency Fund (EPEEF)	Collects detail data on special waste categories (packaging waste, waste tyres, waste oils, waste batteries and accumulators, end-of-life vehicles, waste electric and electronic equipment, waste containing asbestos) according to special ordinances.
Ministry of Agriculture	Collects data on animal by-products

The Croatian Environment Agency (CEA) is a public institution established by the Croatian Government in June 2002. It is responsible for maintaining the Waste Management Information System, enabling and facilitating access to information on waste to decision-makers and general public, developing reports on the status of the waste sector on the national and international level. By the *Environmental Protection Act (OG No 110/07)* and the Croatian Environment Agency (CEA) is appointed as central information authority of the Republic of Croatia for coordinating reporting and reporting to the European Commission on the implementation of specific environmental protection regulations, including waste. In 2012, through an agreement between the CEA and Croatian Bureau of Statistics (CBS), responsibilities for the preparation and submitting of data according to WSR to Eurostat were transferred from CBS to the CEA. Data on Waste statistics for the reference year 2010 and previous years were delivered by the Croatian Bureau of Statistics.

According to the *Environmental Protection Act (OG No 110/07)*, *Waste Act (Official Gazette No. 178/04, 111/06, 60/08, 87/09)* and subordinate legislation, CEA is collecting most of waste data, such as: data on waste from Environmental Pollution Register (annual data on produced, collected, treated waste) (on-line database); data on waste management permits and certificates (on-line database); data for landfill register (on-line database); data on transboundary shipment of waste data on waste management plans (on-line database) etc.

Maintaining of database The Environmental Pollution Register (EPR) is stipulated by *Ordinance on Environmental Pollution Register (OG 35/08)*. It contains annual data on waste generators (> 50 kg hazardous and/or > 2000 kg non-hazardous), all waste collectors and all waste treatment facilities. Electronic software (application) is used for accessing and maintaining the EPR and it enables network data entry, processing and display of data stored within the EPR.

Waste Management Permits Register (WMPR) database contains information and documents on waste management permits (for hazardous, non-hazardous and municipal waste), certificates of registration in the *Register of waste carriers, mediators and exporters of non-hazardous waste for recovery*.

Landfill register –contains general data on technical measures on landfills, data on capacities, data on environmental protection measures carried out on landfills, data on status of landfill activity etc. It is not stipulated by legislation but CEA periodically collects these data from landfills operators.

Transboundary Waste Shipment Database (TWSD) contains data from decisions for transboundary shipment of waste which is subject to notification procedure and data from yearly reports on quantities and types of shipped waste by importers and exporters of waste.

According to the Waste Act importers and exporters of waste are obliged to submit yearly report on quantities and types of shipped waste to the *Ministry of the Environmental and Nature Protection*. These data are then transferred to CEA and are part of the TWSD database run by CEA.

The Environment Protection and Energy Efficiency Fund (EPEEF) is responsible for organizing and monitoring systems for management of six special waste categories, as well as remediation of official

landfills. According to the ordinances which stipulate the management of special waste categories EPEEF collects detailed data on these waste categories. Data collected by EPEEF are used for cross-checking data reported to EPR.

Data on animal by-products not intended for human consumption are collected by Ministry of Agriculture, Directorate for veterinary and food safety which is according to the *Ordinance on animal by-products not intended for human consumption (87/09)* competent authority for the handling of animal by-products not intended for human consumption.

By entering into force a new act on *Sustainable Waste Management (OG NO 94/13) in 2013*, data on animal by-products, including data on processed products which are destined for incineration, landfilling or use in a biogas or composting plant from 2013 onwards must be reported to CEA.

General description of which methods are used in which part of the data set

Data set 1: Waste generation by waste category (EWC-STAT) and economic activities (NACE)

General description of methodology

Table 2: Description of methods for determining waste generation

Waste Item	Source																		
	1	2	3	4	5	6	10	11	12	13	14	15	16	17	18	19		
1																			
...																			
3																			
4																			
5																			
...																			
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42																			
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44																			
45																			
46																			
47																			
48																			
49																			
50																			
51																			

	Data reported by waste producers/holders into the database EPR
	Data reported by waste collectors into the database EPR
	Combination of the data reported by waste producers/holders and waste collectors into the database EPR
	Combination of the data reported by waste producers/holders, waste collectors and waste treatment facilities into the database EPR
	Combination of the data reported by waste producers/holders and waste treatment facilities into the database EPR
	Combination of the data reported by waste collectors and waste treatment facilities into the database EPR
	Combination of the data reported by waste producers/holders into the database EPR and data collected by Ministry of Agriculture
	Combination of the data reported by waste treatment facilities into the database EPR and data collected by Ministry of Agriculture
	Data reported by waste treatment facilities
	Data reported by waste producers/holders and waste collector + estimations

Table 3: Description of classifications used	Name of classification(s) used	Description of the classification(s) (in particular compatibility with WStatR requirements)
Economic activities	NACE Rev. 2.	Directly compatible with WStatR requirements
Waste types	List of Waste (LoW) Animal by-products categorised by <i>Ordinance on animal by-products not intended for human consumption (87/09)</i> in three categories were incorporated in WSR categorisation.	Converted into EWC – Stat /Version 4 classification with conversion key (Commission Regulation 574/2004/EC amending Annexes I and III to Regulation 2150/2002/EC)
Recovery and treatment operations	R&D codes	In line with Waste Framework Directive (2008/98/EC) and WStatR

Determination of waste generation by (sample) survey

N/A (Not Applicable)

Determination of waste generation in the economy on the basis of information on waste treatment

Rubber wastes (code 07.3) – in NACE sections G – U excl. 46.77 the combination of data reported by waste generators and waste treatment facilities were used. The difference in quantities reported by waste treatment facilities and waste producers/holders was taken into consideration. It was not possible to distinguish quantity of rubber wastes which originate from class 46.77, households and services sector, so the sections G – U excl. 46.77 include amounts from services sector and also amounts from households and class 46.77.

Discarded equipment (excl. discarded vehicles, batteries/accumulators) (code 08 excl. 08.1, 08.41) – in NACE sections G – U excl. 46.77 the combination of data reported by waste producers/holders and waste treatment facilities were used. It was not possible to distinguish quantity of discarded equipment which originates from class 46.77, so the quantity from this class was included in services sector (sections G – U without 46.77).

Discarded vehicles (code 08.1) - in NACE sections G – U excl. 46.77 the combination of data reported by waste producers/holders and waste treatment facilities were used in a way that it was taken into consideration the difference in quantities reported by waste treatment facilities and waste producers/holders. It was not possible to distinguish quantity of discarded vehicles which originates from class 46.77, so the quantity from this class was included in services sector (sections G – U without 46.77).

Animal and mixed food waste (code 09.1) – the combination of data reported by waste producers/holders into the database EPR and data reported by incinerators to the Ministry of Agriculture were used. It is determinate that this waste originates from divisions C10-12.

Animal faeces, urine and manure (code 09.3) – the combination of data reported by biogas plants to the Ministry of agriculture, and data reported by composting plants to EPR were used. This waste was added to Section A.

Section F – mostly data reported by waste treatment facilities and waste producers/holders were used. These data include also the data on transboundary shipment of waste reported on the registration forms for waste producers/holders. Additionally, the allocation of reported data on construction and demolition waste belonging to the waste categories Metallic wastes (06.1; 06.2; 06.3), Glass wastes (07.1), Plastic wastes (07.4) and Wood wastes (07.5) from other economic sections to section F was made. Amounts on dredging spoils (code 12.7. – hazardous waste) were determinate on the base of the data reported by waste treatment facilities.

