POLAND

The 2010 National Waste Management Plan

Warsaw, December 2006

Abbreviations used

- BAT - Best Available Techniques
- CRVD - Central Register of Vehicles and Drivers
- CIEP - Chief Inspectorate for Environmental Protection
- CSO - Central Statistical Office
- NWMP - The National Waste Management Plan as approved by Resolution No. 219 of the Council of Ministers, Republic of Poland, of 29 October 2002 (Governmental Gazette of 2003. No. 11, Item 159)
- NWMP 2010 - This 2010 National Waste Management Plan
- NPUWWT - The National Programme for Urban Waste Water Treatment as approved in December 2003, including its update approved on 7 June 2005
- pe - population equivalent - the number expressing the ratio of the pollutant load in waste water and the unit pollutant load in waste water discharged by one inhabitant per day.
- PCBs - polychlorinated biphenyls, polychlorinated triphenyls, monomethyltetrachloro-diphenylmethane, monomethyldichlorodiphenylmethane, monomethyldibromodiphenyl-methane and mixtures containing the total of more than 0.005% of weight mass of any of these substances
- GDP - Gross Domestic Product
- PN-EN - European Standard as transposed into the Polish National Standard
- POPs - persistent organic pollutants
- VFEPWM - The Voivodship Fund of Environmental Protection and Water Management
- VIEP - The Voivodship Inspectorate for Environmental Protection

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CHAPTER 1. INTRODUCTION

The Polish Act of 27 April 2001 on Waste (Official Journal No. 62, Item 628, further amended [1)]), introduced obligation to prepare waste management plans which are subject to at least each 4 years updating.

The first such national waste management plan (NWMP) was approved by Resolution No. 219 of the Council of Ministers, Republic of Poland, of 29 October 2002 (Governmental Gazette of 2003, No. 11, Item 159). The deadline for its updating will expire in 2006.

„Report on implementation of the National Waste Management Plan for the period between 29 October 2002 and 29 October 2004" showed only inconsiderable progress in the scope of improvement in waste management, in particular, municipal waste and urban waste water sludge. A number of relevant recommendations are included therein, a part of which has been already implemented, whereas another one has been under implementation. The most important recommendations implemented include the submission by the Government (in the 1st half of 2005) to the Parliament of the proposal to amend the Acts which relate to waste management issues, and that were aimed at, amongst others, facilitation for the Municipalities to take over from the owners pf real estates the obligations in the scope of municipal waste management and to discipline the territorial self-governmental units in the scope of implementation of their statutory obligations (recommendations 5.10, 5.5 and 5.12). It is noteworthy, that the Parliament shaped in a different manner the proposed systemic solutions, and included them into the Act of 29 July 2005 on the amendments in the Act on Waste and in certain other Acts (Official Journal No. 175, Item 1458 and of 2006 No. 63, Item 441). Among the recommendations now under implementation, the recommendation 5.2 has to be mentioned which relates to environmental charge rates for deposition of waste on landfills. It is assumed that new higher charge rates for deposition of waste will enter into force on 1 July 2007 (the work is under way on preparation of suitable Draft Regulation of the Council of Ministers). Moreover, work is carried out also on preparation of the Operating Programme „Infrastructure and Environment" in view of making it possible to finance investments in the scope of waste management (amongst others, recommendations 5.3 and 5.11).

In 2006, Department of Waste Management was established at Ministry of the Environment. The major responsibilities of this Department include coordination of the activities in the scope of development and implementation of waste management policies both, nationally and on the European Union level.

Since 1 January 2008, the responsibilities in the scope of waste management that so far fell in the Voivodes' competence will delegated to the Voivodship Marshalls, pursuant to the Act of 29 July 2005 on the amendments in certain other Acts in relation to changes in structuring of the responsibility scope and competence territorial administration (Official Journal No. 175, Item 1462 and No. 267, Item 2257; and of 2006, No. 144, Item 1043). That will result in positive concentration in hands of one agency on the Voivodship (i.e. Provincial) level of the responsibilities in the scope of, amongst others, waste management planning and decision making that has to result in positive effects on implementation of the Voivodship policy in the scope of waste management. Competences in the scope of waste management on the level of Poviat (i.e. County) and Municipal levels remain unchanged.

[1)] Amendments in the aforementioned Act are published in Official Journal of 2002 No. 41, Item 365, No. 113, Item 984 and No. 199, Item 1671, of 2003. No. 7, Item 78, of 2004 No. 96, Item 959, No. 116, Item 1208, No. 191, Item 1956, of 2005 No. 25, Item 202, No. 90, Item 758, No. 130, Item 1087, No. 175, Item 1458 and 1462; and No. 180, Item 1495; and of 2006 No. 50, Item 360.

Given the motions being submitted by the territorial self-governmental units, which demand the target waste management scheme be set out and their tasks defined in a more precise manner in the national waste management plan, a slightly altered formula of the „2010 National Waste Management Plan" (NWMP 2010) was assumed than that adopted previously in the first national waste management plan (NWMP).

The Plan covers full range of the tasks required to provide for an integrated waste management throughout the national territory in a manner securing protection of the environment, with regard to both the present and future economic opportunities and circumstances, and the technical development level of existing infrastructure.

Waste management plan covers wastes generated domestically, particularly municipal waste, hazardous waste, packaging waste and municipal sewage sludge, as well as wastes imported into the national territory.

The Plan takes into account trends in the contemporary economy worldwide, as well as the national circumstances of the economic growth.

The objectives and tasks presented in the Plan relate to the period 2007-2010 and in the 2011-2018 perspective.

This waste management plan includes:
- the description of the current status of waste management, including information on:
  - types, quantities and sources of origin of wastes being subject to recovery or disposal processes,
  - holders of waste who perform activities in the scope of collection, recovery or disposal of waste,
  - spatial distribution of existing installations for waste collection, recovery or disposal,
  - identification of existing problems in the scope of waste management,
- the changes forecasted in the scope of waste generation and management,
- the objectives in the scope of waste management with attached time-schedule of their achievement,
- the waste management scheme,
- the tasks, the implementation of which will provide for improvement in the circumstances relating to waste management,
- the types of the relevant projects and the time-schedule for their implementation,
- the financial instruments serving for implementation of the objectives in the scope of waste management that include the following elements:
  - identification of funding sources for the activities planned,
  - in-kind and financial time-schedule for planned activities aiming at prevention of waste generation or reduction of the quantities of waste and their negative environmental impacts, and the proper management thereof, including reduction of the quantities of biodegradable waste contained in municipal waste being deposited on landfills,
- the monitoring system and methods to assess achievement of the waste management objectives.

The following grouping of waste is assumed for the purpose of this waste management plan:
- municipal wastes,
- hazardous wastes,
- other wastes, including wastes generated from industrial activities, waste water sludge, packaging wastes, while detailed reference has made to such types of waste, in relation to which any significant problems have been identified.

The „2010 National Waste Management Plan" has been prepared according to the legal status as of 15 October 2006. The groups, sub-groups and types of waste are defined under Regulation of Minister of the Environment of 27 September 2001 on the catalogue of waste (Official Journal No. 112, Item 1206).

In principle, the statistical data provided by the Central Statistical Office was used to perform the analyses in question, as well as data collected from central and Voivodship databases on waste generation and management, and management of packaging and packaging waste, and also data collected by the Chief Inspectorate for Environmental Protection (CIEP) and the Voivodship Inspectorates for Environmental Protection (VIEP), and the relevant information materials prepared in the recent years. In case of data on the mass of waste generated and utilised that was acquired principally from the Central Statistical Office (CSO), 2004 has been assumed as the base year, but it has to be noted that the CSO-data on municipal waste only relates to the quantities of waste effectively collected (but not the total wastes generated), whereas data on existing installations are presented according to the status as of 31 December 2005. In some exceptional cases where essential amendments were made in legal regulations, the 2006 data was used. That relates, amongst others, to the dismantling stations for the end-of-life vehicles, for which data as of 31 October 2006 are presented. Also, special databases were used here, such like, for instance, that of the Central Register of Vehicles and Drivers (CRVD).

CHAPTER 2. ANALYSIS OF THE CURRENT STATUS OF WASTE MANAGEMENT

2.1. MUNICIPAL WASTES

2.1.1. Types, origination sources, quantity and quality of municipal waste generated

Municipal wastes are the wastes which originate from households, as well as those which contain no hazardous waste that originated from other producers of waste, and that, given their nature or composition, are similar to wastes generated by households.

The sources of waste origination are:

- households,
- infrastructure sites (trade, services, handicraft, schools, industry - in the „social" part thereof, and others).

Statistical data proves that about 2/3 of municipal wastes are generated by households, and 1/3 of this waste is generated from the infrastructure sites.

Balance of municipal wastes generated in Poland in 2004 is presented in Table 2-1.

Table 2-1 Balance of municipal waste generated in Poland in 2004,

No.	Name	Quantity [thousand Mg]
1.	Municipal waste sorted and collected in a selective manner	243
2.	Garden and park wastes	326
3.	Unsorted (mixed) municipal waste, including:	10 417
3-1	*Biodegradable kitchen waste*	*2 486*
3-2	*Garden and park wastes*	*250*
3-3	*Paper and cardboard*	*2 114*
3-4	*Multi-material waste*	*711*
3-5	*Plastic waste*	*1 529*
3-6	*Glass waste*	*889*
3-7	*Metal waste*	*521*
3-8	*Cloth and textile waste*	*160*
3-9	*Wood waste*	*192*
3-10	*Hazardous wastes*	*93*
3-11	*Mineral waste, including ash fraction*	*1 472*
4.	Waste from market places	114
5.	Waste from cleaning streets and squares	251
6.	Large-size waste (1)	451
	TOTAL	**11 802**

(1) – furniture and other large-size waste (excluding used electrical and electronic equipment).
* - when surveying morphology composition of municipal waste no packaging fraction is distinguished

The quantity of municipal waste generated in 2004 was by about 0.6% lesser than in 2000 (11,946 thousand Mg).

Average morphological composition of mixed municipal wastes generated was identified on the basis of relevant survey carried out throughout the national territory in 2000-2005. Figures 2-1, 2-2 and 2-3 show the average percentage composition of municipal wastes generated in urban and rural areas, and infrastructure sites.

Figure 0-1 Morphological composition of wastes generated in urban areas

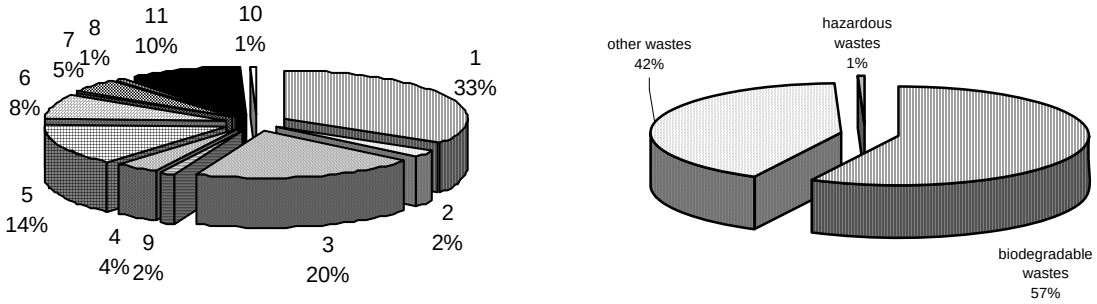


Figure 0-2 Morphological composition of wastes generated in rural areas

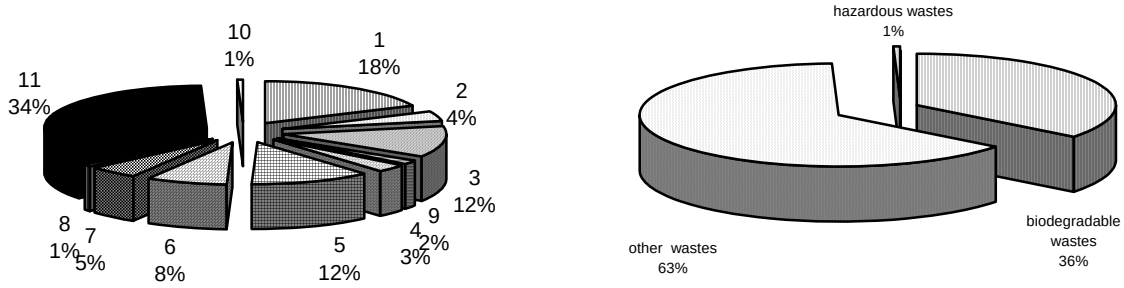
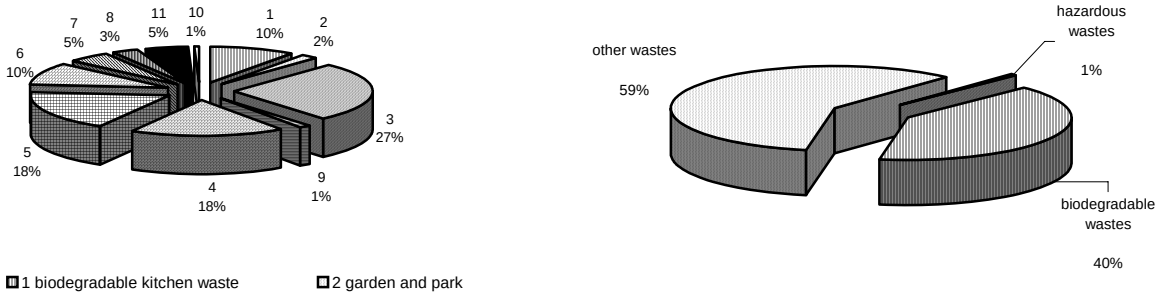


Figure 0-3 Morphological composition of wastes generated from the infrastructure sites



1 biodegradable kitchen waste
2 garden and park
3 paper and cardboard
9 wood
4 multi-material wastes
5 plastics
6 glass
7 metals
8 cloth and textile wastes
11 mineral waste
10 hazardous wastes

2.1.2. Biodegradable wastes

Estimated balance of biodegradable municipal waste is show in Table 2-2.

Table 0-2 The quantities of biodegradable municipal waste generated in 2004

No.	Name	Quantity [thousand Mg]
1.	Paper and cardboard collected in a selective manner	66.7
2.	Cloth and textiles (made of natural materials) collected in a selective manner	7.1
3.	Garden and park wastes	326.0
4.	Biodegradable waste coming into stream of mixed municipal waste	5 040.4
5.	Waste from market places (biodegradable proportion thereof)	80.0
Total		**5 520.2**

The quantity of biodegradable waste generated in 2004 was by 14% larger than in 2000 and by 26% larger when compared against that of the 1995 base year.

The quantity of biodegradable waste generated in 1995 was determined on the level amounting to 4.38 million Mg, meaning that the quantity amounting to 155 kg/year was at that time produced by a statistical inhabitant of the urban areas, whereas 47 kg/year in rural areas.

In 2004, 278 thousand Mg, of the total quantity amounting to 5.52 million Mg of biodegradable waste generated, was biologically treated thanks to selective collection of wastes from households, so that recycling of 66.7 thousand Mg waste paper was possible. Significant proportion of recycled waste paper and cardboard packaging, with the total mass thereof amounting to 467.5 thousand Mg, originated from the infrastructure sites.

Moreover, a part of the volume of biodegradable waste generated, particularly in villages and smaller towns, is utilised by the inhabitants on their own. So then, it is assumed that 70% of biodegradable waste generated in villages and 15% of such waste in minor towns is utilised for the purposes of composting, feeding animals, and in household furnaces. The total estimated quantity of such waste amounted to about 770 thousand in 2004.

It is estimated that in 2004, about 4 million Mg biodegradable municipal waste was deposited on landfills, thus accounting for about 91% in relation to the quantities of municipal biodegradable waste generated in the 1995 base year.

2.1.3. Municipal waste management scheme

In 2004, the operators holding the relevant permits and the municipal administrative units collected the total of about 9.8 million Mg municipal wastes (Table 2-3). For the total quantity of municipal wastes collected, only 0.24 million Mg was collected in a selective manner, whereas of 9.5 million Mg mixed wastes – 6.6 million Mg was collected from households and 2.9 million Mg from the infrastructure sites.