Determination of waste generation in the economy on the basis of information on waste collection

Used oils (code 01.3) – NACE divisions C26-30, C31-33, and sections G – U excl. 46.77 – the combination of data reported by waste producers/holders and waste collectors were used. The difference in quantities of used oils reported by waste collectors and waste producers/holders was determinate and allocated among above mentioned sectors. By checking the coverage of the companies which reported data into the EPR it was determinate that in NACE divisions C26-30, C31-33 and sections G – U excl. 46.77 there are significant number of small enterprises which do not exceed the annual threshold of 50kg of hazardous waste, so they are not obliged to report data into the EPR.

Paper and cardboard wastes (code 07.2) – NACE divisions C10-12, C17-18, C31-33 - the combination of data reported by waste producers/holders and waste collectors were used. The difference in quantities of paper and cardboard wastes reported by waste collectors and waste producers/holders was determinate and allocated among above mentioned divisions. By checking the coverage of the companies which reported data into the EPR it was determinate that in mentioned divisions there are significant number of small enterprises which do not exceed the annual threshold of 2000kg of non-hazardous waste and therefore they are not obliged to report data.

Section F – Other mineral wastes (code 12.2 – asbestos waste) – the combination of data reported by waste collectors and data reported by waste producers/holders were used. The difference in quantities reported by waste collectors and waste producers/holders was taken into consideration. About 10% of generated amount of asbestos waste was reported by waste producers/holders while the rest was

reported by waste collectors. Data were crosschecked with data reported to EPEEF according Instruction on handling waste containing asbestos (OG No. 89/08).

Sections G – U excl. 46.77 -

- glass wastes (code 07.1), paper and cardboard wastes (code 07.2), batteries and accumulators wastes (code 08.41)– the combination of data reported by waste collectors (industrial waste collectors and municipal waste collectors) and data reported by waste producers/holders were used. The difference in quantities reported by waste collectors and waste producers/holders was taken into consideration. The difference between those sources was added to services sector although part of the amount possible may originate from households. It was not possible to distinguish precise shares from commerce and households.
- animal and mixed food waste (code 09.1) –biodegradable kitchen and canteen waste and edible oil and fat - the combination of data reported by waste collectors (industrial waste collectors and municipal waste collectors) and data reported by waste producers/holders were used. The difference in quantities reported by waste collectors and waste producers/holders was taken into consideration. The difference between those sources was added to services sector from which this waste originates.
- vegetal wastes (code 09.2) – biodegradable waste - the combination of data reported by municipal waste collectors, composting plants and data reported by waste producers/holders were used. The difference in quantities reported by waste collectors, composting plants and waste producers/holders was taken into consideration. The difference between those sources was added to services sector from which this waste presumably originates.
- other mineral wastes (code 12.3) – other non-biodegradable waste - the combination of data reported by municipal waste collectors and data reported by waste producers/holders were used. The difference in quantities reported by municipal waste collectors and waste producers/holders was taken into consideration. The difference between those sources was added to services sector from which this waste presumably originates.

Determination of waste generation in the economy on the basis of administrative sources

Determination of waste generation in the economy mostly was done on the basis of the data reported by waste producers/holders , waste collectors and waste treatment facilities into the EPR database.

Companies report data via Internet by means of user name and password that are assigned by the CEA. The deadline for reporting is 1st of March current year for the previous calendar year. From 1st of March until 15th of June, 20 county offices and the office of the City of Zagreb in cooperation with the competent inspection ensure the checking of data in terms of their completeness, consistency and credibility. The CEA coordinates activities relating to data quality assurance and control.

Waste producers/holders producing more than 50 kg of hazardous waste and/or more than 2000 kg of non-hazardous per a year are obliged to report annual data on registration forms PL-PPO (Registration form for producer/holder of produced waste). Reporting forms for waste producers/holders require view of the entire chain of movement of waste, from the place of generation to the place of final recovery/disposal (in case that waste is forwarded for a final recovery/disposal to another country, this location has to be specified too).

Industrial waste collectors report data on registration forms PL-SPO (Registration form for collector/carrier of industrial waste). Except general data on waste collector, forms PL-SPO require for each type of waste data on collected amounts of waste and data on locations and recovery/disposal operations to which collected waste is forwarded. In case that waste is handed over to another collector, the name of another collector has to be reported too.

Municipal waste collectors report data on registration forms PL-SKO (Registration form for municipal waste collector/carrier). Registration forms PL-SKO require view of the entire chain of movement of waste, from the place of generation (collection) to the place of final recovery/disposal. For each type of waste, municipal waste collector has to report town/municipality from which waste originates, collected amount, amount collected from households, from amenity sites..., location and recovery/disposal operation to

which collected waste is forwarded. In case of mixed municipal waste, the number of inhabitants covered by collector's service has to be specified.

Waste treatment facilities (including landfills) report data on PL-OPKO (Registration form for recovery/disposal operator of industrial and/or municipal waste). Form PL-OPKO contains general data about the operator and, for each waste type data about amounts of waste taken in the reporting year (from the territory of Croatia and imported from another countries separately), data about temporary storage, waste handling (amounts of waste regarding disposal and recovery procedures).

All registration forms (PL-PPO, PL-SPO, PL-SKO, PL-OPKO) are attached to this Quality report.

Some negligible amounts of generated waste were determined by using data contained in database on transboundary shipment of waste (export of wood waste).

Part of amounts of animal by-products not intended for human consumption were determined on the basis of the data collected by *Ministry of agriculture* which is responsible for issuing approvals of temporary storage, incineration and co-incineration of animal by-products, and approvals of intermediate plants, biogas plants and composting plants which take over animal by-products. This responsibility is stipulated by the *Ordinance on animal by-products not intended for human consumption (OG 87/09)* which lays down rules for the handling of animal by-products not intended for human consumption and animal health rules. By *the Ordinance* animal by-products are categorised in 3 categories which had to be allocated to waste statistics categories (09.1 animal and mixed food waste, 09.3 animal faeces, urine and manure).

Data on special waste categories (packaging waste, waste tyres, waste oils, waste batteries and accumulators, end-of-life vehicles, waste electric and electronic equipment, waste containing asbestos) were cross-checked with data collected by EPEEF according to ordinances on special waste categories above mentioned.

Checking coverage, coherence and completeness of available data on generated amounts within each NACE activity (except NACE sections A, B, F)

The procedure was conducted in three different steps for the remaining NACE sectors, each step assessing a different aspect of data quality (comparison with neighbouring countries of total amount of waste generated/production value by NACE, of waste categories covered by NACE and of the share hazardous/non-hazardous waste by NACE).

For all NACE activities analysed results were similar or in between the results of the three neighbouring countries analysed (Slovenia, Austria and Czech Republic).

Following these results, it was concluded that the coverage of the Croatian Register in terms of waste generation by the manufacturing and energy sectors is good.

Determination of waste generation in the economy on the basis of other methods

Household and similar wastes (code 10.1) – mixed municipal waste – data on generated amounts of mixed municipal waste by NACE activities were estimated.

According to the information given by municipal waste collectors, about 75% of produced mixed municipal waste originates from households while the rest (25%) is produced by economic activities. This 25% of totally produced amount of mixed municipal waste was divided with the number of employees in economic activities which resulted in an average ratio of generation of mixed municipal waste per employee and per year. This average was multiplied with number of employees in each NACE activity. Due to lack of data on number of employees in class 46.77, data on mixed municipal waste produced by this class are included in services sector Section G-U exclud. 46.77.

Estimated amounts of produced mixed municipal waste per economic activities are questionable quality mainly because of unregistered number of employees especially in touristic season in services providing accommodation, food preparation and serving which make a significant share in economy.

Data on municipal waste include amounts of municipal waste generated by tourists.

Determination of extractive waste generation (new section)

Table 4: Coverage of waste statistics with regard to extractive waste¹⁾

Coverage	Topsoil	Overburden	Waste-rock	Tailings (non-haz.)
Completely covered				
Partially covered				
Generally excluded	x	x	x	x

¹⁾ Please mark with an X whether the listed materials are completely covered, partially covered or generally excluded from waste statistics.

Determination of waste generated by households

Table 5: Determination methods for waste generated by households

1	Indirect determination via waste collection	
1.1	Description of reporting unit applied (waste collectors, municipalities)	Municipal waste collectors
1.2	Description of the reporting system (regular survey on waste collectors, utilisation of administrative sources)	Annual reports into the database EPR + additional estimations for population not covered by organised collection of municipal waste and for 7 municipalities/ towns for which data weren't reported.
1.3	Waste types covered	15 01 and 20 (households, commercial)
1.4	Survey characteristics (1.4a – 1.4d) Not Applicable	
	a) Total no. of collectors /municipalities (population size)	206 municipal waste collectors
	b) No. of collectors/municipalities selected for survey	206
	c) No. of responses used for the calculation of the totals	201
	d) Factor for weighting	-
1.5	Method applied for the differentiation between the sources household and commercial activities	Municipal waste collectors provided to the Agency the share of mixed municipal waste produced by households. They couldn't make distinguish between households and commercial activities. For other types of municipal data on sources (household and commercial activities) are not available.
1.6	Percentages of waste from commercial activities by waste types	Data not available
1.7	Population served by a collection scheme for mixed household and similar waste, in %	99%
2	Indirect determination via waste treatment	
2.1	Specification of waste treatment facilities selected	Waste treatment
2.2	Waste types covered	Discarded vehicles,
2.3	Method applied for the differentiation between the sources	Waste treatment facilities provided to the

	household and commercial activities	Agency the shares of discarded vehicles taken from households and commercial activities
2.4	Percentages of waste from commercial activities by waste types	2,9 %

Estimation of non-covered amount of municipal waste:

Amount of municipal waste collected (reported into the EPR) / covered population reported by registration forms PL-SKO * number of non-covered population.

Data sets 2 and 3: Waste treatment

General description of methodology, Data collection on capacity of treatment facilities, Data collection on treated amounts of waste

Relevant waste treatment facilities are identified true *WMPR database*, run by the CEA. This database contains information and documents on waste management permits. Competent authority for issuing waste management permits for hazardous waste and for thermal treatment of waste is Ministry of Environmental and Nature Protection. For all other types of waste competent authorities are county offices and City of Zagreb office. CEA upon the issuing a permit receives a copy and on the daily bases data are entered in *WMPR*.

Waste management permits provide various data, like data on recovery/disposal operations, annual capacity of treatment facilities, etc.

The coverage of treatment facilities by *WMPR database* is almost 100%. Only the data on number and capacity of biogas plants and incinerators for animal by-products were collected by Ministry of Agriculture.

Data on number of waste treatment facilities are obtained from the *WMPR database*. For providing data on capacity of treatment facilities several sources were used. Most of the data were extracted from waste management permits in *WMPR database*.

For the facilities that incinerate and co-incinerate waste according to *Directive 2000/76/EC on the incineration of waste* data on capacities were collected directly from the treatment facilities by survey.

In certain number of cases, when data on capacity was not available through permit nor through surveys, data from *EPR database* were used.

Data on rest capacity of landfills were collected in the period from September 2013 to November 2013 from the landfill operators. Data on capacities and amounts were reported in tonnes. Conversion of the amounts from tonnes to cubic metres was done.

Data on treated amounts of waste mostly were reported by waste treatment facilities into the *EPR database* according to the procedure described above in section "Determination of waste generation in the economy on the basis of administrative sources".

Only the data on animal by-products treated in biogas plants and incinerators were collected by Ministry of agriculture.

In Croatia there is only one rendering plant of open type. It is the largest animal by-products processor and the majority of the animal by-products generated in Croatia are treated in this company following previously sterilization process to produce technical fat from which a part is used as a fuel in the process. According to the information provided by this plant, in 2012 there wasn't any incineration of technical fat.

5 Major Changes

Changes compared with previous years

By the agreement from May 2012 between CEA and Croatian Bureau of Statistics, CEA took over the obligation of preparation and submitting data according to WSR to Eurostat. For the reference year 2010 and previous years those data were delivered to Eurostat by the Croatian Bureau of Statistics.

Comparison of the data from those two sources is not possible since it is about two different methodologies of data collection. The CBS collected data by biannual statistical surveys while CEA uses administrative source of data.

Foreseen changes

It is planned to improve data from agricultural sector (section NACE A), mining sector (section NACE B), and construction and demolition sector (section NACE F).

Until next reporting period it is foreseen:

- to carry out studies for the determination, calculation and estimation of the amounts of waste which are produced in NACE sections A and F
- to make survey among facilities/installations belonging to extractive activities on amounts of topsoil and overburden which is not placed back into excavation void after extraction of the mineral





6 Specific issues concerning the data collection on reference year 2010

7.1 Revision of the Annexes to the WStatR

Not applicable – 2011 is the first reporting year for Croatian Environment Agency

7.2 Wet matter for sludges

Although the data on sludges are requested only in dry matter since the 2008 data collection, please indicate in the table below the amounts of waste generated for the NACE total in tonnes of wet matter. This will be important to review the conversion factors that have been used to impute missing data in the past.

03.2	Industrial effluent sludges		W	5319
03.2	Industrial effluent sludges		W	10149
11 (excl. 11.3)	Common sludges (excl. dredging spoils)		W	61961
11.3	Dredging spoils		W	-

For industrial effluent sludges it was used conversion factor 0,27 in accordance with Eurostat document "Wet – dry conversion of sludges, ARGUS for Eurostat – Environment Statistics".

For common sludges it is used conversion factor 0,29 according to the information provided by the biggest waste water treatment plants.

Part II: Report on quality attributes

1 Relevance

The main users of the data contained in the report according to WSR are:

- Croatian Bureau of Statistics, Ministry of the Environmental and Nature Protection, Environment Protection and Energy Efficiency Fund, The State Inspectorate and other authority bodies
- Private persons, companies, research institutes...

Description of missing data in data set 1 on waste generation

Data on Mining waste –

Most of the data on mining activities are managed by Ministry of Economy which is the central state administration body competent for mining in Croatia. The Ordinance no. 128/2008 on the Management of Waste Resulting from the Exploration and Excavation of Mineral Resources defines CEA as responsible body for database and records of extractive waste management facilities/installations.

Facilities/ installations belonging to mining activities do not report data on materials which stay on the location of excavation. For this reason, no data is currently available on this category of waste in Croatia but this situation will change in the near future as the CEA plans to ask this information through questionnaires to the concerned facilities/ installations.

NACE A –

In Croatia straw is mainly used as a product, except spoiled amounts which are very small and no data is available to estimate the amount.

Other data which are missing:

- Part of the data on packaging waste (pesticides packaging, seeds packaging...), pesticides, discarded equipment, batteries and accumulators, used oils, wood waste, vegetal waste.

It is foreseen for the near future to carry out study for the determination, calculation and estimation the amounts produce in agricultural sector. Also for the future, investigations will be performed to explore how existing data sources from the Ministry of Agriculture, the Ministry of Water and the Croatian Bureau of Statistics could be used for reporting specific waste generated by this sector.

For conventional waste generated by the sector, CEA will try to include the data on originators of the waste in the data coming from the Fund on the different waste streams (ELV, used oils...).

NACE F –

In Croatia, the producers of construction waste are often the construction companies but sometimes the producer is the future building owner, who do not reports data on construction waste. Therefore part of the data on construction and demolition waste is still missing. For the future it is planned to improve data collection in this field.