Table 2-3 The quantity of municipal wastes collected in 2000-2004

Year	2000	2001	2002	2003	2004
Quantity of waste [million Mg]	12.2	11.1	10.5	9.9	9.8

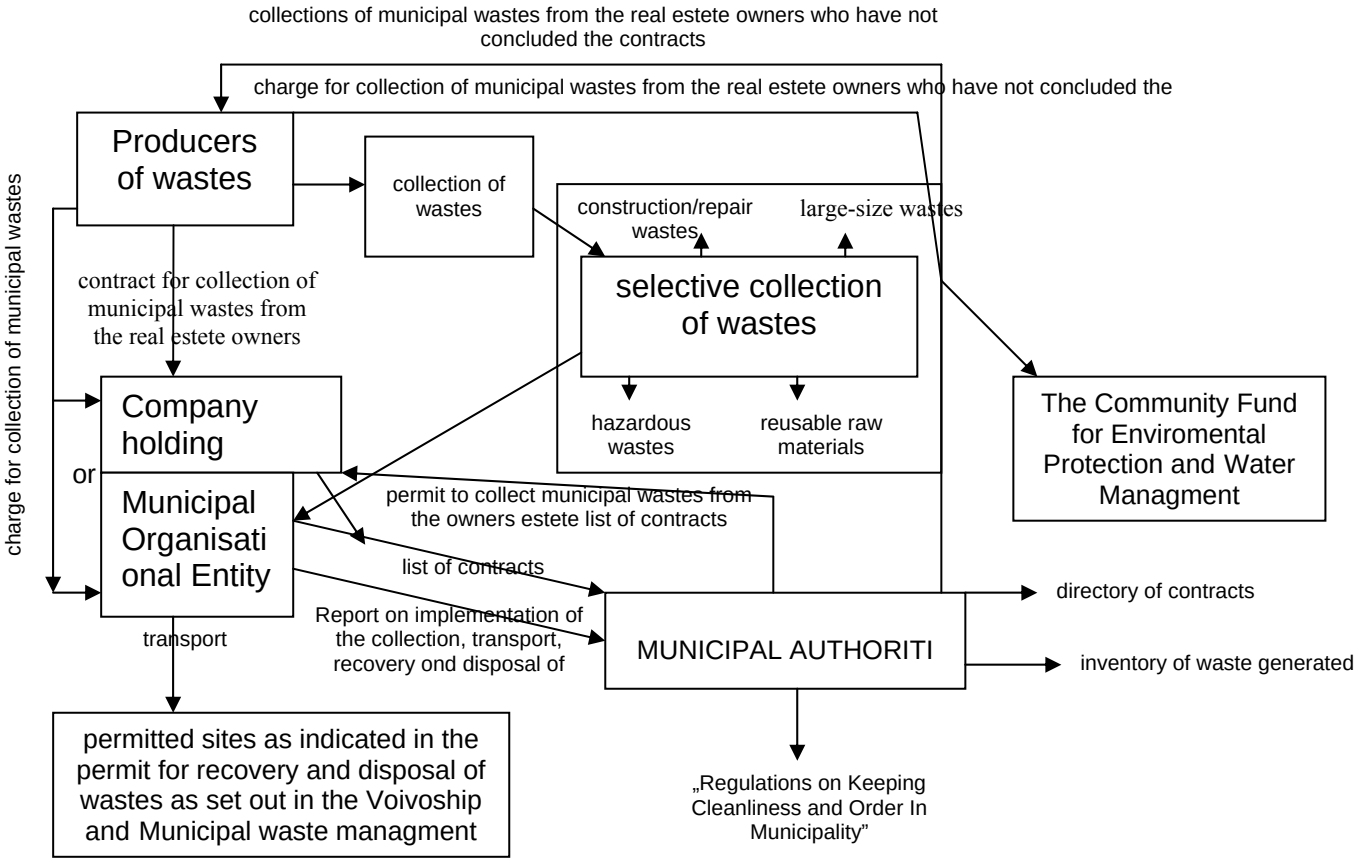
In 2000 – 2004, progressing decline of the quantity of waste collected was noted and the causes for that include, *inter alia*:

- Deviation from the factual status the registration data on waste volumes directed to the recovery and/or disposal sites, with simultaneous failure to weighting waste quantities received on landfills, are amongst the reasons (in 2004, only 32% of landfills were equipped with the scales),

- Failure by the real estate owners to conclude contract with the relevant company being responsible for collection of wastes, and who discarded their wastes on illegal waste dumps or have utilised those in their own household,
- Failure on the Municipalities to control the compliance with the permit conditions in the scope of municipal waste collection from the real estate owners,
- Decline of the volume weight of (i.e. rise in volume of waste with its weight dropping).

The scheme, as operated in Municipalities, for registration of contracts concluded between the producers of waste and the waste collection operators makes it possible to identify those municipal inhabitants who have evaded the obligation to enter such contracts, and to counteract such failures. At the same time, fulfilling by those who perform collection of waste of their statutory obligation to submit reports on waste recovery and disposal methods enables for the Municipalities to control the operators' performance – upon the criterion of their compliance with waste management plans approved.

Figure 2-4 The current model of the municipal waste management scheme.



According to the legal provisions in force, the real estate owner should hold valid contract to provide for delivering his/her municipal waste. Each operator could be a party to such a contract, provided they hold valid permit to perform activities in the scope of municipal waste collection (as issued by Head of Municipality, City Mayor, or President of Town). The permit specifies the municipal waste recovery or disposal sites in accordance with the Voivodship waste management plan. Any Municipal entity who is exempted from the obligation to hold such a permit may also perform activities in the scope of municipal waste collection, provided it complies with the operators' responsibilities as established to this end by the Municipality Head, City Mayor, or President of Town.
The entities active in the Municipal territory in question are obliged to provide their authorities with information on the contracts concluded with the real estate owners. To this end, the municipal

authorities should keep the register of the contracts signed. In case when a real estate owner fails to enter such a contract with the collector of waste, the Municipality undertakes for so called alternative deed (i.e. they impose, by decision, a charge on him/her and manage for collection of municipal waste from this owner; the charge levied goes then to the account of the Municipal Fund for Environmental Protection and Water Management). Moreover, these entities are obliged to report to their authorities on their performance in management of municipal waste.
Where in the territory of a given Municipality there is no active operator collecting municipal waste from the real estate owners, the municipal authorities must provide for a system of municipal waste collection for all inhabitants of this Municipality.
Municipal waste must be delivered and collected in a selective manner in accordance with the requirements laid down in the Regulations on keeping cleanliness and order in the Municipality (that means the local legal act) as approved by the Municipal Council. The Regulations have to be harmonised with the Municipal waste management plan.

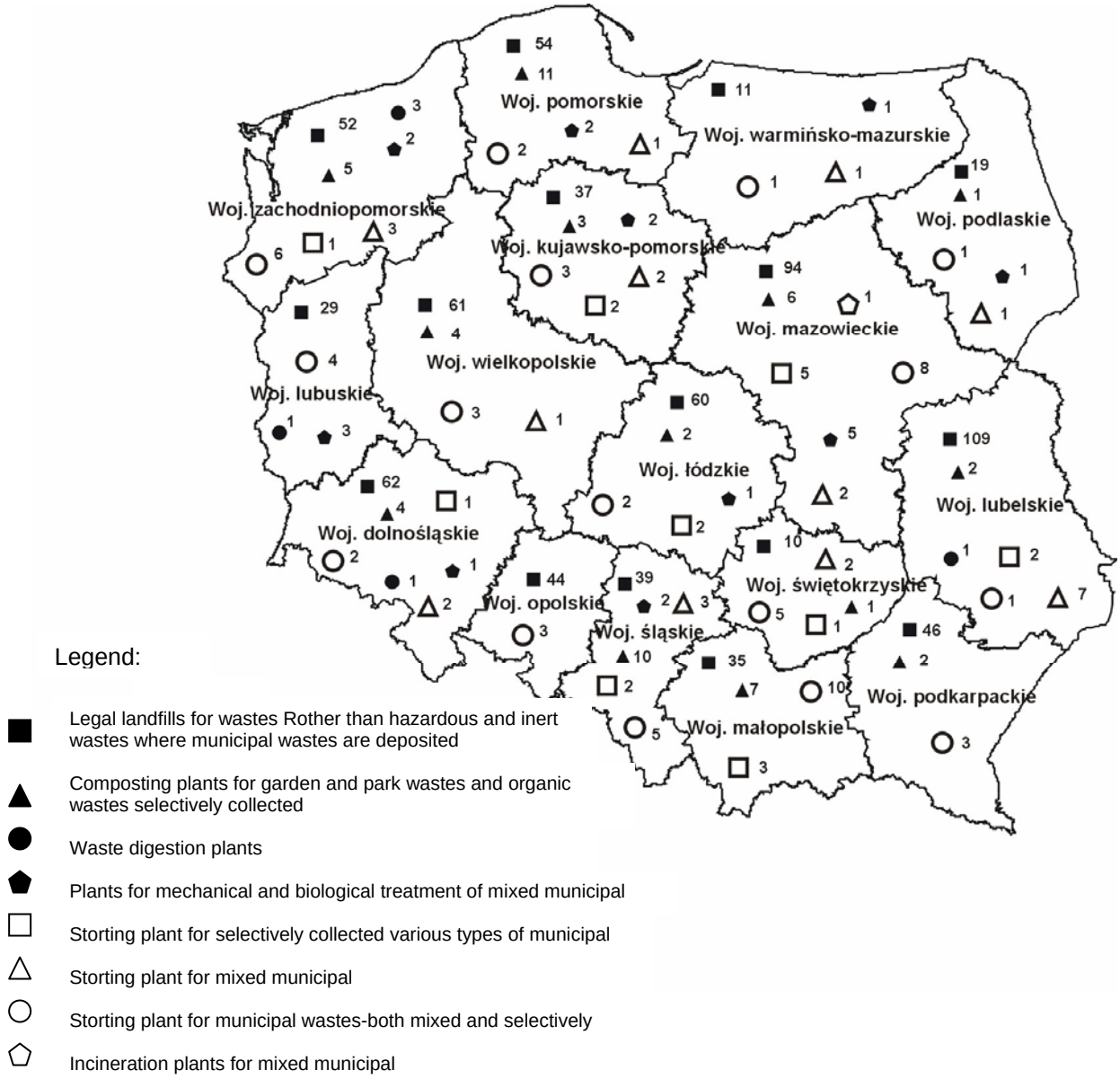
Selective collection of waste
In 2004, the volume of about 243 thousand Mg waste was collected in a selective manner that accounted for about 2% of the total quantity of municipal waste generated, or about 2.5% of the total quantity of collected waste, including 66.7 thousand Mg waste paper and cardboard, 73.4 thousand Mg glass, 31.3 thousand Mg plastics, 9.7 thousand Mg metals, 14,2 thousand Mg textiles, 47,9 thousand Mg large-size wastes, and also 102 Mg hazardous waste, and 12 Mg waste electrical and electronic equipment.
In 2000, the quantity of sorted waste amounted to 13 thousand Mg that accounted for 0.1% of the total collected wastes.
Thus, a growing trend can be noted in this scope; however the progress is still too slow, that means the effects cannot satisfy expectations.

Utilisation of waste
In 2004, about 278 thousand Mg waste was treated by biological processes (R3, D8), that accounted for about 2.3% of the total quantity of municipal waste generated, and about 5% of the estimated quantity of biodegradable waste entering the municipal waste stream.
Since 2000, no meaningful growth in application of biological methods for waste treatment was noted, whereas the quantity of composted waste amounted to 248 thousand Mg.
Thermal treatment of waste (R1, D10) comprised 44 thousand Mg waste, accounting for 0.4% of the total quantity of waste generated, and for 0.4% of the total quantity of waste collected. No progress was noted in this scope when compared against 2000.

2.1.4. Existing recovery and disposal installations for municipal waste

In Poland, waste landfills are still considered the major type of municipal waste utilisation installations. As of 31 December 2005, 762 legal landfills for wastes other than hazardous and inert wastes where municipal wastes were deposited were in operated in Poland (data was obtained from the Marshall Offices in coordination with the Voivodship Offices and the Voivodship Inspectorates for Environmental Protection). For inventory of all these landfills - see Appendix attached to this „The 2010 National Waste Management Plan".
In Poland, by the end of 2005, there were 59 waste sorting plants for waste collected in a selective manner, 19 sorting plants for mixed municipal wastes, and 25 sorting plants for sorting of municipal wastes collected both in a selective manner mixed ones. Moreover, as of 31 December 2005, there were 58 composting plants for wastes from greenery and organic wastes collected in a selective manner, 6 municipal waste fermentation plants, 20 plants for mechanical and biological treatment of mixed municipal wastes, and one incineration plant for mixed municipal wastes.
Figure 2-5 shows distribution of existing municipal waste management sites throughout the national territory in Poland, as of 31 December 2005.

Figure 2-5 Municipal waste management facilities existing in Poland, as of 31 December 2005



The Voivodship waste management plans will contain detailed inventories of municipal waste utilisation installations (plants) and maps showing spatial distribution of these installations (plants), as of 31 December 2006. These inventories will include at least the installation type, name, address, capacity, and additionally, for landfills, their empty volumes anticipated to be potentially filled in with waste, and the quantity of waste mass to be received until closure of the landfill in question.

2.1.5. Problems identified in the scope of municipal waste management

The following problems were identified in the scope of municipal waste management:

- Lacking sufficient number of installations for recovery and disposal of waste (apart from storage), particularly in relation to biodegradable waste, and as consequence too low quantities of waste undergoing its biological and thermal treatment processes,
- Too low operability on a part of the Municipalities in their activities aimed at establishment of supra-Municipal organizational units which would implement comprehensive municipal waste management,

- Unavailable instruments to discipline the territorial self-governmental units in case when they fail to comply with their statutory obligations,
- Incompliant with the legal requirements the technical condition of a major part of landfills for wastes other than hazardous and municipal wastes where deposition of municipal waste is carried out,
- Too low charge rates meted for storage of mixed municipal waste,
- Too low progress being achieved in selective collection of municipal waste, including hazardous waste occurring in municipal waste stream,
- Unavailable uniform inventory system for types and quantities of municipal waste generated and for waste recovery and disposal sites,
- Lacking regular survey on morphology of municipal wastes,
- Insufficient environmental awareness of the general public,
- Unavailable requirements on mechanical-biological treatment of mixed municipal wastes that would allow for recognition of the waste processed as compliant with the criteria for reception this waste on landfills.

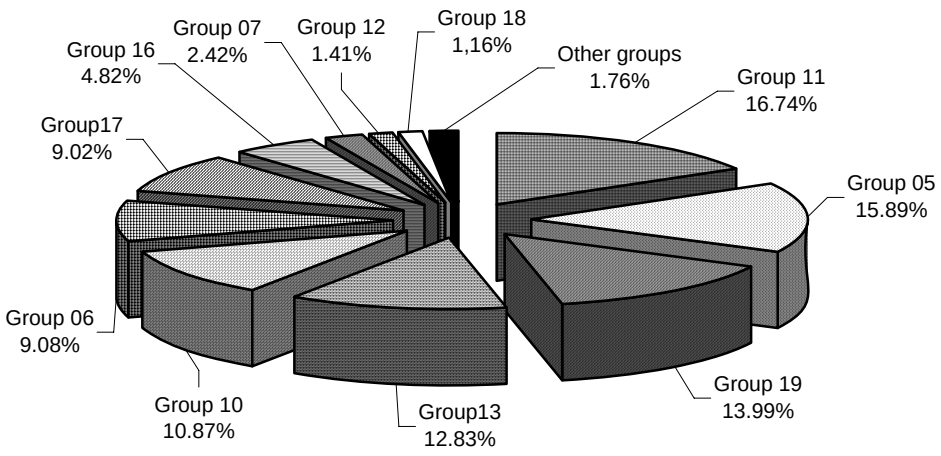
2.2. HAZARDOUS WASTES

2.2.1. Sources of origination, the quantities generated, recovered and disposed of

Industrial and service activities are the major sources for hazardous waste generation. Hazardous waste is generated also in households, medical establishments, schools and in national defence sector. In 2004, the quantity of about 1,680 thousand Mg hazardous waste was generated in Poland. The largest quantities originated from the following industrial branches:
- wastes from the iron and steel industry (sub-group 10 02),
- wastes from lead, zinc and copper thermal metallurgy (sub-groups: 10 04, 10 05 and 10 06),
- wastes from chemical processes (groups: 06, 07 and 11),
- wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal (group 05),

while the least quantities were generated by the leather, fur and textile industries, group 04 (0.001%). The percentage share of particular groups of hazardous wastes generated domestically is shown in Figure 2-6.

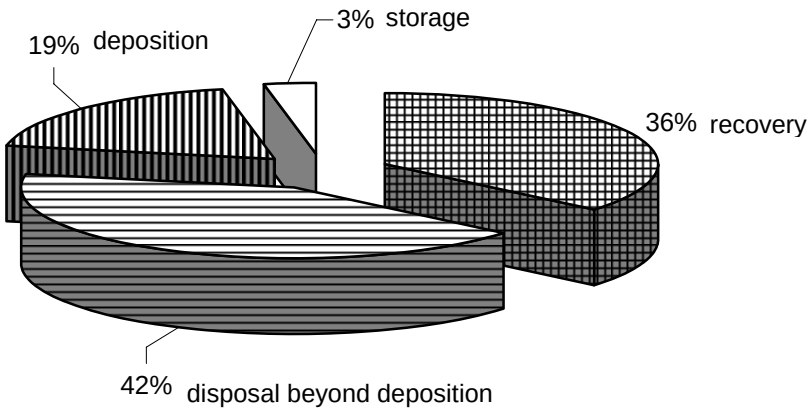
Figure 2-6 The percentage share of particular groups of hazardous wastes generated in Poland in 2004



The quantity of hazardous waste generated in 2004 when compared against that of 2000 increased by about 12%, respectively, i.e. from 1,480 thousand Mg to 1,680 thousand Mg.
However, that does not fully reflect the factual status and has been caused by lacking information on hazardous waste generated in small and medium sized enterprises, and also by the change in waste classification introduced in 2002.

The methods for utilisation of hazardous wastes generated in 2004 throughout Poland are shown in Figure 2-7.

Figure 2-7 The structure of hazardous waste management in Poland in 2004



Existing installations and facilities for recovery and disposal of hazardous wastes

In 2005, about 500 installations and facilities for recovery and disposal of hazardous waste were identified in Poland, including: about 35 landfills (including their separate silos) and about 100 installations for thermal transformation of waste.

No new landfills for hazardous waste are necessary to construct, except for landfills designated for asbestos containing wastes, however there is a need to modify existing ones. The operators have to apply new technologies which provide for reduction in the quantities of hazardous wastes generated and in their harmfulness levels.

Transboundary shipment of hazardous wastes

In 2004, the Chief Inspector of Environmental Protection issued 84 permits for the transboundary shipment of hazardous wastes, including 57 for imports and 27 for exports of wastes.

The permits to import wastes covered about 85 thousand Mg hazardous wastes in the following groups: 06, 07, 12, 13, 16 and 20, whereas those for export - about 150 thousand Mg hazardous waste, in groups: 06, 07, 10, 11, 13, 15, 16, 17 and 20.

Problems identified in the scope of hazardous waste management

The analysis of the current status in the scope of generation and the methods for management of hazardous wastes, and the effectiveness of existing recovery and disposal installations for such wastes, resulted in identification of the following major problems which affect the issues in question:

- Lacking mutual correlation between existing schemes for collection of hazardous waste from diffused sources, including also the hazardous wastes which occur in municipal waste stream,
- Inconsiderable use of up-to-date (innovative) technology,
- The capital barrier on the introduction of the state-of-art technology solutions which could contribute to both the minimization of the quantity of waste generated and the increase in their recovery levels,
- Insufficient economic motivation for undertaking pro-environmental activities,
- The Community legal provisions on the limitation of the opportunities to grant public assistance to the operators,
- Insufficient monitoring of hazardous waste management in relation to small and medium sized enterprises sector, particularly those generating inconsiderable quantities of hazardous waste (for instance photo-shops, printing houses and X-ray laboratories),
- Unsatisfactory level of environmental education and awareness of the general public.