Description of missing data in data sets 2 and 3 on treated waste quantities and capacities

Treatment capacity in regions: HR01 Sjeverozapadna Hrvatska, HR02 Sredisnja i Istocna (Panonska) Hrvatska and HR03 Jadranska Hrvatska –

For three smaller facilities licensed for the recovery operation R1 data on capacity were not available. Two facilities are located in HR01 Sjeverozapadna Hrvatska, one in HR02 Sredisnja i Istocna (Panonska) Hrvatska and one in HR03 Jadranska Hrvatska.

For two of four facilities is expected to receive data on capacity for 2013 because according to *Sustainable Waste Management Act (OG NO 94/13) which entered into force in 2013*, data on animal by-products, including data on processed products which are destined for incineration, landfilling or use in a biogas or composting plant must be reported to CEA and facilities have to issue a treatment permit from the *Ministry of Environmental and Nature Protection*. Other two facilities for which data on capacity is missing (only for year 2011) stopped working and in 2012 were not licensed for waste treatment.

The data on the closing of the landfills in the year 2011 has not been collected for that year.

2 Accuracy

Not applicable

3 Timeliness and punctuality

Not applicable

4 Accessibility and clarity

The data and information on waste are disseminated primarily by website of the Croatian Environment Agency (<http://www.azo.hr/English>). The web page grants access to waste databases. Publications and reports are also made available on the website (<http://www.azo.hr/lzvjesca14>; <http://www.azo.hr/lzvjescaROO01>).

Data for 2011 were published using LoW classification in Statistical Yearbook 2013 (http://www.dzs.hr/Hrv_Eng/ljetopis/2013/sljh2013.pdf).

Regarding clarity, CEA publishes on its websites legislation, manuals and instructions for companies, questionnaires etc (<http://www.azo.hr/Otpad01>) and also provides data and information by meetings, workshops, or directly on request - by phone or info mail (info@azo.hr).

Comparability

On the national level only the comparability of the data on special waste streams is possible because this is the only case of parallel data collection (EPEEF and CEA).

Data collected by CBS up to 2010 and data collected by CEA are incomparable because of two different methodologies used for data collection.

6 Coherence

Data reported according to WSR were used also for:

- *preparation of report according to Commission Decision 2011/753/EU establishing rules and calculation methods for verifying compliance with the targets set in Article 11 (2) of Directive 2008/98/EC of the European Parliament and of the Council (Waste Framework Directive – recycling targets 2011)*
- *preparation of report according to Commission Decision 2000/738/EC for the report of the Member States on the transposition and implementation of Directive (99/31/EC) on the landfill of waste*
- *preparation of Sustainable Development Indicator (SDI) on Municipal Waste for data 2011*
- *Material Flow Accounts (data on landfilled amounts)*

7 Burden on respondents

There are about 8000 PL-PPO forms (from 4000 companies) and 320 PL-OPKO forms (from 270 companies) filled for reporting year 2012.

These forms are prescribed by the Ordinance on EPR and their content is not changing frequently. They are filled electronically so there are some prefilled general fields, automatic checks and available data for previous reporting year in order to shorten the time necessary for data submission. If there is a need, according to the reporting obligation of Republic of Croatia, CEA asks companies for additional information. There are also manuals, instructions, FAQ and examples of filled forms available on CEA webpage to help companies with data report.

Sheet no. _____ of total of _____ (if all data cannot fit on one sheet, remaining data must be given on an additional sheet)

In this form enter only the key waste numbers from group 20 of the Waste Catalogue and group 15 01 in the case of packaging waste collected separately from municipal waste.

													Delivered to							
													Other collector (broker)	Recovery/disposal operator			Export (t) (in the case of hazardous waste export also state name and address of recovery/disposal operator and recovery/disposal site)			
													Amount (t)	Name and address of collector (broker)	For disposal – procedure D1, (t)	For other procedures D*, (t)		For procedure R*, (t)	Name and address of recovery/disposal operator or recovery/disposal site (e.g., landfill)	
Area where waste was collected (municipality/town)	Number of inhabitants from which waste was collected	Name and address of sub-contracted collector (if existing)	Key waste number	Waste name	Basis for amount determination: 1 – weighing, 2 – calculation, 3 - assessment	Total collected (taken over) in reporting year (t)	Waste collected from households (t)	From containers from public areas (t)	From municipal/town recycling yards (t)	Collection points (buyoff) and other (t)	Balance of temporary storage on the day (t)	1.1.	31.12.	n	o	p	r	s	t	u
a	b	c	d	e	f	g	h	i	j	k	l	m								
			□□□□□□														D_	R_		
			□□□□□□														D_	R_		
			□□□□□□														D_	R_		
			□□□□□□														D_	R_		
			□□□□□□														D_	R_		
			□□□□□□														D_	R_		
			□□□□□□														D_	R_		
			□□□□□□														D_	R_		
			□□□□□□														D_	R_		
			□□□□□□														D_	R_		
			□□□□□□														D_	R_		

* Recovery and disposal procedures pursuant to the Ordinance on waste management (OG 27/07):

D waste disposal procedures: **D1** Depositing waste into or onto land (e.g., **landfill** etc.); **D2** Land treatment of waste (e.g., biodegradation of liquid or sludgy discards in soils etc.); **D3** Deep injection of waste (e.g., injection of pumpable discards into wells, salt domes, naturally occurring repositories, etc.); **D4** Surface impoundment of waste (e.g., placement of liquid or sludgy discards into pits, ponds, lagoons, etc.); **D5** Landfilling of waste into a specially engineered landfill (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment, etc.); **D6** Release of waste into a water body except seas/oceans; **D7** Release of waste into seas/oceans including sea-bed insertion; **D8** Biological treatment of waste not specified elsewhere in these procedures which results in final compounds or mixtures which are disposed of by means of any of the operations numbered D1 to D7 and D9 to D12; **D9** Physico-chemical treatment of waste not specified elsewhere in

these procedures which results in final compounds or mixtures which are disposed of by means of any of the operations numbered D1 to D8 and D10 to D12 (e.g., evaporation, drying, calcination, etc.); **D10** Waste **incineration** on land; **D11** Waste incineration at sea; **D12** Permanent storage of waste (e.g., emplacement of containers in a mine, etc.); **D13** Blending or mixing of waste prior to submission to any of the procedures numbered D1 - D12; **D14** Repackaging of waste prior to submission to any of the procedures numbered D1 - D13; **D15** Storage of waste pending submission to any of the procedures numbered D1 - D14 (excluding temporary storage of waste at the place of generation, pending collection).

R waste recovery procedures: **R1** Use of waste principally as a **fuel** or other means to generate energy; **R2** Waste solvent reclamation/regeneration; **R3** Recycling/reclamation of waste organic substances which are not used as solvents (including **composting** and other biological transformation processes); **R4** Recycling/reclamation of waste metals and metal compounds; **R5** Recycling/reclamation of other waste inorganic materials; **R6** Regeneration of waste acids or bases; **R7** Recovery of waste components used for pollution abatement; **R8** Recovery of waste components from catalysts; **R9** Waste oil re-refining or other reuses of waste oils; **R10** Land treatment of waste resulting in benefit to agriculture or ecological improvement; **R11** Recovery of waste obtained from any of the procedures numbered R1 - R10; **R12** Exchange of waste for submission to any of the procedures numbered R1 - R11; **R13** Storage of waste pending any of the recovery procedures numbered R1 - R12 (excluding temporary storage at the place of generation, pending collection).

Environmental Pollution Register

PL-SKO Form

INSTRUCTIONS FOR FILLING OUT THE PL-SKO FORM

Registration form for municipal waste collector/carrier

Data for year |__|__|__|__| – enter the calendar year that the data in the form refers to.