Resolving of the aforementioned problems would provide for both the increase in the mass of hazardous waste subject to recovery processes and the elimination of improper practices in the scope of handling of these wastes.

2.2.2. PCBs-containing wastes

Sources of their origination, the quantities generated and undergoing disposal

Given their dielectric properties, PCBs are applied as:

- The basic components of insulating liquids for filling-in transformers and condensers,
- Hydraulic liquids,
- Additives for paints and varnishes,
- Softening agents for plastics,
- Preservatives and impregnants.

In 2004, the total quantity of about 160 Mg PCBs-containing wastes was collected, including 149 Mg disposed of and 11 Mg deposited.

Performed in 2004 the inventory of equipment containing (or that potentially capable to contain) PCBs revealed existence of 44.5 thousand such equipment on 661 industrial sites. Those were condensers (65%), transformers (28%), switches (6%) and other equipment (1%). The mass of PCBs-containing wastes is estimated at the level of 39.2 thousand Mg. The finding of that inventory was also that about 90% of the currently operated equipment containing (or those capable to contain) PCBs are in good technical condition.

According to Regulation of Minister of Economy of 24 June 2002 on the requirements in the scope of use and shipment of the substances which pose significant environmental risks, or use and cleaning of the installations or equipment in which the substances which pose significant environmental risks were or are used (Official Journal No. 96, Item 860), the installations or equipment where PCBs were or are used have to be gradually eliminated. The use of PCB in the installations or equipment currently under use will be allowed no longer than by 30 June 2010.

Existing treatment installations

One installation for transformer decontamination is currently operated in Poland, the capacity of which is 600 Mg/year. PCBs-containing oils and liquids are disposed of by thermal treatment method in 2 installations, the maximum combined capacity of which is 14,000 Mg/year. There is no installation available in Poland to dispose of the PCBs-containing condensers.

Problem identified:

- too slow phasing out the PCBs-containing equipment.

2.2.3. Waste oils

Sources of origination, the quantities generated, recovered and disposed of

Waste oils originate in result of planned replacement of worn out oils, and accidents of installation and/or equipment, as well as in result of their removal from other wastes, amongst others, end-of-life vehicles. The quantity amounting to about 84.5 thousand Mg waste oil was collected in 2004, of which 50% was subject to reclamation process.

The current waste utilisation scheme

Four recovery organisations are currently active on the Polish market which organise collection and utilisation of waste oils with the aim to achieve their recovery and recycling levels, as required. Figure 2-8 shows the activity flow-diagram of such an organisation.

Existing recovery and disposal installations

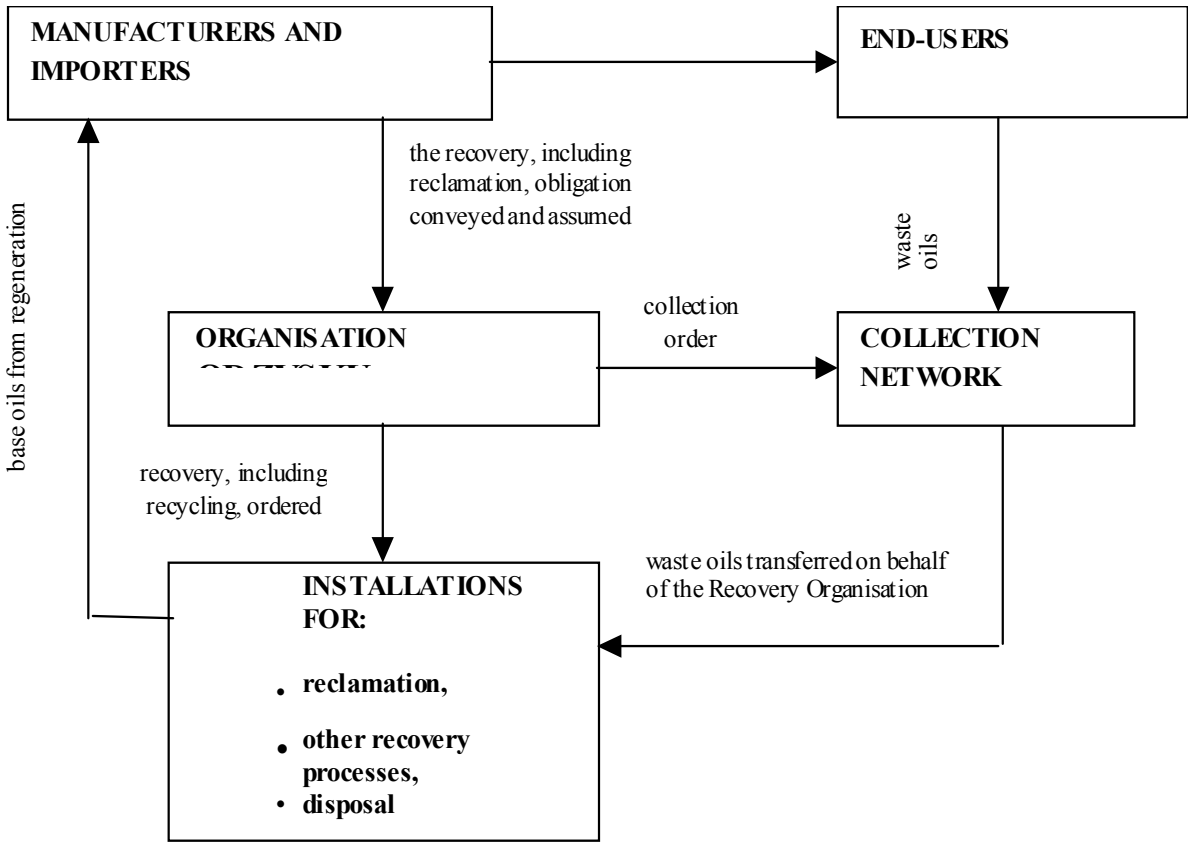
Three meaningful recovery and disposal installations for reclamation of waste oils are currently operated in Poland, the total combined capacity of which is 145 thousand Mg/year.

Problems identified:

- lacking sufficiently developed waste oil collection scheme for small and medium sized enterprises and households,

- unavailable pre-organized sites for storage of waste oils originated from the naval accidents.

Figure 2-8 Coordination activities performed by the Recovery Organisation for utilisation of waste oils



2.2.4. Waste batteries and accumulators

Sources of origination, the quantities generated, recovered and disposed of

Lead-acid accumulators
Lead-acid accumulators are used principally as car batteries. Used accumulators undergo replacement by new ones (thus forming one of the sources of waste origination). Thus type of waste originates also in the end-of-life vehicles dismantling stations. In 2004, about 79 thousand lead-acid accumulators were subject to recycling in technology process aimed at recovery of lead and sulphuric acid, including 56 thousand Mg related to replacement of worn-out car-batteries with new ones.

Nickel-cadmium batteries and accumulators
Large- and small-size nickel-cadmium batteries and accumulators are currently in use. Given their life-time duration of 10-12 years, precise quantities of used Ni-Cd batteries and accumulators are difficult to determine. It is estimated that about 2 thousand Mg this type batteries and accumulators are annually phased-out from operation.

Manganese-zinc batteries with alkaline and hydrochloric electrolytes (Mn – Zn), zinc-carbon (Zn), zinc-manganese (Zn-Mn), lithium (Li), lithium-ion (Li-ion) and other
Following the estimates, in 2004, more than 250 million batteries, mainly zinc-carbon, zinc-manganese and lithium-ion batteries, the total mass of which amounted to about 7 thousand Mg, were placed on the Polish market. Given their relatively short life-time, it is estimated that the total used annual mass of this type batteries is comparable to that of manufactured ones, i.e. about 7 thousand Mg. In 2004, only about 700 Mg these type batteries were collected which were then forwarded in total to specialist installations for recovery and disposal.

The current waste utilisation scheme
The companies dealing with recycling of lead-acid accumulators have their own waste collection network which covers entire Polish national territory.
Collection schemes for other types of batteries and accumulators are currently under development and they have been operated in a limited area of the national territory.
The batteries and accumulators collected undergo processing in existing installations currently operated in Poland.

Existing recovery and disposal installations
As of 31 December 2005, 6 installations for recovery and disposal of waste covered by sub-group 16 06 are actively operated in Poland, the total combined throughput of which is about 180 thousand Mg/year, including 2 ones dedicated to recycling of lead-acid accumulators.

Problems identified:
- unavailable data on all the operators who deal with imports or inter-Community purchase of batteries,
- insufficiently operated scheme for collection of small-size batteries from small and medium sized enterprises and households, including retailers,
- lacking developed environmentally and economically effective technologies for treatment of batteries and accumulators that would provide for achievement of 50% recycling level (excluding lead-acid accumulators and nickel-cadmium batteries).

2.2.5. Medical and veterinary wastes

Sources of origination, the quantities generated, recovered and disposed of
Medical and veterinary wastes originate in all medical and veterinary establishments situated throughout the national territory.
In 2004, about 20 thousand Mg medical and veterinary wastes were collected in these establishments in a selective manner (including about 80 Mg veterinary waste) that were in total disposed of.

The current waste utilisation scheme
The major part of medical and veterinary establishments apply selective waste collection methods with use of special types of receptacles (following their internal Regulations), nevertheless, this scheme has not been unified on the national scale. In 2004, these wastes were collected by specialised companies and disposed of mainly by means of incineration (D10), thermal disinfection (D9), or physical and chemical treatment (D9) processes.

Existing disposal installations
As 31 October 2006, 37 incineration plants for medical and veterinary wastes having the total combined treatment capacity about 4 thousand kg/h, and additionally, reception of medical and veterinary wastes was carried out by 9 other installations for thermal treatment of wastes.

Problems identified:
- low reliability of data on the quantities of particular types of waste generated in medical and veterinary establishments,
- ineffective supervision over suitability of handling medical and veterinary wastes,
- lacking effective schemes for management of medical waste and veterinary waste,
- unavailable scheme for monitoring of the quantity of veterinary waste,
- in numerous regions throughout the country no scheme is available for collection of overdue medicaments from households.

2.2.6. End-of-life vehicles

Sources of origination, the quantities generated, recovered and disposed of
According to estimates, the vehicle dismantling processes comprised: in 2003 - about 370 thousand vehicles (i.e. about 344 thousand Mg); in 2004 – about 400 thousand vehicles (i.e. about 376 thousand

Mg), and in 2005 – about 660 thousand vehicles (i.e. about 624 thousand Mg). Hence, 45% increase in the quantities of vehicles subject to dismantling was noted in 2003-2005.

Existing vehicle collection points and dismantling stations
As of 31 October 2006, 81 collection points and 445 dismantling stations for end-of-life vehicles were operated in Poland, the total capacity of which amounted to about 580 thousand Mg/year (data taken from the relevant decisions), where the number of dismantling stations with capacity at least 3,000 Mg/year is not higher than 35.

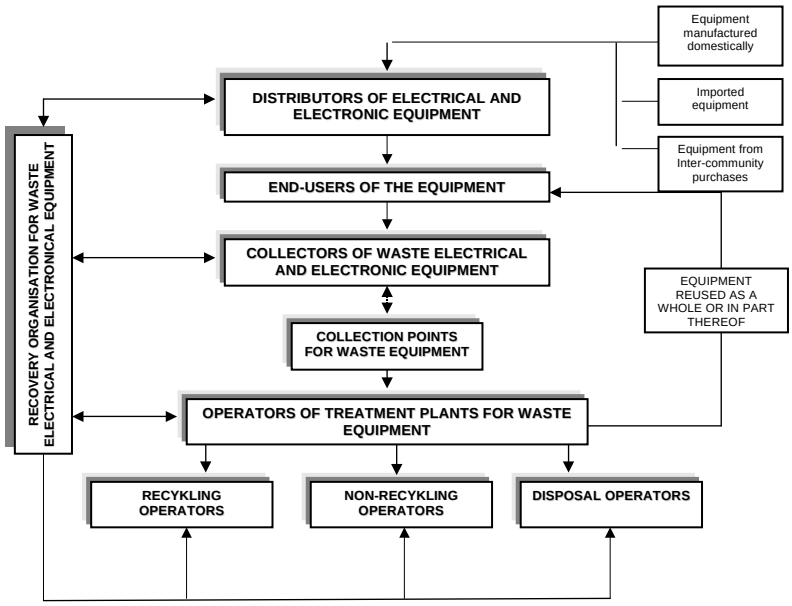
Problems identified:
- unreliable and incomplete data on the quantity of cars being put on the registers and deleted there from,
- unavailable collection network for end-of-life vehicles that would cover all the national territory,
- lacking reliable data on the quantity of vehicles subject to dismantling, although Central Inventory of Vehicles and Drivers (CEPiK) is already in operation,
- mass imports and inter-Community purchase of used cars (often considerably worn out),
- dismantling practices on the end-of-life vehicles being pursued beyond the dismantling stations.

2.2.7. Waste electrical and electronic equipment

Sources of origination, the quantities generated, recovered and disposed of
In 2004, about 4 thousand Mg waste electrical and electronic equipment was collected. The quantities of used equipment which contained hazardous elements amounting to about 1.5 thousand Mg were subject to disposal processes (including about 0.1 thousand Mg by means of deposition). The remaining quantity of waste equipment was subject to recovery processes (about 0.7 thousand Mg) or stored in warehouses (about 1.7 thousand Mg).

The current waste utilisation scheme
Storage in warehouses or deposition on municipal waste landfills were still recently the major methods practiced in dealing with waste electrical and electronic equipment originated from municipal sector. However, the specialized companies holding the relevant permits collected such type equipment which originated from sources other than households.
Since 2006, new management scheme for waste electrical and electronic equipment which originated in particular from households has been under implementation. The users of the equipment designed for household use are obliged to collect it in a selective manner and transmit to the entities dealing with collection of this type of waste (they could be municipal waste collection companies, waste collection points and trading entities – in case when a customer purchases new equipment of the same type and quantity at 1:1 rate). Mixing of this type wastes with other waste types is banned. Such waste equipment is then transmitted to processing plants which perform its dismantling. Separated fractions of waste go to specialised installations. The obligation to finance the entire scheme is imposed on the distributors who place the equipment in question on the market. Flow diagram of the current utilisation scheme (collection, treatment, recovery, recycling) for waste electrical and electronic equipment is presented in Figure 2-9.

Figure 2-9 Utilisation scheme of waste electrical and electronic equipment



In case of users other than households, the distributors placing the equipment on market are obliged to collect their waste electrical and electronic equipment directly from them.

Existing plants for treatment of waste electrical and electronic equipment
As of 31 October 2006, 58 treatment plants for waste electrical and electronic equipment were listed on the inventory being kept by the Chief Inspectorate for Environmental Protection.

Problems identified:
- unavailability of reliable data on the Polish market of waste electrical and electronic equipment,
- lacking sufficient number of treatment plants,
- no organised secondary circulation scheme for outdated waste electrical and electronic equipment is unavailable.

2.2.8. Wastes containing asbestos

Sources of origination, the quantities of generated and disposed of
In 2004, the quantity amounting to about 141 thousand Mg asbestos-containing wastes was collected and disposed of by means of its deposition. This quantity included asbestos-containing waste such like: insulation materials, construction materials, waste electrical and electronic equipment, brake pads, and wastes containing asbestos from electrolysis. The quantity of about 15 million Mg materials containing asbestos has yet remained uncollected throughout Poland.

The current waste utilisation scheme
The holders of the relevant administrative decisions and certificates on suitable qualification in safe dismantling of asbestos-containing products are exclusively authorised to perform dismantling of the insulation and construction elements containing asbestos.

Existing disposal installations
Deposition on landfills is the sole legally permitted method for disposal of waste containing asbestos. As of 31 October 2006, 26 such landfills were operated throughout Poland those were hazardous waste landfills or separated silos on landfills for waste other than hazardous and inert waste.

Problems identified:
- unavailable economic incentives for private holders to disassembly their asbestos-cement roofing products (eternit),
- difficulties in identification of the general-purpose landfills with asbestos containing wastes deposited thereon that would otherwise lead to verification of the „Programme for disposal of asbestos and asbestos-containing products applied throughout Poland".

2.2.9. Overdue pesticides

Sources of origination, the quantities generated and disposed of
Overdue pesticides and pesticide waste originate from:
- overdue preparations which were withdrawn from the market and deposited in burial grounds or warehouses for plant protection agents,
- the current production, distribution and application in agriculture,
- the old production, accumulated on landfills.

In 2004, the quantity amounting to about 170 Mg overdue pesticides and pesticide waste was collected and in total disposed of by thermal disposal processes.
As of 30 September 2006, 129 burial grounds were operated in Poland with estimated contents of about 4.2 thousand Mg overdue plant protection agents.

Existing treatment installations
Currently, two installations for disposal of pesticide waste are operated in Poland, the total combined treatment capacity of which amounts to 6 thousand Mg/year

Problems identified:
- difficulties on the part of the public administration authorities in formulation of adequately the specification of the essential preconditions to be included in the relevant order when contracting liquidation of the burial grounds,
- too scarce financial resources for gradual liquidation of landfills, burials and storage sites for overdue plant protection agents and for monitoring of the areas contaminated by pesticides.

2.2.10. Waste explosives

Sources of origination, the quantities generated, recovered and disposed of
Waste explosives originate from the current military activities, as they did also in the past period (including those from military troops of the Russian Federation), including in the areas of the military, border guard and police training and testing grounds, and in production plants both manufacturing and applying explosives. Those include, amongst others, waste ammunition, waste pyrotechnic products and other explosives.
In 2004, about 62 thousand Mg such types of wastes were produced, including so called redundant combat resources. These resources are currently stored in 12 Material Warehouses of the Regional Bases of the Armed Forces of the Republic of Poland.

Problems identified:
- unavailable programme for utilisation of waste ammunition and liquidation of the relevant resources accumulated.

2.2.11. Installations for recovery and disposal of hazardous wastes

Figure 2-10 shows the coverage of selected installations for recovery and disposal of hazardous wastes in Poland (PCBs, waste oils, waste batteries and accumulators, medical and veterinary wastes, end-of-life vehicles, waste electrical and electronic equipment, wastes containing asbestos, and waste

pesticides), as of 31 December 2005, except for incineration plants where medical and veterinary wastes undergo thermal treatment, dismantling stations for end-of-life vehicles, plants processing waste electrical and electronic equipment, and waste landfills for deposition of wastes containing asbestos, the data on which is given as for 31 October 2006.

Figure 2-10 Coverage of selected installations for recovery and disposal of hazardous wastes in Poland, as for 31 December 2005, (except for incineration plants where medical and veterinary wastes undergo thermal treatment, dismantling stations for end-of-life vehicles, plants processing waste electrical and electronic equipment and waste landfills for deposition of wastes containing asbestos, the data on which is given as for 31 October 2006)

The Voivodship waste management plans will contain detailed lists of installations (plants) for utilisation of hazardous wastes, including also maps illustrating spatial distribution of these installations (plants), as of 31 December 2006. These lists will include at least the installation type, name, address, capacity, and additionally – for landfills their empty volumes with anticipated mass of wastes to be potentially received until closure of a given landfill.

2.3 OTHER WASTES

2.3.1. End-of-life tyres

Types, sources of origination and quantities of waste generated

End-of-life tyres originate in course of every day use of mechanical vehicles. End-of-life vehicles are also the source of their origination. Estimation of the quantity of waste generated is made upon the quantity of new tyres purchased to replace the old ones or upon the quantity of vehicles registered, while taking into account the tyres' life-time. The estimates show that in 2004, about 131 thousand Mg end-of-life tyres were generated. The quantities of the end-of-life tyres generated in Poland in 2000 – 2004 are shown in Table 2-4.

Table 0-4 The quantities of the end-of-life tyres generated in Poland in 2000 – 2004

Year	2000	2001	2002	2003	2004
Quantity of end-of-life tyres (thousand Mg)	114	118	121	127	131

Types and quantities of waste subject to particular recovery and disposal processes

In 2004, about 88.7 thousand Mg end-of-life tyres were recovered, including 17.3 thousand Mg recycled. The level of recovery amounted to 58.87% and was higher by 8.57% than the required one. The recycling level was 11.45% and was higher by 5.45% than the required one.

The current waste utilisation scheme

Waste collection network for end-of-life tyres includes: tyre service points (being the major source of the end-of-life tyres), vehicle utility companies, dismantling stations, municipalities and individuals. The quantity of the end-of-life tyres collected varies seasonally, i.e. being the maximum in the autumn and spring tyre replacement periods. The recovery organisation deals with establishment of a comprehensive scheme for collection, recovery and disposal of the end-of-life tyres, in cooperation with the logistic operators and companies dealing with recovery or disposal of tyres.

Problems identified:

- incineration of a proportion of the end-of-life tyres in installations being not prepared for this purpose,
- mixing this waste together with municipal waste and their deposition on municipal landfills.

2.3.2. Wastes from construction, repair and demolition of building structures and road infrastructure

Types, sources of origination and quantities of waste generated

Wastes from construction, repair and demolition works originate from housing and industrial construction activities and also in highway and railway engineering – during both construction and planned maintenance phases, and accidental repairs, and also during demolition works. Sources of their origination are of diffused nature that involves difficulties in terms of their quantitative evaluation. In 2004, about 1.8 million Mg wastes other than hazardous wastes were generated within this group that accounted for 1.5 % of the total wastes generated in Poland. The quantities of this waste showed some variations: by 2002, a decline trend was noted in the quantity of wastes from construction and repair works, whereas since 2003 gradual rise in their generation was observed. The differences amounted to about 10% annually. The quantity of waste generated in 2004 was by about 10% lower than that in 2000. About 230 million Mg wastes were accumulated on landfills by the end of 2004.

Types and quantities of waste undergoing particular recovery and disposal processes

Wastes from construction, repair and demolition works undergo recovery and disposal processes in installations and by other ways, for instance, for levelling the ground, reclamation of post-excavation pits (total about 1.2 million Mg), and also disposal processes (about 0.3 million Mg). Other wastes undergo storage. Deposition was the major disposal method for disposal of this waste.

The current waste utilisation scheme

The following deal currently with collection and transport of wastes from construction, repair and demolition works:

- producers of these wastes, for instance, building and construction, and repair and demolition companies, and physical persons carrying out such works,
- specialised entities active in the scope of waste collection and transport.

Construction debris and other wastes accompanying the construction and repair works for housing purposes undergoes removal by means of loading it into containers operated by municipal waste collection entities acting on assignment and payment made by producers of these wastes. In 2005, 236 recovery installations and sites for treatment of group 17 wastes were in operation, the total combined capacity of which amounted to about 540 thousand Mg. These installations and sites have sufficient potential for recovery of the total stream of wastes from construction, repair and demolition works.

Problems identified:

- group 17 waste are not always collected in a selective manner which would have enabled their utilisation,
- waste collection scheme does not cover all producers of waste,
- high share of wastes disposed of by deposition and storage methods in relation to the processing potential of the installations and sites capable of their recovery.

2.3.3. Urban waste water sludge

Sources of origination and the quantities of waste generated

Municipal sewage sludge is generated in municipal waste water treatment plants during waste water treatment processes. The quantity of sludge generated depends upon pollutant contents in waste water, treatment technology adopted and carried out, and decomposition rate of organic substances in so called stabilization process. This waste is classified in group 19 under code number 19 08 05 - sludges from treatment of urban waste water. In 2004, the total combined quantity of 476 thousand Mg dry mass urban sewage sludge was generated in Poland in 2,875 urban waste water treatment plants servicing almost 60% of the national population. According to the National Environmental Policy and assumptions for this 2010 National Waste Management Plan and the National Programme for Urban Waste Water Treatment (NPUWWT), the volume of treated urban waste water regularly grows in Poland that is linked with dynamic expansion of sewerage networks (about 5 thousand km annually in 2000-2004). The percentage of population serviced by waste water treatment plants and continuous growth in the quantities of urban waste water sludge are the measurable effects here.

Table 2-5 The quantities of urban waste water sludge generated in Poland in 1999-2004

Year	Quantity of sludge generated [thousand Mg dry mass]	Percentage of population serviced by waste water treatment plants [%]
1999	354	48.0
2002	435	56.7
2004	476	59.0

The largest quantities of sludge were generated in the Voivodships featuring by high population, and with large conurbations like, for instance, in the Silesian, Wielkopolskie, Mazovian, and Lower Silesian Voivodships. The least quantities of sludge are generated in the Świętokrzyskie Voivodships. About 44% of waste water sludge generated originates from agglomerations with pe ≥ 100 000, about 40% from agglomerations with pe 15 000-100 000, and in agglomerations with pe 2000-15000 about 16 % of the total quantity of sludge is generated.

In quantitative terms, biological type waste water treatment plants (2,080 such sites) predominate in Poland that service near 9 million populations. The major population percentage is serviced by treatment plants with enhanced biogenic removal – more than 12.7 million populations. By the end of 2004, 689 such treatment plants were operated in Poland – being mainly big ones operated in large conurbations.

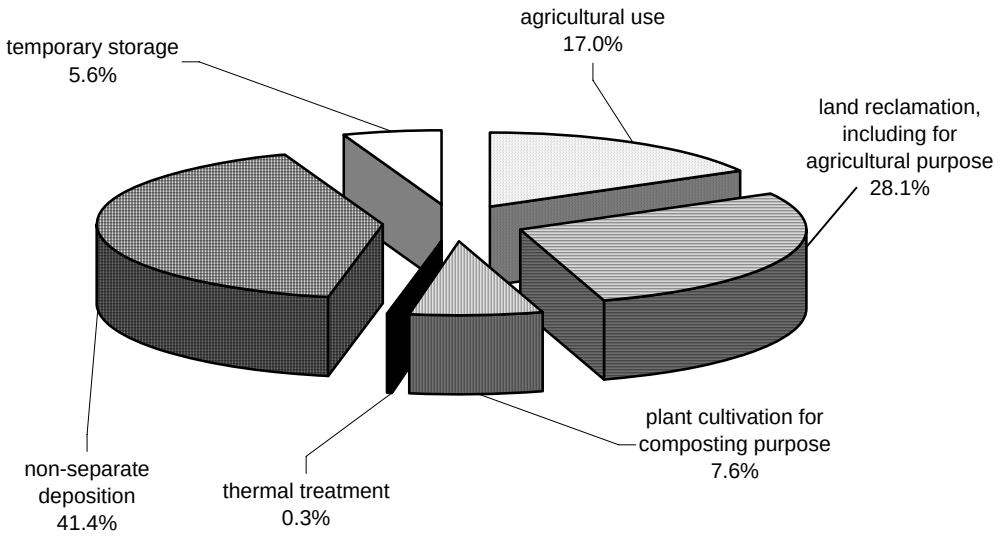
The quantity of waste undergoing particular recovery and disposal processes

Likewise in the previous years, also in 2004, deposition on municipal landfills predominated as the method for utilization of urban waste water sludge – more than 41% of the sludge mass generated. Apart from economic reasons (deposition generates the least sludge utilisation costs), also lacking opportunities to direct such waste into adequate treatment installations (composting or thermal treatment), in line with exceedance of the permissible qualitative parameters for sludge, were the causes which excluded or restricted the opportunities to its use for agricultural or land reclamation purposes. When compared against 2000, and with regard to growth in the quantity of sludge generated, the proportion between the quantities of sludge utilised and deposited are similar. Figure 2-11 illustrates the structure of utilisation of urban waste water sludge generated in Poland in 2004.

In 2004, the methods for utilisation of urban waste water sludge, by the agglomeration size, were following:

- in agglomerations with pe ≥ 100 000: deposition (about 29%), land reclamation (about 24%), agricultural use (about 21%),
- in agglomerations with 15 000 ≤ pe < 100 000: deposition (about 51%), agricultural use (about 22%), land reclamation (about 13%),
- in agglomerations with 2 000 ≤ pe < 15 000: land reclamation (about 62%), deposition (about 28%), agricultural use (about 5%).

Figure 2-11 Utilisation structure of urban waste water sludge generated in Poland in 2004



Type, distribution and processing capacity of the installations for recovery and disposal of sludges

In 2005 urban waste water sludges were directed to 35 composting plants located throughout the national territory. Those were both the large urban plants where sludge is applied as additive to biomass composted, and also the composting sites at urban waste water treatment plants where sludge was used as the major component on their input. Thermal treatment of sludge was carried out in one cement plant for co-combustion in clinker burning process.

Problems identified:

- high percentage of waste deposited on landfills,
- unavailability of installations for thermal treatment of waste water sludges.

2.3.4. Packaging waste

Types, sources of origination and quantities of waste generated, and types and quantities of wastes undergoing particular recovery and disposal processes

Packaging waste is waste which originated from sales (primary) packaging, grouped (secondary packaging), and transport packaging applied within entire packaging system for products placed on market. These wastes originate mainly in the areas of the production plants, trade companies, other business entities, households, and also offices, schools, public authorities, other public utilities, streets, snack-bars, marketplaces, etc.

Data on the mass of packaging waste generated and undergoing recovery processes in Poland in 2004, and their recovery and recycling levels achieved by particular material groups are compiled in Table 2-6.

Table 2-6 The mass of packaging waste generated in Poland in 2004, and their recovery and recycling levels achieved

Material		Mass of wastes [Mg]	Mass of wastes subject to recovery [Mg]							Recycling level [%]	Recovery level [%]
			Material recycling	Other forms of recycling	Total recycling	Energy recovery	Other forms of recovery	Incineration with energy recovery	Total recovery		
1		2	3	4	5	6	7	8	9	10	11
Glass		914 700	250 000	0	250 000	0	0	0	250 000	27.3	27.3
Plastics		663 300	108 200	5 500	113 700	48 500	0	7 500	169 700	17.1	25.6
Paper/cardboard		1 182 000	467 533	0	467 533	33 800	30 000	7 500	538 833	39.6	45.6
Metals	Aluminium	47 000	18 100	0	18 100	0	0	0	18 100	38.5	38.5
	Steel	121 000	20 000	0	20 000	0	0	0	20 000	16.5	16,5
	Total	168 000	38 100	0	38 100	0	0	0	38 100	22.7	22.7
Wood		480 000	10 000	86 400	96 400	345 600	0	0	442 000	20.1	92.1
Other		5 000	0	0	0	0	0	0	0	0.0	0.0
Total		3 413 000	873 833	91 900	965 733	427 900	30 000	15 000	1 438 633	28.3	42.2

The current waste utilisation scheme

The basic factors which underpin the national packaging waste management scheme being active in Poland since 2002 are following:

- the operators' responsibility for their products placed on the market in packaging originated from waste packaging that consists primarily in legally binding commitment to achieve specified recovery and recycling levels, as required,
- the opportunities to overtaking the operators' responsibilities in the scope of recovery and recycling by the recovery organizations established in form of joint stock companies,
- implementation of monitoring of wastes to be carried out under reporting obligation,
- introduction of the environmental protection requirements on packaging.

Financing the works which relate to both collection and preparation of packaging waste to its recycling is secured by the fees which the operators have to pay to the recovery organizations and the product charges to be paid to the Marshall Offices. The recovery organizations, depending upon their activity form as required by their statutes, provide financing to the municipal servicing companies who collect waste, or to the municipal self governmental entities who manage for collection of waste in their respective areas. The municipal financing variant of collection of waste on the product charge has been considerably confined in result of decline in income from these charges. As results from reporting data, in 2004, only 132.5 thousand Mg waste was collected in selective manner, as managed by the self governmental entities.

Data included in Table 2-6 indicates that in 2007 it will be possible to achieve the national recycling level as set out in Directive 94/62/EC, i.e. 25 %. Given the only limited opportunities to energy recovery, the mandatory recovery level amounting to 50 % has to be achieved by means of enhanced

recycling of these groups of waste which constitute significant mass and for which potential capacities do exist, i.e. : packaging cardboard, glass, such plastics like: polyethylene, polypropylene and poly(ethylenetereftalate). Unfortunately, the current processing capacities in the scope of energy recovery are unsatisfactory (since limited to waste thermal treatment plant, in Warsaw, and incineration of waste fuel in cement plants).

Problems identified:
- insufficiently developed scheme for selective collection of packaging waste originated from households – hypothetically, it was possible to acquire from households about 900 thousand Mg packaging waste fit for recycling, including about 150 thousand Mg waste paper (mainly used school manuals), 200 thousand Mg plastics (mainly polyolefines and poly(ethylenetereftalate)), 500 thousand Mg glass, 50 thousand Mg steel scrap; the major proportion of that mass was deposited on landfills in form of mixed municipal waste,
- insufficient number of installations and unsatisfactory processing potential in case of certain types of waste,
- requirement to double certification of recycling practices,
- unavailability of register of the companies which deal with processing, recovery, including recycling, and disposal of packaging waste,
- wrongly issued decisions to perform recovery processes (R).

2.3.5. Waste from selected economy sectors, the utilisation of which involves problems

Sources of origination and quantities of waste generated

Waste other than municipal and hazardous wastes form the major stream of wastes generated in Poland. These wastes originate mainly in economy sectors, including particular industrial branches, agriculture, handicraft, and certain types of services.

In 2004, the inventory of waste identified about 121 million Mg wastes other than municipal and hazardous wastes that accounts for about 90% of the total mass of wastes generated in Poland in 2004. The quantity of wastes other than municipal and hazardous wastes generated in Poland has declined: from about 144 million Mg in 1990 to about 125 million Mg in 2000. That is mainly due to restructuring changes in industry.

The largest quantities of waste originate from excavation industry – 58.3% of the total mass of wastes generated; in power generation sector – 23.0%; in food production and agricultural sectors – 7.3%; and from installations and facilities for utilisation of waste from waste water treatment plants, and drinking water treatment conditioning of water for industrial purposes – 4.7%. Table 2-7 below presents the generation and utilisation status of wastes other than municipal and hazardous wastes in 2004.