Data on |__|__| **county** – mark the county in which territory the organisational unit performed the activity and to which the data is submitted (Zagreb – 1, Krapina-Zagorje – 2, Sisak-Moslavina – 3, Karlovac – 4, Varaždin – 5, Koprivnica-Križevci – 6, Bjelovar-Bilogorje – 7, Primorje-Gorski kotar – 8, Lika-Senj – 9, Virovitica-Podravina – 10, Požega-Slavonija – 11, Brod-Posavina – 12, Zadar – 13, Osijek-Baranja – 14, Šibenik-Knin – 15, Vukovar-Srijem – 16, Split-Dalmatia – 17, Istria – 18, Dubrovnik-Neretva – 19, Međimurje – 20, City of Zagreb – 21)

1. DATA ON MUNICIPAL WASTE COLLECTOR/CARRIER – mark the appropriate box with an x.

1. Data on obliged party (waste producer)

1.1. Name – enter the full name of the parent company or other legal person, as entered in the register of the Commercial Court or the full name of the natural person as entered in the trades&crafts register, which owns or manages the organisational unit on site.

1.2. Subject registration number or trade&craft registration number - enter the subject registration number from the register kept by the competent Commercial Court or the trade&craft registration number from the trades&crafts register.

1.3. Business entity registration number or personal ID number – enter the business entity registration number for a legal person issued by the Central Bureau of Statistics or the personal ID number for a natural person.

1.4. Web page – enter the web page address of the company (if existing)

2. DATA ON ORGANISATIONAL UNIT ON SITE

2.1. Name of organisational unit – enter the name of the organisational unit on site.

2.2. Code of organisational unit – enter the unique numerical code designated by the collector/carrier for the organisational unit on site. Once designated, this code can be changed only with the consent of the administrative department competent for environmental protection in the county or in the City of Zagreb.

2.3. Address of organisational unit – enter the street name and number, name and postal code of the town/settlement where the organisational unit of the collector/carrier is located.

2.4. Activity according to NCA – NCA class and corresponding name of activity according to the National Classification of Activities

2.5. Gauss-Krüger centroid coordinates of organisational unit – enter the centroid coordinates (of the approximate geographic centre) of the organisational unit read from the Gauss-Krüger projection.

2.6. Temporary waste storage capacity – enter the total temporary waste storage capacity (m³)

2.7. Contact person – enter the name and surname, phone/fax and e-mail address of the person responsible for keeping the Environmental Pollution Register at the level of the organisational unit of the collector/carrier.

TABLE: amounts should be entered only in tonnes with three decimal places

Column a – enter the municipality or the town in which territory waste was collected. Each subsequent type of waste collected in the territory of the same municipality/town is entered in a new row.

Column b – enter the number of inhabitants from which waste is collected (mandatory for key number 20 03 01 and for other types if applicable)

Column c - enter the company or name and address of the collector whom the utility company has sub-contracted for emptying containers and vessels from public areas, or for some other waste collecting activity in the territory covered by the utility company. In the continuing row enter data that refers only to the sub-contracted collector.

Columns d and e - enter the six-digit key number and full name of waste pursuant to the Waste Catalogue (Regulation on categories, types and classification of waste with the waste catalogue and list of hazardous waste, Official Gazette 50/05).

Column f - enter the basis for determining the amount of waste: 1 – weighing, 2 – calculation or 3 – estimate.

Column g – enter the total amount of municipal waste collected (taken over) in the reporting year.

Column h – enter how much of the total amount of collected (taken over) waste was collected from households.

Column i - enter how much of the total amount of collected waste was collected from containers in public areas.

Column j - enter how much of the total amount of collected waste was collected through municipal/town recycling yards of utility companies.

Column k – enter the amount of waste collected in other ways e.g., at collection (buy-off) points for special categories of waste (at a concessionaire) etc.

Columns l and m – enter the amount of waste in temporary storage on 1 January of the reporting year, and on 31 December of the reporting year.

Column n – enter the amount of waste delivered to another collector (broker)

Column o – enter the name and address of the collector (broker) to whom the waste was delivered.

Columns p, r, and s – enter the quantities of waste delivered for recovery or disposal. If there are several waste recovery/disposal operators, then data on quantities for each operator should be entered in a separate row.

Person responsible for accuracy of data:

Responsible person:

Name and surname LS

Signature

Name and surname

Signature

This form is filled out by the responsible person in the organisational unit and submitted to the competent authority by 1 March of the current year for the previous year (Article 20 of this Ordinance).

At the end of the form, the place and date of filling out the form is legibly entered, as well as the name and surname of the person responsible for the accuracy of provided data and of the responsible person in the organisational unit, their signatures and seal.

REGISTRATION FORM FOR RECOVERY/DISPOSAL OPERATOR OF INDUSTRIAL AND/OR MUNICIPAL WASTE	Report for _____ year	PL-OPKO Form
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Sheet no. _____ of total of _____ (if all data cannot fit on one sheet, remaining data must be given on an additional sheet)

New waste which is sent to further recovery/disposal/export procedures (columns »o« and »p«) shall be reported on PL-PPO form as waste producer/holder

a	b	c		e		g						o		p	
		from the territory of Croatia (t)	imported waste (t)	1.1	31.12	Disposal (D)			Recovery (R)			Key waste number	amount (t)		
						disposal (D1 procedure)*	incineration without energy recovery – D10* procedure	Other D* procedure	incineration with energy recovery – R1* procedure	Other R* procedure					
						amount (t)	amount (t)	amount (t)	amount (t)	amount (t)					
								D__				R__			
								D__				R__			
								D__				R__			
								D__				R__			
								D__				R__			
								D__				R__			
								D__				R__			

*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D__	<input type="checkbox"/>	<input type="checkbox"/>	R__	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D__	<input type="checkbox"/>	<input type="checkbox"/>	R__	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Procedures of recovery and disposal, pursuant to the Ordinance on waste management, Official Gazette 27/07:

D waste disposal procedures: **D1** Depositing waste into or onto land (e.g., **landfill** etc.); **D2** Land treatment of waste (e.g., biodegradation of liquid or sludgy discards in soils etc.); **D3** Deep injection of waste (e.g., injection of pumpable discards into wells, salt domes, naturally occurring repositories, etc.); **D4** Surface impoundment of waste (e.g., placement of liquid or sludgy discards into pits, ponds, lagoons, etc.); **D5** Landfilling of waste into a specially engineered landfill (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment, etc.); **D6** Release of waste into a water body except seas/oceans; **D7** Release of waste into seas/oceans including sea-bed insertion; **D8** Biological treatment of waste not specified elsewhere in these procedures which results in final compounds or mixtures which are disposed of by means of any of the operations numbered D1 to D7 and D9 to D12; **D9** Physico-chemical treatment of waste not specified elsewhere in these procedures which results in final compounds or mixtures which are disposed of by means of any of the operations numbered D1 to D8 and D10 to D12 (e.g., evaporation, drying, calcination, etc.); **D10** Waste **incineration** on land; **D11** Waste incineration at sea; **D12** Permanent storage of waste (e.g., emplacement of containers in a mine, etc.); **D13** Blending or mixing of waste prior to submission to any of the procedures numbered D1 - D12; **D14** Repackaging of waste prior to submission to any of the procedures numbered D1 - D13; **D15** Storage of waste pending submission to any procedures numbered D1 - D14 (excluding temporary storage of waste at the place of generation, pending collection).

R Waste recovery procedures: **R1** Use of waste principally as a **fuel** or other means to generate energy; **R2** Waste solvent reclamation/regeneration; **R3** Recycling/reclamation of waste organic substances which are not used as solvents (including **composting** and other biological transformation processes); **R4** Recycling/reclamation of waste metals and metal compounds; **R5** Recycling/reclamation of other waste inorganic materials; **R6** Regeneration of waste acids or bases; **R7** Recovery of waste components used for pollution abatement; **R8** Recovery of waste components from catalysts; **R9** Waste oil re-refining or other reuses of waste oils; **R10** Land treatment of waste resulting in benefit to agriculture or ecological improvement; **R11** Recovery of waste obtained from any of the procedures numbered R1 - R10; **R12** Exchange of waste for submission to any of the procedures numbered R1 - R11; **R13** Storage of waste pending any of the recovery procedures numbered R1 - R12 (excluding temporary storage at the place of generation, pending collection).