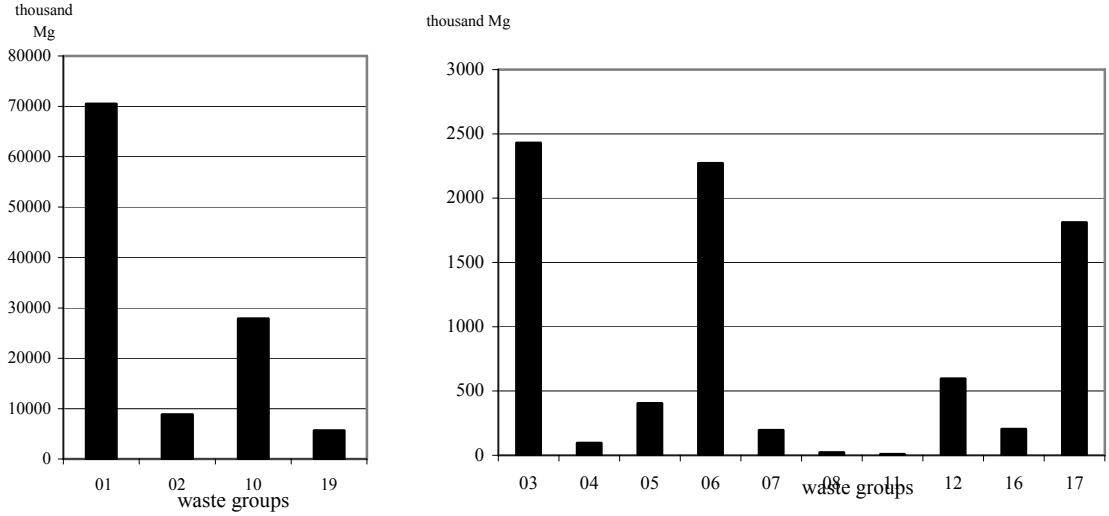
Table 2-7 The quantities of wastes other than municipal and hazardous wastes generated in Poland in 2004, and their utilization methods

Group of waste	Waste generated	Waste recovered	Disposal of waste					Waste stored	Waste accumulated on landfills
			total	thermal	composting	deposition	other		
01	70 504.8 100	61 033.7 86.6	8 868.7 12.6	-	-	8 850.6 12.5	18.1 0.02	602.4 0.8	1 266 255.0
02	8 868.7 100	7 724.9 87.1	693.3 7.8	72.2 0.8	34.8 0.4	289.8 3.3	296.5 3.3	450.5 5.1	1 207.4
03	2 430.3 100	2 156.4 88.7	195.2 8.0	97.2 4.0	-	72.0 2.9	26.0 1.1	78.7 3.2	1 141.5
04	95.4 100	7.7 8.1	49.5 51.9	1.3 1.4	-	11.4 12.0	36.8 38.6	38.2 40.0	139.9
05	405.1 100	3.2 0.8	401.8 99.2	1.4 0.3	-	0.1 0.02	400.3 98.8	0.1 0.02	4.4
06	2 271.8 100	198.5 8.7	2 066.4 95.3	-	0.9 0.04	2 025.8 89.2	39.7 1.7	6.9 0.3	91 691.7
07	195.8 100	113.2 57.8	27.2 13.9	0.2 0.1	-	24.1 12.3	2.9 1.5	55.4 28.3	5 026.3
08	22.4 100	8.6 38.4	8.6 38.4	0.6 2.7	-	1.7 7.6	6.3 28.1	5.2 23.2	10.9

Group of waste	Waste generated	Waste recovered	Disposal of waste					Waste stored	Waste accumulated on landfills
			total	thermal	composting	deposition	other		
10	27 860.1 100	20 874.2 74.9	5 036.4 18.1	9.7 0.03	-	4 691.0 16.8	335.7 1.2	1 949.5 7.0	331 165.9
11	8.7 100	6.7 77.0	2.0 23.0	0.8 9.2	-	0.4 4.6	0.8 9.2	-	32.4
12	596.6 100	538.5 90.3	49.9 8.4	-	-	30.5 5.1	19.4 3.2	8.2 1.4	34.6
16	204.2 100	117.9 57.7	76.6 37.5	-	-	40.8 20.0	35.6 17.4	9.9 4.8	872.2
17	1 811.3 100	1 225.5 67.7	267.5 14.8	0.7 0.04	-	232.5 12.8	34.3 1.9	318.3 17.6	230 788.8
19	5 664.8 100	2 050.4 36.2	3 421.1 60.4	3.2 0.06	1.7 0.03	298.8 5.3	3117.5 55.0	193.2 3.4	14 029.0
Total	**120 940.0** **100**	**96 059.4** **79.4**	**21164.3** **17.5**	**187.3** **0.15**	**37.4** **0.03**	**16 569.5** **13.7**	**4369.9** **3.6**	**3 716.5** **3.1**	**1 942 400.0**

xxx = thousand Mg
yyy %

Figure 2-12 The quantities of wastes other than municipal and hazardous wastes generated in particular groups of waste in 2004



The largest quantities of waste were generated in the Southern Poland, including the Voivodships of: Silesia (about 41.9% of the total waste stream), Lower Silesia (about 26.9% of the total) and Małopolska (about 7.3%). The smallest quantities were generated in the Voivodships of: Lubuskie (0.48%), Warmia and Masuria (0.54%), and Podlasie (0.74%).

By the end of 2004, about 1,942 million Mg wastes other than hazardous wastes were accumulated on landfills at industrial plant. The largest quantities of waste were accumulated on landfills of the Lower Silesian and Silesian Voivodships.

Generated waste other than municipal and hazardous waste were classified in the following groups of wastes:

Wastes resulting from exploration, mining, quarrying, physical and chemical treatment of minerals (group 01)

Mining plants, and also - to a limited extent - prospecting companies and self-dependent processing plants which do not carry out extraction activities themselves, are the sources for generation of group 01 wastes. In 2004, about 71 million Mg group 01 wastes other than hazardous wastes were generated that accounted for about 58% waste generated in Poland. Since 2000, the quantity of group 01 wastes generated has declined by 4%. Considerably large quantities of group 01 wastes deposited in form of "old" mine heaps, internal waste banks and industrial settlement tanks are a separate issue. By the end of 2004, about 1,266 million Mg group 01 wastes were accumulated on the own waste disposal sites of

the entities producing wastes. The major waste management problems within this group of waste include: large quantities of waste generated, unavailability of full balance of wastes deposited and accumulated, and specific features of exploitation of mineral deposits – fossil minerals almost never feature by the properties which could enable their direct utilization in economy sectors and therefore their exploitation and further flotation in course of their processing causes origination of the output which does not have any direct application.

Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing (group 02)

The major sites of origination of group 02 wastes are: slaughter-houses, meat processing plants, diaries, cold storage plants, agricultural, horticultural and breeding farms, sugar plants, breweries, alcohol distilleries and other plants dealing with food-stuff production and processing. In Poland, the number of plants where group 02 wastes originate is very high and amounts to as much as several dozen thousand. Many branches of food industry are operated in a campaign-mode, i.e. very large amounts of waste are generated in a short time-period. In 2004, about 9 million Mg waste other than hazardous wastes were generated within this group that accounted for about 7% of the total wastes generated in Poland. When compared against 2000, the quantity of group 02 wastes declined by about 17%. By the end of 2004, about 1 million Mg group 02 wastes were accumulated on the own landfills of waste generating companies. The major waste management problems within this group of waste include: diffuse nature of their origination sources, seasonal character of generation of large quantities of waste (campaign-mode), no economic grounds for application of any recovery processes for a part of this group waste types, and difficulties in of their shipment at longer distances.

Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard (group 03)

Group 03 wastes originate in all phases of wood processing, manufacturing of furniture and MDF panels, and also from manufacturing of pulp and paper. This waste originates mainly in sawmills, timber processing plants, joinery plants, fibreboard and chipboard production plants, and pulp and paper production plants. In 2004, about 2.5 million Mg group 03 wastes other than hazardous wastes were generated that accounts for about 2% of the total wastes generated in Poland. When compared against 2000, the quantity of group 03 wastes declined by about 45%. At present, a slight upward trend is noted in the quantity of this type of waste generation (about 4% annually). By the end of 2004, about 1 million Mg group 03 wastes were accumulated on landfills owned by waste generating companies, including mainly slurry, waste mass from processing of waste paper, and sludge from industrial effluent treatment plants. Considerable water logging of certain types of wastes (for instance effluent sludge) that poses difficulties during disposal and recovery processes is the major waste management problem within this group of waste.

Wastes from the leather, fur and textile industries (group 04)

Wastes from the leather and fur industries originate in tanning processes of hides. In Poland, about 20 large tanning plants are operated which manufacture 80% of the total quantity of finished leather, and about 430 small and very small tanning enterprises. Textile industries perform manufacturing activities covering preparation and spinning of (natural, artificial and synthetic) fibres, weaving and finishing of fabrics, and manufacturing of non-woven products. In 2004, about 100 thousand Mg group 04 wastes other than hazardous wastes were generated that accounts for about 0.1% of the total wastes generated in Poland. Stable decline trend of waste generated is observed – the quantity of group 04 wastes dropped in 2004 by about 28% in relation to that of 2000. By the end of 2004, about 150 thousand Mg waste group 04 wastes were accumulated on landfills owned by waste generating companies. The major waste management problems within this group of waste include: irregularities occurring in small plants where liquid waste generated are neutralised to insufficient degree and discharged illegally into the environment, as well as storage of large portion of wastes.

Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal (group 05)

Group 05 wastes originate from plants dealing with petroleum processing (refineries, petrochemical plants), foundries, metallurgical plants, coking plants, chemical plants (producing for instance

paraffin), natural gas mines and processing plants, those for reclamation of waste oils, manufacturing synthetic graphite and carbon electrodes. This group wastes originate also in plants dealing with processing of waste plastics (for instance olefin plastics), and from manufacture of semi-products for production of fuels. In 2004, about 400 thousand Mg group 05 wastes other than hazardous wastes were generated that accounts for about 0.3% of the total wastes generated in Poland. The quantity of group 05 wastes grows regularly – being in 2004 higher by o 64.5% than in 2000. By the end of 2004, about 5 thousand Mg group 05 wastes were accumulated on landfills owned by waste generating companies. The major waste management problems within this group of waste include: the increasing quantities of waste generated in relation to rise in petroleum processing, and the considerable quantities of wastes accumulated in the past in the plant areas.

Wastes from inorganic chemical processes (group 06)
Plant manufacturing mineral fertilisers, chemical plants, copper smelters and steelworks, plants producing soda, pigments, medicaments and cellulose are the major producers of group 06 wastes. In 2004, about 2 million Mg group 06 wastes other than hazardous wastes were generated that accounts for about 2% of the total wastes generated in Poland. The quantity of waste generated in 2004 is by about 25% lower than that in 2000. The current growing trend can be observed in generation of these wastes that is on the level of 7% annually. By the end of 2004, about 90 million Mg group 06 wastes were accumulated on landfills owned by waste generating companies. The major waste management problems within this group of waste include wastes generated in large quantities – phospho-gypsum – with no economic grounds for application of any recovery processes and being thus disposed of by means of their deposition on landfills.

Wastes from organic chemical processes (group 07)
For 07 group of waste, the industries producing mineral fertilisers, dyes and pigments, the basic organic chemicals, paints, varnishes and other coating substances, inks and sealing compounds, pesticides and agro-chemical agents, pharmaceutics, fat products, soaps, cosmetics and detergents, washing and cleaning operations, rubber and plastic industry products. In Poland, about 540 various companies are active which generate wastes from organic synthesis processes. In 2004, about 200 thousand Mg group 07 wastes other than hazardous wastes were generated that accounts for about 0.2% of the total wastes generated in Poland. When compared against 2000, their quantity has increased by about 75%. By the end of 2004, about 5 million Mg waste z group 07 wastes were accumulated on landfills owned by waste generating companies. The major waste management problems within this group of waste include difficulties to utilise sludges from industrial waste water treatment plants and therefore they are currently in large proportion deposited on landfills.

Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks (group 08)
Group 08 includes waste originating in result of manufacturing, coating and removal of varnish coatings, cleaning of tools, product packaging, residues or packaging of inks, and application and manufacturing of glues, putties and surfacers. In 2004, about 20 thousand Mg group 08 wastes other than hazardous wastes were generated that accounts for about 0.02% of the total wastes generated in Poland. The quantity of group 08 wastes generated increased from 2000 by about 40%. By the end of 2004, about 10 thousand Mg group 08 wastes were accumulated on landfills owned by waste generating companies. The major waste management problems within this group of waste include: unavailable information on the quantity of waste generated by numerous diffuse sources, deposition of waste on landfills being not adapted to this purpose, and discharging liquid waste into urban sewerage network or directly into ground and water environment.

Wastes from thermal processes (group 10)
Group 10 wastes originate in power generation sector, principally in combustion processes of energy raw materials (hard coal and lignite) and in result of application of flue gas purification methods, and also in iron and steel metallurgy processes and those of non-ferrous metals. Considerable quantities of waste originate in industries which deal with processing of raw materials, in their foundries. In 2004, about 28 million Mg Group 10 wastes other than hazardous wastes were generated that accounts for

about 23.0 % of the total wastes generated in Poland. In relation to 2000, about 2% increase in generation of this waste has been noted. By the end of 2004, about 330 million Mg waste z group 10 wastes were accumulated on landfills owned by waste generating companies. The major waste management problems within this group of waste include: the huge mass of waste generated, the cases of improper application of waste from combustion of solid fuels to, for instance, land macro-reclamation or reclamation, large quantities of waste accumulated in the past.

Wastes from chemical surface treatment materials; non-ferrous hydro-metallurgy and coating of metals and other (group 11)
Group 11 wastes are generated mainly by the industries which deal with processing and surface treatment of steel and non-ferrous metals, including products thereof, and in electric, electronic and automobile industries. In 2004, about 10 thousand Mg group 11 wastes other than hazardous wastes were generated that accounts for about 0.1% of the total wastes generated in Poland. The quantity of waste generated in group 11 shows continuous upward trend – by about 15% in 2001 – 2002 and as much as by about 100% in 2002 – 2004. In relation to 2000, the quantity of waste generated increased by about 200%. By the end of 2004, about 30 thousand Mg group 11 wastes were accumulated on landfills owned by waste generating companies. Insufficient progress in implementation of production technology change to provide for reduction of the quantity of waste generation is the major waste management problem within this group of waste.

Wastes from shaping and physical and mechanical surface treatment of metals and plastics (group 12)
Group 12 wastes are generated during manufacturing processes of metal and plastic elements, their finishing, and during repair operations. In 2004, 596.6 thousand Mg group 11 wastes other than hazardous wastes were generated that accounts for 0.5 % of the total wastes generated in Poland. By the end of 2004, about 34.6 thousand Mg group 12 wastes were accumulated on landfills owned by waste generating companies. The lacking possibilities to utilise wastes which occur in dusty form and sludges from metal treatment are the major waste management problems within this group of waste.

Wastes not otherwise specified in the list (group 16)
Group 16 covers all wastes which have not been classified elsewhere in other groups of wastes, including end-of-life vehicles and waste electrical and electronic equipment, as discussed above in section on hazardous waste. In 2004, about 200 thousand Mg group 16 wastes other than hazardous wastes were generated that accounts for about 0.2% of the total wastes generated in Poland. The quantity of group 16 wastes shows slight variation, i.e., in 2000 – 2002, a decline trend was noted, but since 2003 the quantity of waste generated has risen annually by about 7 – 12%. However, in relation to 2000, the quantity of waste generated dropped by about 25%. By the end of 2004, about 900 thousand Mg group 16 wastes were accumulated on landfills owned by waste generating companies. The major waste management problems within this group of waste include: high percentage of deposited wastes, variety and variability of their properties, and unavailability of complete information on waste generated by diffuse sources.

Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use (group 19)
Group 19 includes wastes which originate from incineration and thermal decomposition of municipal wastes, physical and chemical processing of industrial wastes, waste from aerobic and anaerobic digestion of solid wastes, and waste from waste water treatment plants and water purification stations. In 2004, about 6 million Mg group 19 wastes other than hazardous wastes were generated that accounts for about 5% of the total wastes generated in Poland. The quantity of group 16 wastes varies considerably, amounting to 25% annually. At present, a decline trend is noted in generation of this type of waste, nevertheless, in relation to 2001, their quantity grew by about 6%. Group 19 includes wastes from mechanical treatment, for instance those under 19 12 12 code number, the quantity of which is expected to increase. By the end of 2004, about 14 million Mg group 19 wastes were accumulated on landfills owned by waste generating companies. The major waste management problems within this group of waste include: variety and variability of the properties of waste generated, their mass production, their high deposition percentage (for instance, those within sub-

groups 19 02 and 19 09) that results from the unavailability of economically justified methods for their recovery and disposal.

Types and quantities of wastes undergoing particular recovery and disposal processes

For the total quantity of wastes generated (about 121 million Mg) about 96 million Mg (about 80%) undergo recovery processes and about 21 million Mg (about 17%) is disposed of. The following groups of waste are to the most extent subject to recovery processes:

- Group 03 – 88.7%,
- Group 02 – 87.0%,
- Group 01 – 86.6%.

Waste disposal processes covered mostly the following groups of waste: Group 05 – in 99.1%; Group 06 – in 90.9%; and Group 19 – in 60.4%. About 4 million Mg (about 3%) is stored.

The following waste disposal methods were applied:

- thermal (including incineration): about 190 thousand Mg,
- biological: about 37 thousand Mg,
- deposition on the company and other landfills: about 16.6 million Mg,
- other: about 4.4 million Mg.

Types, distribution and processing capacity of the installations for recovery and disposal of waste

In 2005, about 2000 installations and facilities for recovery and disposal of waste other than hazardous and municipal wastes were operated throughout Poland, including more than 50% being the installations which apply processes falling in R14 category (other activities consisting in use of waste as the whole or as a part thereof), 12% - R5 (recycling/reclamation of other inorganic materials), and R1 (use principally as a fuel or other means to generate energy) – 10%. The waste disposal installations and facilities are situated mostly in the Silesian (about 20%), Kujawy-Pomeranian (12%), Lower Silesian (10%), Pomeranian (10%) and Małopolskie (9%) Voivodships. Figure 2-13 shows map presenting distribution of selected types of installations situated in particular Voivodships. Figure 2-14 presents compilation of the number of installations and facilities for recovery and disposal of wastes other that municipal and hazardous wastes by particular groups of wastes. Figure 2-15 shows percentage of the installations and facilities by recovery and disposal processes.

Figure 2-13 Distribution of selected types of existing installations for utilisation wastes other than hazardous and municipal wastes, as of 31 December 2005

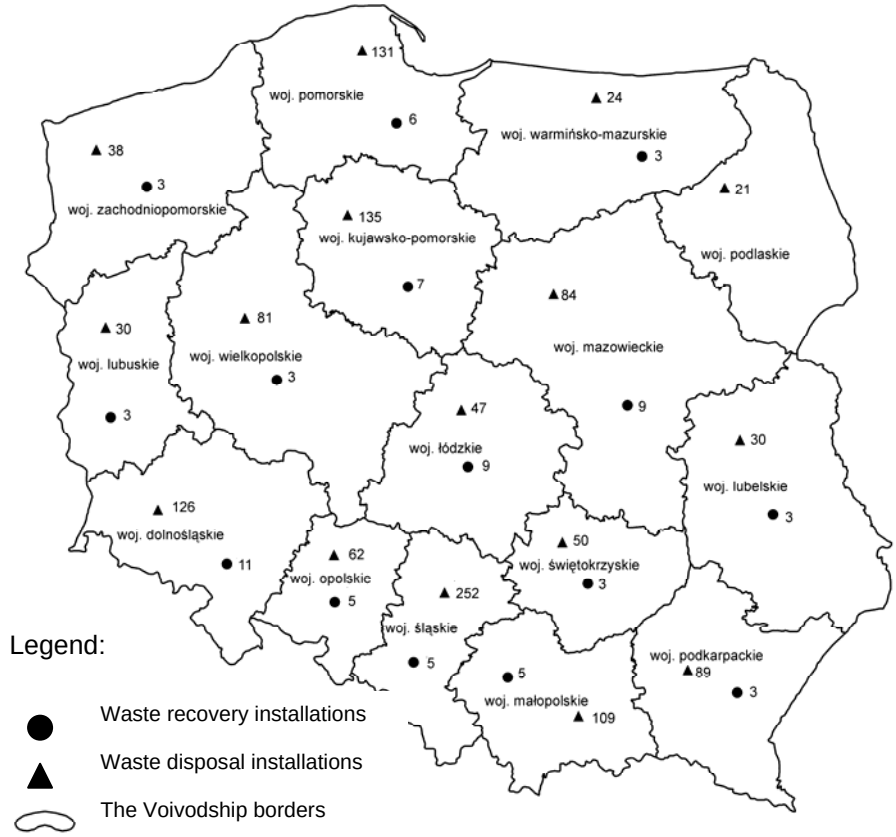


Figure 2-14 Compilation of the number of the installations and facilities for recovery and disposal of wastes other than hazardous and municipal wastes by particular groups of wastes

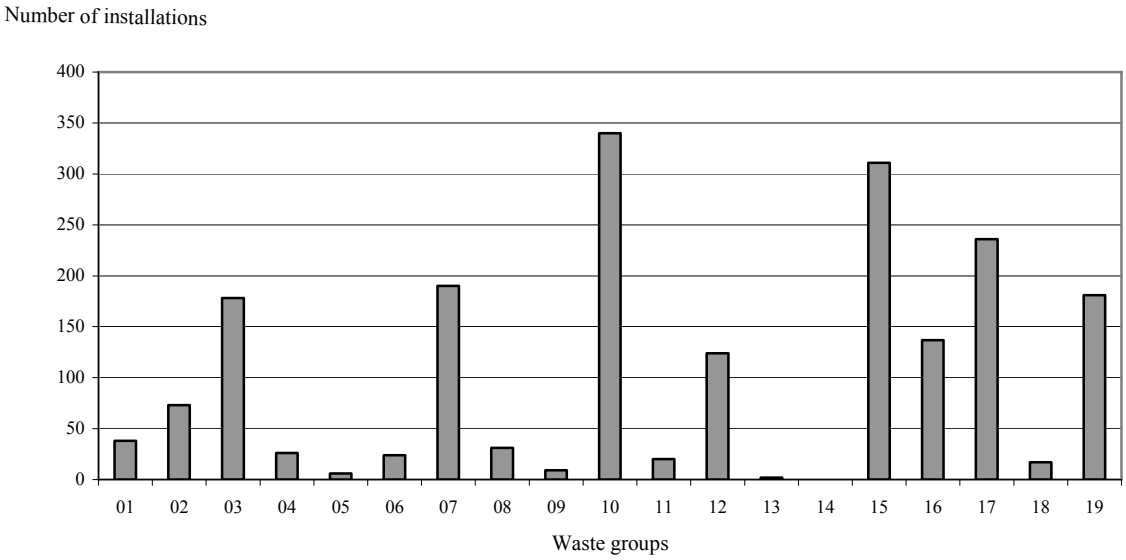
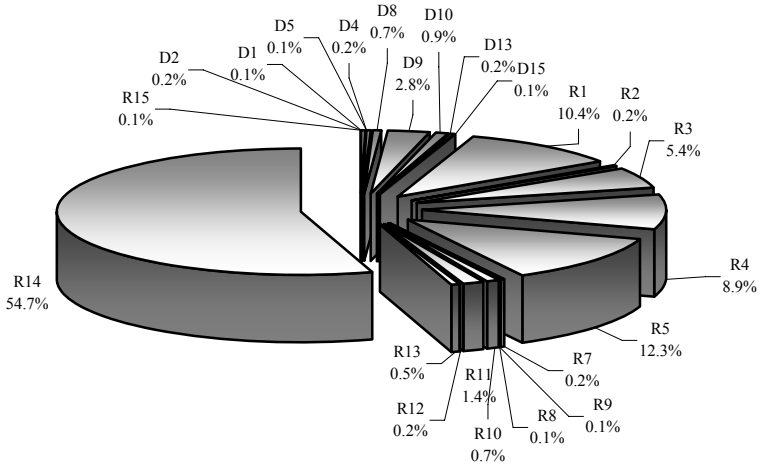


Figure 2-15 The share of the recovery and disposal processes in the total number of installations and facilities for treatment of wastes other than municipal and hazardous wastes



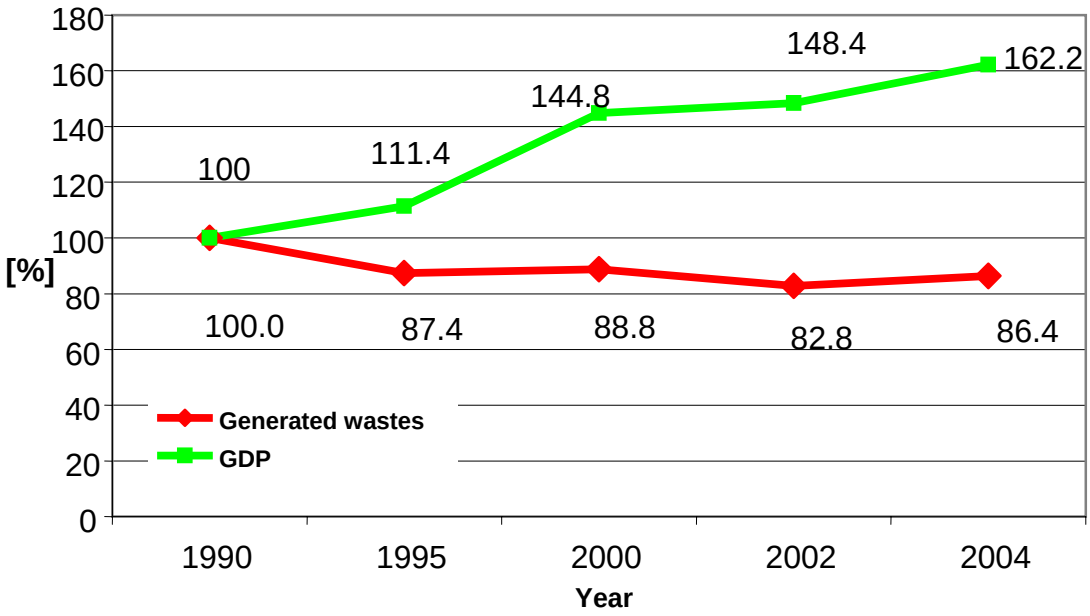
The Voivodship waste management plans will contain detailed inventories of municipal waste recovery and disposal installations for wastes other than municipal and hazardous wastes, and also maps showing spatial distribution of these installations, as of 31 December 2006. These inventories will include at least the installation type, name, address, treatment capacity, and additionally, for landfills their empty volumes will be specified capable of potential filling in with waste and the quantity of waste mass to be received until closure of operation of the landfill in question.

Problems identified:
- low environmental awareness among producers of waste, particularly small and medium sized enterprises,
- insufficient knowledge on altering legal provisions amongst producers of waste,
- incompliance on part of the producers of waste and other waste holders with the obligations as required by legal provisions,
- insufficient use of the instruments and sanctions to discipline the producers of waste and other waste holders,
- difficult economic situation amongst many business entities, including capital barrier when attempting to introduce up-to-date technological solutions capable of contributing to minimization of waste and upgrading of their recovery levels,
- low level of use by the business entities of the Community resources and of other available funding sources,
- insufficient level of competence and knowledge on part of the public administrative authorities being responsible for granting decisions in the scope of waste management.

2.4. SUMMING UP

Improvements in certain fields of waste management were noted during implementation of the first NWMP and attainment of certain objectives was possible, for instance, in the scope of packaging waste management. Reduction in the mass of waste produced has been noted. The earlier introduced system of granting decisions on waste generation contributed to decoupling of the national economic growth (as expressed in GDP) from the quantities of waste mass generated, as shown in Figure 2-16.

Figure 2-16 Interdependence between GDP and the quantity of waste generated (total) in 1990 – 2004 (year 1990 – 100%)



However, many problems still remain to be gradually resolved.
Given the highly disintegrated waste management data collection system (as required under a number of legal acts, and pursued by numerous institutions, via administrative channels and through statistical surveys performed with application of various methodologies), the difficulties are encountered in monitoring of the current status of waste management. Therefore, in some cases, is difficult to determine whether the rated installations' capacities are sufficient.
In spite of numerous legal changes, the difficulties appear also in understanding and adequate application of the provisions in the scope of waste management by both the operators and the public administration authorities.
Despite continuously growing environmental awareness of the general public the old ways of thinking on certain matters still linger (for instance, on allegedly high adverse environmental and human health impacts from thermal methods of waste treatment) that make difficult the location of the relevant new investments. Non-uniform guidelines on selective collection of municipal wastes (often complicated and thus unfavourable and non-eligible for people of the common run) are one of the development curbs affecting selective collection of waste.
Deposition of waste on landfill is still commonly considered the major method to be applied for management of municipal waste. The high percentage of municipal and other types of biodegradable wastes being deposited, or their application on landfills as so called boosters separating subsequent layers of urban waste water sludge, causes that deposition of waste has become a significant source of methane emissions which are one of the most dangerous components of greenhouse gas.
Failure to use wastes of vegetation and animal origin as renewable energy source, particularly for substitution of fossil fuels, slows down the process of achievement of the limits on use renewable energy in Poland.
Unfortunately, many recovery methods, including recycling, rely on the technologies, the environmental quality of which is doubtful and their application is only aimed at issuance of documents confirming that the act of recovery or recycling has taken place.
Also, a trend has been noted towards the highest possible intense spreading of waste on the land surface for, amongst others, the purpose of land macro-levelling, reclamation or fertilization. While in

certain instances that could be fully justifiable on ecological grounds, nevertheless in many other cases the aim of such perpetration was to avoid deposition of waste on the sites designed to this purpose (i.e. waste landfills). Those cases caused environmental propagation of pollutants contained in wastes.
Since the 1st of May 2004, being the date when Poland became the Member State of the European Union, certain new alarming phenomena have appeared. About 1.7 million used cars were imported to Poland in that period, while 10-year old or post-accidental vehicles are the prevailing ones which tend to become waste within a short time-period. These vehicles are imported principally by private individuals and this imposes a considerable burden on just only developing management scheme for this type of waste, yet that according to legal regulations being a transposition of the Community law, the recent car-owner has the right do give up such an end-of-life vehicle free of charge. Similar trends have been noted for other market segments being under similar regulations on the Community level, for instance as regards electrical and electronic equipment. Another, separate issue is the introduction in certain EU Member States of a more stringent requirements than those laid down on the Community level in the scope of deposition of municipal waste. That causes seeking by the operators in these countries for the opportunities to export such wastes to other countries where their utilization costs will be lower. Although transitional periods have been granted to Poland in the scope of transboundary shipment of wastes, and apart from merely restrictive policies being pursued in this regard by the Chief Inspector of Environmental Protection, a tendency has been noted to importing to Poland of waste considered still a product (that refers particularly to attempts being undertaken to obtain classification of these wastes as fuels). In result of that the domestic potential for treatment of domestic wastes is becoming unavailable.

CHAPTER 3. PROGNOSIS OF CHANGE IN WASTE MANAGEMENT

3.1. MUNICIPAL WASTES

The following assumptions were made to perform the prognosis of change in the quantity and quality of municipal wastes:
- no essential change will follow in morphological composition of municipal waste generated;
- increase in the unit generation indicator will develop on 5% level in five-year periods and will be following:

2010 – 289 kg/M/year,
2014 – 301 kg/M/year
2018 – 313 kg/M/year;

- the increase in the level of selective collection from 2% at present (in relation to the total wastes generated) up to 10% in 2010 and 20% in 2018, will cause changes in the quantity and composition of unsorted wastes; mainly their content of paper, plastics, glass and metals will decline;
- the quantity of other group 20 wastes will rise by 5%, on average, in five-year periods (1% on annual basis).

Anticipated quantities of municipal wastes generation are shown in Table 3-1.

Table 0-1 The prognosis of generation of municipal wastes

No.	Type	Quantity of waste [thousand Mg], in years		
		2010	2014	2018
1.	Municipal waste sorted and collected in a selective manner	1 096.7	1 701.2	2 341.8
2.	Garden and park wastes	341.7	334.0	331.3
3.	Unsorted (mixed) municipal waste	9 870.5	9 640.1	9 367.4
4.	Waste from market places	120.5	117.9	116.9
5.	Waste from cleaning streets and squares	266.2	276. 9	287.9
6.	Large-size waste	478.5	497.0	517.5
TOTAL		**12 174.1**	**12 290.2**	**12 962.8**

3.1.1. Anticipated quantity of biodegradable wastes generation

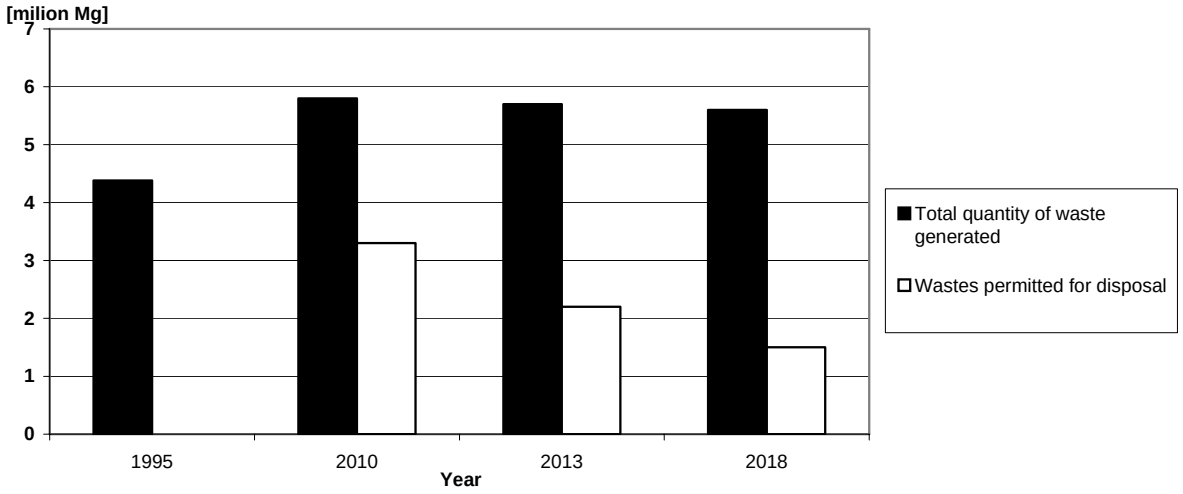
Prognosis of the quantity of biodegradable wastes generation is show in Table 3-2.

Table 0-2 Prognosis of biodegradable wastes generation

No.	Type	Quantity [thousand Mg], in years		
		2010	2013	2018
1.	Paper and cardboard	700.0	800.0	1 000.0
2.	Cloth and textile waste	7.2	7.0	7.0
3.	Garden and park wastes	341.7	334.0	331.3
4.	Biodegradable wastes coming into stream of mixed municipal wastes	4 644.3	4 327.4	3971.0
5.	Waste from market places (biodegradable part)	84.4	82.5	81.8
	TOTAL	**5 777.6**	**5 550.9**	**5391.1**

Under Polish law – reduction of the quantity of biodegradable waste deposited is required, as show in Figure 3-1. In the Figure, reduced quantity of these wastes in the period 2010 – 2018 will result from forecasted decline in the national population number.

Figure 0-1 Reduction of biodegradable waste deposition.



In 2010, the quantity of municipal biodegradable waste deposited must not exceed 3.29 million Mg. Given the prognosis of generation of municipal biodegradable waste as presented above, it is estimated that the quantity of wastes subject to recovery and disposal (excluding deposition) has to develop on the level of about 2.5 million Mg.
However, in 2013, the quantity of municipal biodegradable waste deposited must not exceed 2.19 million Mg, whereas estimated quantity of municipal biodegradable waste that has to be subject to recovery or disposal (excluding deposition), will amount to about 3.5 million Mg.
In 2020, the target quantity of municipal biodegradable waste deposited must not exceed 1.53 million Mg. Therefore, it is estimated that in 2018 at least 3.6 million Mg waste will have to be treated by biological or thermal methods.

3.1.2. Changes anticipated in the scope of the organizational and technological solutions.

The following trends are anticipated:
- development of selective collection and sorting of municipal waste in relation to, amongst others, the need to implement the requirements included in the Community Directives,
- speeding-up the activities in the scope of establishment of supra-municipal and municipal schemes for recovery and disposal of municipal waste with special regard to biodegradable waste,
- construction of regional plants for municipal waste utilisation which will operate installations for biological or thermal treatment of waste (depending upon the size of the region),
- reduction in the number of landfills for wastes other than hazardous and municipal wastes where municipal waste are deposited: that will result from closures of the landfills which do not conform to the requirements and failures to obtain integrated permits (the deadline for their obtaining expires on 30 April 2007).

3.2. HAZARDOUS WASTES

Making prognosis of the quantity of hazardous waste possible to generate by 2018 is difficult and depends upon many, mainly economic factors. However, comparing the quantity of hazardous wastes generated *per annum* in the period 2000-2004 it is likely that their quantity will rise to the level of several dozen thousands Mg/year.
In the subsequent years the increase anticipated will amount to:

- 2010 - 1 800 thousand Mg,
- 2014 - 1 830 thousand Mg,
- 2018 - 1 870 thousand Mg.

The factors limiting the quantity of hazardous waste generated might include: change in production technology leading to minimizing generation of the quantity of hazardous wastes, change in production technology leading to utilisation of specific types of wastes in the industries' manufacturing processes, and insolvency of the production companies, or changes in their activity profiles.

3.2.1. Wastes containing PCBs

Generated quantity of wastes containing PCBs will rise by 2010 due to the need to the total phasing out of the equipment containing PCBs (to be achieved by 30 June 2010, at the latest).
Table 3-3 presents the minimum quantities of the equipment containing PCBs as planed by the operators for decontamination and disposal.