Environmental Pollution Register
Form PL-OPKO

INSTRUCTIONS FOR FILLING OUT THE PL-OPKO FORM

Registration form for recovery/disposal operator of industrial and/or municipal waste
Data for year |_|_|_|_| – enter the calendar year that the data in the form refers to.
Data on |_|_| **county** – mark the county in which territory the organisational unit performed the activity and to which the data is submitted (Zagreb – 1, Krapina-Zagorje – 2, Sisak-Moslavina – 3, Karlovac – 4, Varaždin – 5, Koprivnica-Križevci – 6, Bjelovar-Bilogorje – 7, Primorje-Gorski kotar – 8, Lika-Senj – 9, Virovitica-Podravina – 10, Požega-Slavonija – 11, Brod-Posavina – 12, Zadar – 13, Osijek-Baranja – 14, Šibenik-Knin – 15, Vukovar-Srijem –

16, Split-Dalmatia – 17, Istria – 18, Dubrovnik-Neretva – 19, Međimurje – 20, City of Zagreb – 21)

1. DATA ON RECOVERY/DISPOSAL OPERATOR OF INDUSTRIAL/MUNICIPAL WASTE

1.1. Name – enter the full name of the parent company or other legal person, as entered in the register of the Commercial Court or the full name of the natural person as entered in the trades&crafts register.

1.2. Subject registration number or trade&craft registration number - enter the subject registration number from the register kept by the competent Commercial Court or the trade&craft registration number from the trades&crafts register.

1.3. Business entity registration number or personal ID number – enter the business entity registration number for a legal person issued by the Central Bureau of Statistics or the personal ID number for a natural person.

1.4. Web page – enter the web page address of the company (if existing)

2. DATA ON ORGANISATIONAL UNIT ON SITE

2.1. Name of organisational unit on site – enter the name of the organisational unit on site.

2.2. Code of organisational unit on site – enter the unique numerical code designated by the treatment operator of industrial and/or municipal waste for the organisational unit on site.

Once designated, this code can be changed only with the consent of the administrative department competent for environmental protection in the county or in the City of Zagreb.

2.3. Number of employees – enter the total number of employees at organisational unit on site.

2.4. Address of organisational unit on site – enter the street name and number, name and postal code of the town/settlement where the organisational unit on site is located.

2.5. Activity according to NCA – NCA class and corresponding name of activity according to the National Classification of Activities

2.6. Activity according to Annex 1 – enter the code referred to in Annex 1 of the Environmental Pollution Register and maximum capacity (t/year)

2.7. Gauss-Krüger centroid coordinates of organisational unit – enter the centroid coordinates (of the approximate geographic centre) of the organisational unit read from the Gauss-Krüger projection.

2.8. Temporary waste storage capacity – enter the total temporary waste storage capacity. If there are several temporary storages on site, enter a sum of all waste storage capacities (m³).

2.9. Data on devices/facilities for recovery/disposal on site – enter the name of the device or facility for recovery/disposal on site, appropriate R or D procedure pursuant to the Ordinance on waste management, Official Gazette 27/07, and total annual maximum capacity (t/year).

2.10. Data on landfill – enter name and address of landfill or settlement closest to that landfill, total landfill capacity (m³), amount of waste deposited on the landfill in the reporting year (t). In case of municipal waste landfill, enter the town or municipality from which the deposited waste originated in the reporting year (collection area).

2.11. Contact person – enter the name and surname, phone/fax and e-mail address of the person responsible for keeping the Environmental Pollution Register at the level of the organisational unit on site.

TABLE: amounts should be entered only in tonnes with three decimal places

Columns a and b – enter the six-digit key number and full name of waste pursuant to the Waste Catalogue (Regulation on categories, types and classification of waste with the waste catalogue and list of hazardous waste, Official Gazette 50/05).

Columns c and d – enter the amount of waste collected (taken over) from the territory of Croatia or imported (non-hazardous, imported for the purpose of material recovery).

Columns e and f – enter the amount of waste in temporary storage on 1 January of the reporting year, and on 31 December of the reporting year.

Column g – enter the amount of waste deposited on the landfill (D1).

Column h – enter the amount of incinerated waste (without energy recovery, D10).

Column i – enter type (number) of the undertaken waste disposal D (excluding D1 and D10) on the line. Enter just one waste disposal procedure in the box. If several waste disposal procedures have been applied for the same type of waste (excluding D1 and D10), enter the amount of disposed waste in a separate row.

Column j – enter the amount of waste disposed by the procedure stated in column i.

Column k – enter the amount of waste incinerated with energy recovery (waste used as fuel, R1)

Column l – enter the amount of composted waste (R3).

Column m – enter the type (number) of the undertaken recovery procedure R (excluding R1 i R3). Enter just one waste recovery procedure in the box. If several waste recovery procedures have been applied for the same type of waste (excluding R1 and R3), enter the amount of disposed waste in a separate row.

Column n – enter the amount of waste recovered by the procedure stated in the column.

Column o – enter the six-digit key number pursuant to the Waste Catalogue (Regulation on categories, types and classification of waste with the waste catalogue and list of hazardous waste, Official Gazette 50/05).

Column p – enter the amount of waste produced after the implementing recovery/disposal procedures on the overtaken waste. Newly generated waste should be reported on a form for waste producer.

Environmental Pollution Register
PL-PPO Form

Data for year
Data: County

REGISTRATION FORM FOR PRODUCER/HOLDER OF PRODUCED WASTE

1. DATA ON <input type="checkbox"/> PRODUCER <input type="checkbox"/> HOLDER	
1.1. Company or name: _____	
1.2. Subject registration number or trade&craft registration number: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
1.3. Business entity registration number or personal ID number: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
1.4. WEB address: _____	
2. DATA ON ORGANISATIONAL UNIT ON SITE	
2.1. Name of organisational unit: _____	
2.2. Code of organisational unit: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2.3. Number of employees <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
2.4. Address of organisational unit: Street and number : _____	
Town /settlement: _____	Postal code: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
2.5. Activity according to NCA – National Classification of Activities, which generates waste	
Class: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Name: _____
2.6. Activity according to Annex 1	
Code: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Capacity (t/year) _____
2.7. Gauss-Krüger centroid coordinates of organisational unit: Y = <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> X = <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
2.8. Temporary waste storage capacity (m ³): _____	
2.9. Contact person (name and surname): _____	
Telephone/fax: _____	E-mail: _____

* Procedures of recovery and disposal, pursuant to the Ordinance on waste management, Official Gazette 27/07:

D waste disposal procedures: **D1** Depositing waste into or onto land (e.g., **landfill** etc.); **D2** Land treatment of waste (e.g., biodegradation of liquid or sludgy discards in soils etc.); **D3** Deep injection of waste (e.g., injection of pumpable discards into wells, salt domes, naturally occurring repositories, etc.); **D4** Surface impoundment of waste (e.g., placement of liquid or sludgy discards into pits, ponds, lagoons, etc.); **D5** Landfilling of waste into a specially engineered landfill (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment, etc.); **D6** Release of waste into a water body except seas/oceans; **D7** Release of waste into seas/oceans including sea-bed insertion; **D8** Biological treatment of waste not specified elsewhere in these procedures which results in final compounds or mixtures which are disposed of by means of any of the operations numbered D1 to D7 and D9 to D12; **D9** Physico-chemical treatment of waste not specified elsewhere in these procedures which results in final compounds or mixtures which are disposed of by means of any of the operations numbered D1 to D8 and D10 to D12 (e.g., evaporation, drying, calcination, etc.); **D10** Waste **incineration** on land; **D11** Waste incineration at sea; **D12** Permanent storage of waste (e.g., emplacement of containers in a mine, etc.); **D13** Blending or mixing of waste prior to submission to any of the procedures numbered D1 - D12; **D14** Repackaging of waste prior to submission to any of the procedures numbered D1 - D13; **D15** Storage of waste pending submission to any procedures numbered D1 - D14 (excluding temporary storage of waste at the place of generation, pending collection).