Table 0-3 The minimum quantities of registered equipment which contain PCBs as planed by their operators to be decontaminated and/or disposed of in 2007-2010

Years	The number of equipment containing PCBs [pieces]	
	decontamination	disposal
2007-2008	781	1.847
2009-2010	4.446	34.586

When deciding on sequencing the equipment for decontamination and disposal the following criteria were taken into account: condition of the equipment and its age (the elder the equipment, the higher the likelihood to its breakdown and release of PCBs into the environment), and location of the equipment.
As results from the Table above, the largest quantities of the equipment containing PCBs anticipated for disposal fall in 2009-2010 and amount to about 36 thousand pieces. Given the likelihood that difficulties could appear in disposal of so large number of equipment it would be advisable to structure this process into phases, i.e. to dispose about 9 thousand pieces of equipment on annual basis in period of 2007-2010.

3.2.2. Waste oils

Given the decline in demand of fresh lubricant oils, as caused, amongst others, by enhanced time-period of exploitation of these oils, it is likely that also the volumes of waste oils possible for acquisition will drop.
The following quantities of waste oils possible for acquisition are anticipated:
- 2010 – 94.2 thousand Mg,
- 2014 – 90.4 thousand Mg,
- 2018 – 86.8 thousand Mg.

3.2.3. Waste batteries and accumulators

It is estimated that a slight upward trend will appear in the forthcoming years in the scope of generation of waste batteries and accumulators, given, amongst others, the fact that population in Poland utilize about 60% of the primary batteries when compared against the use of the primary batteries used by the consumers in other EU Member States.

3.2.4. Medical and veterinary wastes

Assuming the growth in the quantity of medical services rendered by about 1% annually, the anticipated quantity of origination of medical waste in open medical establishment (clinical treatment and medical consultations) is following:
- 2010 – 8.4 thousand Mg wastes, including 2.5 thousand Mg hazardous wastes.
- 2014 – 8.8 thousand Mg wastes, including 2.6 thousand Mg hazardous wastes.
- 2018 – 9.2 thousand Mg wastes, including 2.7 thousand Mg hazardous wastes.

Growth in the quantity of medical waste originating in open medical establishments results from gradual ageing of the population in Poland. It is estimated that by 2018 the share of population being more than 65 years of age will rise by about 30%.
Assuming that the quantity of beds in closed medical establishments (hospitals) will be retained on stable level of about 200 thousand (by 2018) the anticipated quantity of medical wastes originating in this sector will amount to about 72 thousand Mg annually, including about 30% of hazardous wastes. This quantity will retain on stable level despite ageing of the society since shortening by about 10-15% of duration of medical treatment of patients in hospitals is noted in relation to 2000
Hence, the total combined quantity of hazardous medical wastes in 2007-2018 will be at the level of 24 - 25 thousand Mg.
It is estimated that the quantity of hazardous veterinary wastes equals usually to about 10% of that of hazardous medical wastes. So, the quantity of hazardous veterinary wastes in 2007-2018 will range between 2.4 and 2.5 thousand Mg.

3.2.5. End-of-life vehicles

The prognosis of the quantity of end-of-life vehicles, apart from the cars being put on and deleted from the registers, is influenced also by several other factors, including the values of those defining the number of the individuals per 1 car and demographic prognoses. The number of cars possessed will regularly rise in line with both economic growth and increase in the populations' wealth, hence that of the end-of-life vehicles will also grow. A phenomenon of replacement of the elder vehicle models by newer ones will also follow, and that will also contribute to increase in the quantity end-of-life vehicles.
Anticipated quantities of end-of-life vehicles are following:
- 2010 – 1,005 thousand Mg,
- 2014 – 1,222 thousand Mg,
- 2018 – 1,485 thousand Mg.

3.2.6. Waste electrical and electronic equipment

It is assumed that the development dynamics of the quantity of waste electrical and electronic equipment will range between 3 - 5% on the annual scale (with 5% growth rate of the mass of equipment placed on the market).
Assuming also that the operation life-time of electrical and electronic equipment is about 8-12 years the following prognosis of the quantity of waste equipment (total) could be drawn up:
- 2010 – 465 thousand Mg,
- 2014 – 524 thousand Mg,
- 2018 – 590 thousand Mg,

However, for waste equipment originated from households the prognosis will be following:
- 2008 – 172 thousand Mg,
- 2010 – 175 thousand Mg,
- 2014 – 180 thousand Mg,
- 2018 – 182 thousand Mg.

3.2.7. Waste containing asbestos

According to the „Programme for disposal of asbestos and asbestos-containing products used in Poland" as approved by the Council of Ministers, Republic of Poland, on 14 May 2002, the estimated quantity of products containing asbestos that amounts to 15 million Mg has to be removed by the end of 2032. However, by 2018 the percentage of removed quantity of wastes containing asbestos should amount to 60%.
Also in the forthcoming years, the appearance of insignificant quantities of waste asbestos are expected that will originate from asbestos fibres (chryzolite) containing products applied in diaphragms used in electrolytic installations, and as the elements of the shafts in glass drawing installations. These products are permitted to manufacture or implementation in the territory of the Republic of Poland by 31 December 2008 and they will be yet temporary applied until worn out or earlier until asbestos-free substitutes are available (Act of 22 December 2004 on amendments in the Act on the ban on use of products containing asbestos (Official Journal of 2005 No. 10, Item 72).

3.2.8. Overdue pesticides

By 2010, all burial grounds which exist in Poland and contain the total of about 4.6 thousand Mg waste should be eliminated, and elimination of hazards caused by environmentally incompliant landfills containing pesticide production wastes has to be initiated.

3.2.9. Waste explosives

The estimated quantity of newly originating redundant military explosive resources amounts to 150 Mg /year.

3.3. OTHER WASTES

3.3.1. End-of-life tyres

The quantity of end-of-life tyres will continuously grow with its increase rate proportional to the increase in the number of automobiles. Their prognosis by 2018 is following:
- 2010 – 135 000 Mg wastes,
- 2014 – 150 000 Mg wastes,
- 2018 – 165 000 Mg wastes.

3.3.2. Wastes from construction, repair and demolition of building structures and road infrastructure

The quantity of waste generated depends upon the growth or recession in particular economy sectors, and particularly in building and construction, road engineering and railway engineering sectors. Anticipated growth of waste generated is following:
- by 2010 - 2 000 thousand Mg,
- by 2014 - 2 200 thousand Mg,
- by 2018 - 2 400 thousand Mg.

3.3.3. Urban waste water sludge

The quantities of sludge generated depend upon two basic factors: demographic changes and implementation of investments in the scope of construction and expansion of sewerage networks and waste water treatment sector. Steady growth of implementation of sewerage networks is anticipated

throughout the national territory. According to assumptions included in the National Programme for Urban Waste Water Treatment (NPUWWT), in 2015 the sewerage networks will service:
- in agglomerations with pe ≥ 100 000, at least 98% of their inhabitants,
- in agglomerations with pe 15 000 ÷ 100 000, at least 90% of their inhabitants,
- in agglomerations with pe 2000 ÷ 15 000, at least 80% of their inhabitants.

It is assumed that by 2015 all agglomerations with pe ≥ 2000 will be provided with collective sewerage networks (such collective sewerage networks are already operated in all agglomerations with pe ≥ 15000). Moreover, in its updated 2005 version the NPUWWT assumes that also agglomerations in village municipalities with scattered buildings will be provided with sewerage networks, including in village municipalities situated in the environs of big towns (that means a rise in the number of agglomeration <15000 pe and increase of the pe in agglomerations >15000 RLM).

Following the NPUWWT, the quantity of dry mass of stabilised waste water sludge, as anticipated for 2015, that will originate from urban waste water treatment plants will amount to 642.4 thousand Mg. It is estimated that in 2015, about 58% of the total quantity of sludges generated in Poland will originate from agglomerations with pe amounting to more than 100 000. In case of other agglomeration intervals these figures will be, respectively: about 29% from agglomerations with pe 15 000 -100 000 and about 13% from agglomerations with pe 2 000 - 15 000. Based on the above assumptions and demographic prognoses it is estimated that the quantity of waste water sludges to be generated in Poland by 2018 will be following:
- by 2010 - 612.8 thousand Mg dry mass,
- by 2015 - 642.4 thousand Mg dry mass,
- by 2018 - 706.6 thousand Mg dry mass

3.3.4. Packaging waste

Given the technology progress being made in manufacturing of packaging materials and packaging that brings about considerable reduction of the packaging mass and also in spite of the need on part of the operators to the packaging mass in the commodity packaging systems (reduction at source conforming to the Polish Standard PN-EN 13428:2005 (U) Packaging – Requirements on manufacturing and composition – Prevention through reduction at source), no significant growth in the mass of packaging wastes is anticipated for 2007-2018. The prognosis of use by particular packaging groups does not indicate any potential changes in the structure of packaging wastes. By 2018, waste cardboard/paper, waste glass, and waste plastics will be predominating, in terms of their mass.

In 2007-2018 perspective, it is also expected that positive changes will follow in the scope of usefulness of waste for material recycling and energy recovery. That results from the need to provide for compliance with the basic requirements of Directive 94/62/EC, for instance, through handling compliant with both the harmonized standards and the Directive.

Estimated mass of all types of packaging (including also those not covered currently by the recovery and recycling obligation) and of the relevant elements of packaging (for instance locks, paper and plastic labels, etc...), is shown in Table 3-4.

Table 0-4 Estimated data on the mass of packaging waste by 2018

Type of packaging material	Anticipated mass of packaging waste by 2018 [thousand Mg]		
	2010	2014	2018
Paper and cardboard	1942	2076	2170
Glass	1347	1390	1415
Plastics	741	767	781
Multi-material packaging	216	224	231
Steel sheet	170	173	176
Aluminium	49	50	50
Wood and natural materials	552	563	569
TOTAL	**5017**	**5243**	**5392**

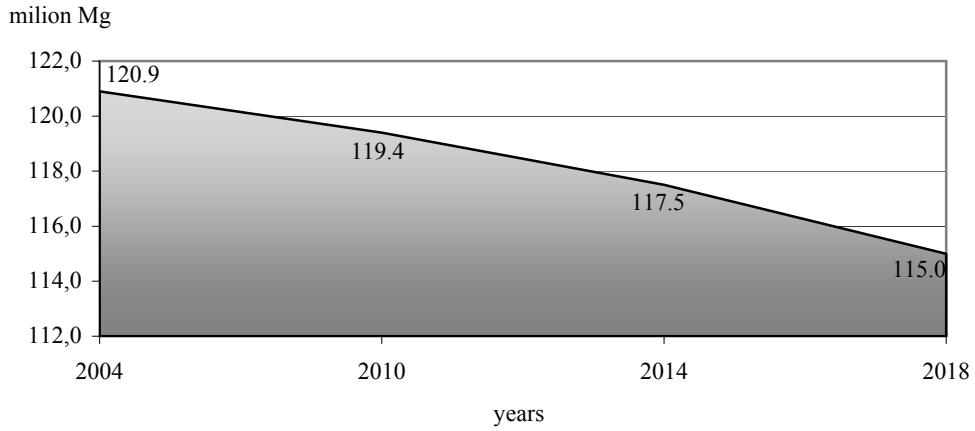
As concerns sorting and preparation of wastes for their further treatment, considerable improvement is anticipated in furnishing of the packaging waste sorting plants (with equipment for shredding,

compression, magnetic sorting, optical sorting, flotation, or conditioning of cullet etc.) and the increase in the number of such plants.
In 2014-2018 perspective, more opportunities are anticipated for energy recovery from packaging waste unfit for recycling, by means of their incineration in municipal waste incineration plants. That relates primarily to plastic waste, multi-material waste with share of plastics, paper, and with metallised foils and thin aluminium foils, and to the primary packaging of high calorific value that originates from households for that its product residues pose barrier to recycling.

3.3.5. Wastes from selected economy sectors, the utilisation of which involves problems

The quantity of generated wastes other than hazardous and municipal wastes and the methods for management will depend principally upon overall Poland's economic development, market conditions of particular economic sector, changes in legal regulations, economic situation (and particularly the costs of waste treatment), establishment of new sites for waste recovery and disposal, changes in production technology (particularly that aimed at minimizing of wastes), intensifying control over and inventory of wastes generated.
The further national economic development to result from restructuring of industry and trade during forthcoming 15 year period is anticipated as a stable tendency. According to development trends noted, and with upholding of the current economic development, considerable opportunities could arise for Poland's transition from the growth phase based mainly upon use of natural resources and the labour factor, towards the phase which is predominated by effective use of in-kind and human capital and technological innovations based upon industries and the "knowledge".
In general, the quantity of generated waste other than municipal and hazardous wastes tends to fluctuate inconsiderably amounting to 3 – 5% annually, with general decline tendency. Anticipated quantity of wastes is shown in Figure 3-2.

Figure 3-2 Prognoses of generation of the quantity of wastes other than municipal and hazardous wastes by 2018



By 2018, reduction in the quantity of wastes generated is anticipated in the following sectors:
- excavation (group 01) by about 15%,
- food and agriculture (group 02) by about 5%,
- wood and pulp and paper (group 03) by about 3%,
- leather and textile (group 04) by about 8%,
- chemical inorganic synthesis (group 06) by about 6%.

Increase of waste quantities generated in the following sectors:
- petroleum, natural gas and coal processing (group 05) – by about 20%,
- organic chemistry (group 07) – by about 10%,
- protective coatings (group 08) – by about 20%,
- thermal processes (group 10) – by about 6%,
- chemical treatment and coating metal and other surfaces (group 11) – by about 40%,
- wastes not classified in other groups (group 16) – by about 25%,
- waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use 19) – by about 30%.

Generation of wastes from shaping and physical and mechanical surface treatment of metals and plastics (group 12) is anticipated to uphold on unchanged level.

Anticipated changes in the quantities of generated waste other than municipal and hazardous wastes in particular waste groups are shown in Table 3-5.

Table 0-5 Prognoses for generation of wastes other than municipal and hazardous wastes by 2018

Group of wastes	Year		
	2010	2014	2018
	thousand Mg/year		
01	69 400	66 800	63 500
02	8 650	8 540	8 430
03	2 410	2 380	2 360
04	93	91	88
05	434	464	487
06	2 230	2 190	2 140
07	210	210	220
08	24	26	27
10	28 900	29 200	29 600
11	10	11	13
12	600	600	600
16	221	237	256
19	6 240	6 800	7 370
TOTAL	**119 422**	**117 549**	**115 091**

The prognoses anticipate that by 2018, the quantities of waste subject to recovery processes will increase by 6%, and waste disposed of (excluding those deposited on landfills) – by about 4%. The quantity of stored wastes is anticipated as unchanged.

CHAPTER 4. WASTE MAGANEMENT OBJECTIVES AND TARGETS

The long-term objective of development of the national waste management plan provides for achievement waste management system conforming to the principle of sustainable development with waste management principles being fully implemented, and in particular the principle of conduct of waste in accordance with waste management hierarchy being pursued, i.e. firstly, to prevent generation of waste and minimise the quantity of waste generated and reduce their hazardous properties, and secondly, reuse the material and energy properties of wastes, and in case when it is impossible for waste to undergo recovery processes – this waste must be disposed of, while its deposition on landfill is generally considered the least desirable method of conduct. Implementation of this objective will make possible achievement of other objectives, such like: reduction of the climate change which results from waste management, to be done through minimisation of greenhouse gas emissions from waste utilisation technologies, or through enhancement of the share of renewables in the national energy balance by means of substituting fossil fuels with combustible waste of the vegetation and animal elements.
Therefore, according to the National Environmental Policy, the following major objectives are adopted:

- uphold the tendency to decoupling the national economic growth, as expressed in GDP, from the quantities of waste generated,
- enhance the share of recovery, including in particular energy recovery from wastes, in conformity with environmental requirements,
- reduce the quantity of all wastes subject to deposition on waste landfills,
- provide for closure, by the end of 2009, of all domestic landfills which do not conform to the legal requirements,
- eliminate illegal waste deposition practices,
- develop comprehensive database on products being placed on the market, and on waste management in Poland,

whereas the amendments to be introduced in legal provisions will be restricted to the farthest minimum possible which results from necessity to the transpose the Community law and the need to introduce changes as indicated in this 2010 National Waste Management Plan. Significant emphasis will be put on enforcement of legal provisions concerning waste management, also in the context of the transboundary waste shipments.
Given the fact that directions for change in environmental law are currently determined principally on the level of the European Union, Poland's active participation in activities as carried out on the European Union forum, in particular, in the work on new legal acts, has become one of the principal objectives in the field of waste management. Poland, as the member of the international community, yet before its accession to the European Union signed the Stockholm Convention on persistent organic pollutants. Given the fact that the European Union already ratified this Convention, the target for Poland is to ratify this Convention by the end of 2007, at the latest.

Specific targets within particular groups of wastes (i.e. municipal wastes, hazardous wastes and other wastes) have been formulated and set out below.

4.1. MUNICIPAL WASTES

The following targets are adopted for management of municipal waste:
- by the end of 2007, at the latest, cover 100% of the national population with organised municipal waste collection scheme,
- by the end of 2007, at the latest, comprise all the population within selective waste collection scheme, the minimum requirements for which are set out in this 2010 National Waste Management Plan,

- reduce the quantity of municipal biodegradable waste subject to deposition on waste landfills so that the following deposition percentage targets are achieved:
  - in 2010 more than 75%,
  - in 2013 more than 50%,
  - in 2020 more than 35%

of the mass of these wastes generated in 1995,
- by the end of 2014, reduce the mass of municipal waste deposited to maximum 85% of waste generated,
- by the end of 2014, reduce to maximum 200 the number of landfills for wastes other than hazardous and inert wastes on which municipal wastes are deposited,

4.2. HAZARDOUS WASTES

4.2.1. Wastes containing PCBs

In period between 2007 and 2010, the target is to destruct totally and eliminate PCBs from the environment by means of controlled disposal of PCBs and decontamination or disposal of the equipment containing PCBs.
Beginning from 2011, liquidation of waste containing PCBs in concentration below 50 ppm should be carried out.