R Waste recovery procedures: **R1** Use of waste principally as a **fuel** or other means to generate energy; **R2** Waste solvent reclamation/regeneration; **R3** Recycling/reclamation of waste organic substances which are not used as solvents (including **composting** and other biological transformation processes); **R4** Recycling/reclamation of waste metals and metal compounds; **R5** Recycling/reclamation of other waste inorganic materials; **R6** Regeneration of waste acids or bases; **R7** Recovery of waste components used for pollution abatement; **R8** Recovery of waste components from catalysts; **R9** Waste oil re-refining or other reuses of waste oils; **R10** Land treatment of waste resulting in benefit to agriculture or ecological improvement; **R11** Recovery of waste obtained from any of the procedures numbered R1 - R10; **R12** Exchange of waste for submission to any of the procedures numbered R1 - R11; **R13** Storage of waste pending any of the recovery procedures numbered R1 - R12 (excluding temporary storage at the place of generation, pending collection).

Environmental Pollution Register
PL-PPO Form

INSTRUCTIONS FOR FILLING OUT THE PL-PPO FORM

Registration form for producer/holder of industrial waste

Data for year |__|__|__|__| – enter the calendar year that the data in the form refers to.

Data on |__|__| **county** – mark the county in which territory the organisational unit performed the activity and to which the data is submitted (Zagreb – 1, Krapina-Zagorje – 2, Sisak-Moslavina – 3, Karlovac – 4, Varaždin – 5, Koprivnica-Križevci – 6, Bjelovar-Bilogorje – 7, Primorje-Gorski kotar – 8, Lika-Senj – 9, Virovitica-Podravina – 10, Požega-Slavonija – 11, Brod-Posavina – 12, Zadar – 13, Osijek-Baranja – 14, Šibenik-Knin – 15, Vukovar-Srijem – 16, Split-Dalmatia – 17, Istria – 18, Dubrovnik-Neretva – 19, Međimurje – 20, City of Zagreb – 21)

1. DATA ON PRODUCER/HOLDER OF INDUSTRIAL WASTE – cross out the appropriate box

1.1. Name – enter the full name of the parent company or other legal person, as entered in the register of the Commercial Court or the full name of the natural person as entered in the trades&crafts register.

1.2. Subject registration number or trade&craft registration number - enter the subject registration number from the register kept by the competent Commercial Court or the trade&craft registration number from the trades&crafts register.

1.3. Business entity registration number or personal ID number – enter the business entity registration number for a legal person issued by the Central Bureau of Statistics or the personal ID number for a natural person.

1.4. Web page – enter the web page address of the company (if existing)

2. DATA ON ORGANISATIONAL UNIT ON SITE

2.1. Name of organisational unit on site – enter the name of the organisational unit on site.

2.2. Code of organisational unit on site – enter the unique numerical code designated by the collector/carrier for the organisational unit on site. Once designated, this code can be changed only with the consent of the competent body in the county or in the City of Zagreb.

2.3. Number of employees – enter the total number of employees at organisational unit on site.

2.4. Address of organisational unit – enter the street name and number, name and postal code of the town/settlement where the organisational unit on site is located.

2.5. Activity according to NCA – NCA class and corresponding name of activity according to the National Classification of Activities

2.6. Activity according to Annex 1 – enter the code referred to in Annex 1 of the Environmental Pollution Register and maximum capacity (t/year)

2.7. Gauss-Krüger centroid coordinates of organisational unit – enter the centroid coordinates (of the approximate geographic centre) of the organisational unit read from the Gauss-Krüger projection.

2.8. Temporary waste storage capacity – enter the total temporary waste storage capacity. If there are several temporary storages on site, enter a sum of all waste storage capacities (m³).

2.9. Contact person – enter the name and surname, phone/fax and e-mail address of the person responsible for keeping the Environmental Pollution Register at the level of the organisational unit on site.

TABLE: amounts should be entered only in tonnes with three decimal places

Columns a and b – enter the six-digit key number and full name of waste pursuant to the Waste Catalogue (Regulation on categories, types and classification of waste with the waste catalogue and list of hazardous waste, Official Gazette 50/05).

Column c – enter the basis for determining the amount of waste: 1 –weighing, 2 – calculation or 3 - estimate.

Column d – enter the total amount of municipal waste collected (taken over) in the reporting year.

Columns e and f – enter the amount of waste in temporary storage on 1 January of the reporting year, and on 31 December of the reporting year.

Column g – enter the amount of waste recovered/disposed on site of its generation.

Column h – enter recovery (R1-R13) or disposal (D1-D15) procedure of the amount of waste entered in column g. Enter a single recovery/disposal procedure in the box. If two or several recovery/disposal procedures have been undertaken for the same type of waste enter data for each procedure in a separate row.

Column i – enter the amount of waste delivered to the waste collector (broker).

Column j – enter the name and address of the collector (broker) to whom the waste was delivered.

Column k, l i m – enter the quantities of waste delivered for recovery or disposal. If there are several waste recovery/disposal operators, then data on quantities for each operator should be entered in a separate row.

Column n – enter the name and address of the waste recovery/disposal operator to whom the waste was delivered for recovery/disposal or the recovery/disposal site (e.g., name of landfill).

Column o – enter the amount of waste exported, and in the case of hazardous waste export also state the name and address of the waste recovery/disposal operator and the recovery/disposal site.

Environmental Pollution Register

Data for year |__|__|__|__|

PL-SPO Form

Data: |__|__| County

REGISTRATION FORM FOR COLLECTOR/CARRIER OF INDUSTRIAL WASTE

1. DATA ON <input type="checkbox"/> COLLECTOR <input type="checkbox"/> CARRIER*	
1.1. Company or name:	
1.2. Subject registration number or trade&craft registration number: __ __ __ __ __ __ __ __	
1.3. Business entity registration number or personal ID number: __ __ __ __ __ __ __ __	
1.4. WEB address:	
2. DATA ON ORGANISATIONAL UNIT ON SITE	
2.1. Name of organisational unit:	
2.2. Code of organisational unit: __ __ __ __ __ __ __ __	
2.3. Address of organisational unit:	
Street and number :	
Town /settlement:	Postal code: __ __ __ __
2.4. Activity according to NCA – National Classification of Activities, which generates waste	
Class: __ __ __ __	Name:
2.5. Gauss-Krüger centroid coordinates of organisational unit: Y = __ __ __ __ __ __ X = __ __ __ __ __ __	
2.6. Temporary waste storage capacity (m ³):	
2.7. Contact person (name and surname):	
Telephone/fax:	E-mail:

* carrier – legal person who transports waste on behalf of others on the basis of the certificate of registration in the Register of Carriers of the Ministry, does not possess a waste management permit.

In _____

Date: |__|__| - |__|__| - |__|__|__|__|

Person responsible for accuracy of data:

Responsible person:

Name and surname

LS

Name and surname

Signature

Signature

This form is filled out by the responsible person in the organisational unit and submitted to the competent authority by 1 March of the current year for the previous year (Article 20 of this Ordinance).

At the end of the form, the place and date of filling out the form is legibly entered, as well as the name and surname of the person responsible for the accuracy of provided data and of the responsible person in the organisational unit, their signatures and seal.

REGISTRATION FORM FOR COLLECTOR/CARRIER OF PRODUCTION WASTE	Report for year _____	PL-SPO Form
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Sheet no. _____ of total of _____ (if all data cannot fit on one sheet, remaining data must be given on an additional sheet)

Key waste number	Waste name	Name and address of sub-contracted collector (if existing)	Basis for amount determination: 1 – weighing, 2 – calculation, 3 – estimate	Total amount of collected in the reporting year (t)	Situation of temporary storage on date (t)		Delivered to						Export (t) (in the case of hazardous waste export also state name and address of recovery/disposal operator and recovery/disposal site)	
					1.1.	31.12.	Other collector (broker)	Recovery/disposal operator						Name and address of recovery/disposal operator or recovery/disposal site (e.g., landfill)
								amount (t)	Name and address of other collector	for disposal – procedure D1, (t)	For other procedures D*, (t)	For procedure R*, (t)		
a	b	c	d	e	f	g	h	i	j	k	l	m	n	
											D -	R -		
											D -	R -		
											D -	R -		
											D -	R -		
											D -	R -		
											D -	R -		
											D -	R -		

* Procedures of recovery and disposal, pursuant to the Ordinance on waste management, Official Gazette 27/07:

D waste disposal procedures: **D1** Depositing waste into or onto land (e.g., **landfill** etc.); **D2** Land treatment of waste (e.g., biodegradation of liquid or sludgy discards in soils etc.); **D3** Deep injection of waste (e.g., injection of pumpable discards into wells, salt domes, naturally occurring repositories, etc.); **D4** Surface impoundment of waste (e.g., placement of liquid or sludgy discards into pits, ponds, lagoons, etc.); **D5** Landfilling of waste into a specially engineered landfill (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment, etc.); **D6** Release of waste into a water body except seas/oceans; **D7** Release of waste into seas/oceans including sea-bed insertion; **D8** Biological treatment of waste not specified elsewhere in these procedures which results in final compounds or mixtures which are disposed of by means of any of the operations numbered

D1 to D7 and D9 to D12; **D9** Physico-chemical treatment of waste not specified elsewhere in these procedures which results in final compounds or mixtures which are disposed of by means of any of the operations numbered D1 to D8 and D10 to D12 (e.g., evaporation, drying, calcination, etc.); **D10** Waste **incineration** on land; **D11** Waste incineration at sea; **D12** Permanent storage of waste (e.g., emplacement of containers in a mine, etc.); **D13** Blending or mixing of waste prior to submission to any of the procedures numbered D1 - D12; **D14** Repackaging of waste prior to submission to any of the procedures numbered D1 - D13; **D15** Storage of waste pending submission to any procedures numbered D1 - D14 (excluding temporary storage of waste at the place of generation, pending collection).

R Waste recovery procedures: **R1** Use of waste principally as a **fuel** or other means to generate energy; **R2** Waste solvent reclamation/regeneration; **R3** Recycling/reclamation of waste organic substances which are not used as solvents (including **composting** and other biological transformation processes); **R4** Recycling/reclamation of waste metals and metal compounds; **R5** Recycling/reclamation of other waste inorganic materials; **R6** Regeneration of waste acids or bases; **R7** Recovery of waste components used for pollution abatement; **R8** Recovery of waste components from catalysts; **R9** Waste oil re-refining or other reuses of waste oils; **R10** Land treatment of waste resulting in benefit to agriculture or ecological improvement; **R11** Recovery of waste obtained from any of the procedures numbered R1 - R10; **R12** Exchange of waste for submission to any of the procedures numbered R1 - R11; **R13** Storage of waste pending any of the recovery procedures numbered R1 - R12 (excluding temporary storage at the place of generation, pending collection).

Environmental Pollution Register
PL-SPO Form

INSTRUCTIONS FOR FILLING OUT THE PL-SPO FORM

Registration form for collector/carrier of industrial waste

Data for year |__|__|__|__| – enter the calendar year that the data in the form refers to.

Data on |__|__| **county** – mark the county in which territory the organisational unit performed the activity and to which the data is submitted (Zagreb – 1, Krapina-Zagorje – 2, Sisak-Moslavina – 3, Karlovac – 4, Varaždin – 5, Koprivnica-Križevci – 6, Bjelovar-Bilogorje – 7, Primorje-Gorski kotar – 8, Lika-Senj – 9, Virovitica-Podravina – 10, Požega-Slavonija – 11, Brod-Posavina – 12, Zadar – 13, Osijek-Baranja – 14, Šibenik-Knin – 15, Vukovar-Srijem – 16, Split-Dalmatia – 17, Istria – 18, Dubrovnik-Neretva – 19, Međimurje – 20, City of Zagreb – 21)

Environmental Pollution Register
PL-SPO Form

1. DATA ON COLLECTOR/CARRIER OF INDUSTRIAL WASTE – cross out the appropriate box

1.1. Name – enter the full name of the parent company or other legal person, as entered in the register of the Commercial Court or the full name of the natural person as entered in the trades&crafts register.

1.2. Subject registration number or trade&craft registration number - enter the subject registration number from the register kept by the competent Commercial Court or the trade&craft registration number from the trades&crafts register.

1.3. Business entity registration number or personal ID number – enter the business entity registration number for a legal person issued by the Central Bureau of Statistics or the personal ID number for a natural person.

1.4. Web page – enter the web page address of the company (if existing)

2. DATA ON ORGANISATIONAL UNIT ON SITE

2.1. Name of organisational unit – enter the name of the organisational unit on site.

2.2. Code of organisational unit – enter the unique numerical code designated by the collector of industrial waste for the organisational unit on site. Once designated, this code can be changed only with the consent of the administrative department competent for environmental protection in the county or in the City of Zagreb.

2.3. Address of organisational unit – enter the street name and number, name and postal code of the town/settlement where the organisational unit of the collector is located.

2.4. Activity according to NCA – NCA class and corresponding name of activity according to the National Classification of Activities

2.5. Gauss-Krüger centroid coordinates of organisational unit – enter the centroid coordinates (of the approximate geographic centre) of the organisational unit read from the Gauss-Krüger projection.

2.6. Temporary waste storage capacity – enter the total temporary waste storage capacity. If there are several temporary storages on site, enter a sum of all waste storage capacities (m³).

2.7. Contact person – enter the name and surname, phone/fax and e-mail address of the person responsible for keeping the Environmental Pollution Register at the level of the organisational unit of the collector/carrier.

At the bottom, enter the place and date, as well as legible name and surname of the person responsible for the accuracy of data and manager, their signatures and obliged party's seal.

TABLE: amounts should be entered only in tonnes with three decimal places

Columns a and b – enter the six-digit key number and full name of waste pursuant to the Waste Catalogue (Regulation on categories, types and classification of waste with the waste catalogue and list of hazardous waste, Official Gazette 50/05).

Column c – enter the name and address of the sub-contracted collector (if existing). In the continuing row enter data which refer only to the sub-contracted collector.

Column d – enter the basis for determining the amount of waste: 1 –weighing, 2 – calculation or 3 - estimate.

Column e – enter the total amount of municipal waste collected (taken over) in the reporting year.

Columns f and g – enter the amount of waste in temporary storage on 1 January and on 31 December of the reporting year.

Column h – enter the amount of waste delivered to other collector (broker).

Column i – enter the name and address of the collector (broker) to whom the waste was delivered.

Columns j, k, l – enter the amounts of waste delivered for recovery or disposal. If there are several waste recovery/disposal operators, then data on quantities for each operator should be entered in a separate row.

Column m – enter the name and address of the waste recovery/disposal operator to whom the waste was delivered for recovery/disposal or the recovery/disposal site (e.g., name of landfill).

Column n – enter the quantity of waste exported, and in the case of hazardous waste export also state the name and address of the waste recovery/disposal operator, as well as the recovery/disposal