4.2.2. Waste oils

In 2007 – 2018, retain the recovery level of waste oils with its value level amounting to at least 50%, and perform recycling understood as their reclamation on the level of at least 35%. Having in mind that the installations for reclamation of waste oils are operated with 50% of their potential capacity it will be necessary to endeavour after full use of treatment capacities.

4.2.3. Waste batteries and accumulators

According to the National Environmental Policy, expansion of the recovery and disposal scheme for waste batteries and accumulators is the overall objective to be aimed at the total elimination of their deposition.
In period between 2007 and 2009, at least the recovery and recycling levels have to be achieved, as required (and laid down in the Act of 11 May 2001 on the operators' obligations in the scope of management of certain wastes and on the product fee and deposit charges (Official Journal No. 63, Item 639, further amended)) and shown in Table 4-1.

Table 4-1 The recovery and recycling targets for waste batteries and accumulators

No.	Types of batteries and accumulators from which waste originates	Beginning from 2007 the percentage targets for	
		recovery	recycling
1.	Lead-acid accumulators	*All collected and recovered*	*All collected and recycled*
2.	Nickel-cadmium accumulators (large-size)	60	60
3.	Nickel-cadmium accumulators (small-size)	40	40
4.	Nickel-iron accumulators and other electrical accumulators ((large-size)	40	40
5.	Nickel-iron accumulators and other electrical accumulators (small-size)	20	20
6.	Galvanic cells and batteries and parts thereof, excluding parts of galvanic cells and batteries	25	25 [1)]
1) not applicable to zinc-carbon and alkaline cells			

The following targets are laid down for the period between 2010 and 2018:
- achieve collection and recycling levels (as defined and set out in Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC, page 1), i.e.:
  - minimum collection rate for waste batteries and accumulators (including Ni-Cd accumulators) amounting to 25% by 2012 – according to Article 10, paragraph 2 subparagraph (a):
  - minimum collection rate for waste batteries and accumulators amounting to 45% by 2016 – according to Article 10 paragraph 2 subparagraph (b),
  - minimum recycling efficiency of 65% by average weight of lead-acid batteries and accumulators including recycling of the lead content in the highest degree that is technically feasible while avoiding excessive costs (by 2010) – according to Article 12 paragraph 4,
  - minimum recycling efficiency of 75% by average weight of cadmium-nickel batteries and accumulators including recycling of the cadmium content in the highest degree that is technically feasible while avoiding excessive costs (by 2010) – according to Article 12 paragraph 4,
  - minimum recycling efficiency of 50% by average weight of other waste batteries and accumulators (do 2010) – according to Article 12 paragraph 4,
- from 2008, prohibit placing on the market:
  - all batteries and accumulators, whether or not incorporated into appliances, that contain more than 0.0005% of mercury by weight, excluding button cells with a mercury content of no more than 2% by weight,
  - portable batteries or accumulators, including those incorporated into appliances, that contain more than 0.002% of cadmium by weight, excluding portable batteries and accumulators intended for use in:
    - emergency and alarm systems, including emergency lighting,
    - medical equipment,
    - cordless power tools,
- from 2012, prohibit use of nickel-cadmium (Ni-Cd) batteries.

4.2.4. Medical and veterinary wastes

In period between 2007 and 2018, the target is to improve effectiveness of selective collection of medical and veterinary wastes (including sorting of waste at the source of its origination) that will result in reduction of the quantity of wastes other than hazardous wastes in hazardous waste stream.

4.2.5. End-of-life vehicles

According to the National Environmental Policy, the overall objective is to provide for full operation effectivnes of the scheme for collection and dismantling of end-of-life vehicles and for recovery, including recycling, of waste originating from end-of-life vehicles.
By 2018, the following minimum annual recovery and recycling levels have to be achieved in relation to the mass of the vehicles received at the dismantling stations:

- from 1 January 2006, 75% and 70% for vehicles manufactured before 1 January 1980, and 85% and 80% for other vehicles, respectively,
- from 1 January 2015, 95% and 85%, respectively, regardless of the vehicle manufacturing date.

4.2.6. Waste electrical and electronic equipment

According to the National Environmental Policy, expansion of the recovery and disposal scheme for waste electrical and electronic equipment is the overall objective in view of the total elimination of its deposition.
Therefore, for the period between 2007 and 2018, the following partial target levels have to be achieved:
- from 1 January 2008 – the recovery and recycling targets for waste equipment are following:

- for waste large-size household appliances and distributing machines:
  - recovery level amounting to 80 % of waste equipment mass,
  - recycling efficiency for constituent parts, materials and substances of this waste - 75 % of waste equipment mass;
- for waste Information Technology, telecommunication and audio-video equipment:
  - recovery level amounting to 75 % waste equipment mass,
  - recycling efficiency for constituent parts, materials and substances of this waste - 65 % of waste equipment mass;
- for waste small-size household appliances, lighting equipment, electrical and electronic tools excluding large-size ones, stationary industrial tools, toys, recreational and sporting equipment, and supervision and control appliances - 70% of waste equipment mass,
  - recycling efficiency for constituent parts, materials and substances of this waste equipment - 50 % of waste equipment mass;
- for used fluorescent discharge tubes - recycling efficiency for constituent parts, materials and substances of this waste - 80% of the mass of used tubes;

- from 1 January 2008 – the level of selective collection of waste electrical and electronic equipment originated from households amounts to 4 kg/inhabitant/year.

4.2.7. Wastes containing asbestos

In period between 2007 and 2018, achieve gradually the objectives and targets included in the „Programme for Elimination of Asbestos and Asbestos Containing Products Applied in the National Territory of Poland" as approved on 14 May 2002 by the Council of Ministers, Republic of Poland, which aims at 2032, and is to be revised in 2007.

4.2.8. Overdue pesticides

By 2010 – eliminate gradually the burial grounds and stores of overdue plant protection agents and begin suppression of hazards posed by landfills of production pesticide waste, that do not conform to environmental requirements.
From 2011 – eliminate gradually pesticide ground pollution caused by the burials that endanger the safety of usable underground water, and by 2018 – complete elimination of hazards caused by landfills containing post-manufacture pesticide waste.

4.2.9. Waste explosives

In period between 2007 and 2014, the overall goal is to expand the scheme for utilisation of waste explosives and its adaptation to environmental requirements.

4.3. OTHER WASTE

4.3.1. End-of-life tyres

In period between 2007 and 2018, the overall goal is to expand the scheme for utilisation of end-of-life tyres, including achievement of their recovery levels and recycling efficiencies as shown in Table 4-2.

Table 4-2 The annual recovery and recycling targets for end-of-life tyres by 2018

No.	Types of product from which waste originated	2007		2010		2018	
		Percentage target		Percentage target		Percentage target	
		recovery	recycling	recovery	recycling	recovery	recycling
1.	Tyres	75	15	85	15	100	20

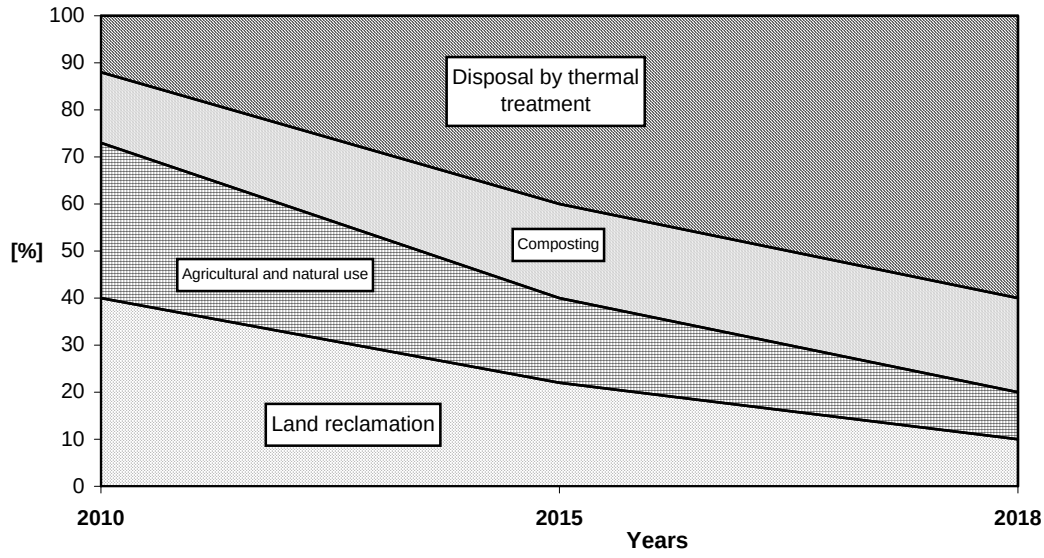
4.3.2. Wastes from construction, repair and demolition of building structures and road infrastructure

In period between 2007 and 2018, the overall objective is to expand by the recovery processes the scheme for selective collection of wastes from construction, repair and demolition of building structures and road infrastructure, so as the following recovery levels are achieved: 50% in 2010, and 80% in 2018.

4.3.3. Urban waste water sludges

In 2018 perspective, the overall objectives in management scheme of urban waste water sludge are following:
- reduce deposition of waste water sludge,
- expand the quantity of urban waste water sludges pre-processed prior to their release into the environment and of those treated by thermal methods,
- maximize the utilisation rate of biogenic substances contained in sludges with parallel fulfilling all the requirements concerning sanitary and chemical safety, according to targets shown in Figure 4-1.

Figure 4-1 Changes in structure of recovery and disposal of sludges from urban waste water treatment plants in 2018 perspective



4.3.4. Packaging wastes

For period between 2007 and 2018, the overall goal is to expand packaging waste management scheme, so as the targets be achieved as set out in Table 4-3.

Table 4-3 The annual recovery and recycling targets for packaging waste by 2014

No.	Types of packaging from which waste originated	2007		2010 [1)]		2014	
		Percentage target		Percentage target		Percentage target	
		recovery	recycling	recovery	recycling	recovery	recycling
1.	Packaging (total)	min. 50	min. 25	min. 60	min. 38	min. 60	55-80
2.	Plastic packaging	-	min. 25	-	min. 18	-	min. 22.5
3.	Aluminium packaging	-	min. 40	-	min. 45	-	min. 50
4.	Steel packaging	-	min. 20	-	min. 35	-	min. 50
5.	Paper and cardboard packaging	-	min. 48	-	min. 54	-	min. 60
6.	Glass packaging	-	min. 38	-	min. 49	-	min. 60
7.	Natural materials packaging (wooden and textiles)	-	min. 15	-	-	-	-
8.	Wooden packaging	-	-	-	min. 15	-	min. 15

[1)] Final target values will be established in Regulation Minister of the Environment of 24 May 2005 on the annual recovery and recycling target levels for packaging waste and reusable wastes (Official Journal No. 103, Item 872).

[2)] Target level for recycling includes only recycling and that is the reason why exclusively the plastics product is obtained as the final one.

4.3.5. Waste from selected economy sectors, the utilisation of which poses problems.

The following objectives and targets are to be achieved in period between 2007 and 2010 – enhance the share of wastes subject to recovery processes to reach 82% in 2010; and enhance the share of waste subject to disposal processes, beyond their deposition, to reach 5% in 2010; and
in period between 2011 and 2018 – enhance the share of wastes subject to recovery processes to reach 85% in 2018; and enhance the share of waste subject to disposal processes, beyond their deposition, to reach 7% in 2018.

CHAPTER 5. DIRECTIONS FOR ACTIVITIES TO PREVENTION WASTE AND DEVELOP WASTE MANAGEMENT SYSTEM

Avoidance and minimisation of generation of wastes are the priorities in the hierarchy of waste as established in the Community law that forms at the same time the objectives, for achieving of which the Member States of the European Union are obliged to undertake the relevant activities. Achieving this objective depends upon many factors which do not refer to waste management directly, but relate, for instances, to the economic growth, the implementation rate of the best available techniques (BAT) by industries, or the wealth of the society. Decisions on avoidance of generation of waste are undertaken already in the product design phase and also during its manufacturing and use phases, and are related to final utilization of waste originated form this product at the end of its life-cycle.

Therefore, the following principal activities are undertaken in this regard on the national level:

- continuation of research on new technologies contributing to avoidance and minimisation of waste generation and reduction of its adverse environmental impact,
- supporting implementation of low-waste production technologies and those which provide for utilisation of all possible components of the raw materials applied,
- promotion of implementation of environmental management system,
- intensification of environmental education promoting minimisation of waste and carrying out effective information and education campaign in this scope,
- implementation of „The 2007–2009 National Action Plan In the Scope of Green Public Procurements" including its versions for the subsequent years,
- application of economic instruments, including gradual increase of the charge rates for deposition of wastes, in particular mixed municipal wastes, biodegradable wastes and those subject to recovery processes, including recycling.

No essential change is anticipated in the management schemes for particular types of waste, with regard to overall development of waste management policy. Nevertheless, some corrections could be possible in course of establishment and development of particular schemes. The major directions for activities in the field of waste management are following:

- intensification of environmental education promoting suitable conduct of waste and carrying out effective information and education campaign in this scope,
- development and monitoring of real indicators of waste generation and morphology that are aimed at diagnosing the needs in the field of waste management,
- supporting economically and environmentally effective technologies of waste recovery and disposal, including technologies which provide for recovery of energy contained in waste, through its thermal and biochemical treatment processes,
- verification of the locations of currently existing waste landfills and elimination of environmental arduousness resulting from their operation, including closure and reclamation of such landfills which do not meet legal requirements,
- strengthening of control of the entities active in the field waste collection, transport, recovery and disposal,
- introduction of financial instruments which provide for implementation of waste management tasks as entrusted to the territorial self-governmental entities, and which discipline these entities in performance of their statutory responsibilities,
- elimination of inadequate landfill operation and reclamation practices.

Specification of additional activities required for particular waste groups is given below.

5.1 MUNICIPAL WASTES

5.1.1. Collection and transport of wastes

Implementation of the following activities is required to achieve the objectives required in the scope of municipal collection:

- Carrying out by the Municipalities of control of the implementation status of contracts concluded by the real estate owners with the companies responsible for collection of municipal wastes, with the aim to achieve 100 % coverage by these contracts or the relevant decisions of all the population throughout the national territory;
- Carrying out by the Municipalities of control of the methods and scope being applied by the companies holding permits to perform municipal waste collection from the real estate owners to comply with the provisions included in these permits in relation to the methods and sites they have to use for recovery and disposal of wastes;
- Improve the inventories of municipal waste generated, recovered and disposed of.

According to the targets established in the scope of waste recovery and recycling, selective collection and reception of the following fractions of municipal waste is required:

- garden and park wastes,
- paper and cardboard (including packaging, newspapers, journals, etc.),
- glass packaging wastes sorted by transparent and colour glass,
- plastics and metals,
- waste batteries and accumulators,
- waste electrical and electronic equipment,
- overdue medicaments,
- chemicals (paints, solvents, waste oils, etc.),
- furniture and other large-size waste,
- construction and repair wastes.

Other fractions of municipal waste may be collected together as mixed municipal waste.

The programme for development of selective collection of wastes should be prepared on the municipal and/or supra-municipal levels as an integral part of the municipal and/or supra-municipal waste management plan with regard to methods applied for carrying out their selective collection, type and size of the receptacles, collection frequency, etc.

Wastes collected in a selective manner should be transported in a way which avoids their mixing.

5.1.2. Recovery and disposal of wastes

Maximization of waste recovery requires:

- provision, through suitable monitoring of all investments implemented and planned to implement, of adequate installation throughput (capacity) to be available so to secure treatment of all wastes collected in a selective manner,
- stimulation of development of the market for reusable raw materials and raw material containing products, by means of supporting cooperation between the recovery organisation, industry and territorial self-government, and consistent enforcement of the obligations to be fulfilled in the scope of recovery and recycling of wastes,
- promotion, through adequate promotional and educational activities and public procurements, of products manufactured with waste materials,
- permitting only construction of such installations which conform to the provisions included in waste management plans, and the purposefulness of which has been confirmed in its cost and benefits analysis,
- encouraging public and private investors to take part in implementation of the strategic investments according to waste management plans,
- supporting and promotion of survey in the scope of waste recovery and disposal technologies.

Intensive increase of application of both biological and thermal methods for mixed municipal waste treatment is one of the principal directions of these activities. The current limited deposition rate of biodegradable wastes relates to the need to construct technology lines for their processing, as follows:

- composting plants for organic waste,

- technology lines for mechanical and biological treatment of mixed municipal wastes,
- installations for digestion of (organic or mixed) wastes,
- thermal treatment plants for mixed municipal wastes.

A system of regional solutions which take into account all required waste management components adapted to the local circumstances (including, for instance, thermal treatment) forms the basis for performance of municipal waste management in Poland. It is essential that the installations planned, in particular those for thermal treatment of waste, meet the BAT criteria, and that technologies applied have proved effective during their rich and multi-year experience.

5.1.3. Implementation of systemic and comprehensive solutions in municipal waste management

Waste utilisation plants having capacity sufficient to receive and treat wastes from the area inhabited by minimum 150 thousand residents, each, and technically meeting the criteria of the best available technique, have to become the basis for any municipal waste management scheme.
The waste utilisation plants should be capable to provide at least the following services:

- mechanical and biological or thermal treatment of mixed municipal waste and residues from sorting plants,
- deposition of treated mixed municipal waste,
- composting of garden and park wastes,
- sorting of particular fractions of municipal wastes collected in a selective manner (optional),
- dismantling plant for large-size waste (optional),
- treatment plant for waste electrical and electronic equipment (optional).

For agglomerations and regions inhabiting more than 300 thousand residents, thermal treatment (i.e. incineration) is the method preferred for utilisation of mixed municipal wastes. Municipal waste incinerators will receive infectious medical and veterinary wastes following their pre-deactivation.
In the Voivodship waste management plans, the regions have to be set out – in harmonization with the County and Municipal self-governments (through setting out the list of Municipalities) – to be serviced by the waste management plants. For regions covering Municipalities in more than one Voivodship, respective provisions should be introduced into all Voivodship plans.
In both Voivodship and Municipal plans the recovery and disposal sites for mixed municipal wastes are indicated to be used provisionally until the regional waste utilisation plants are established. The permits to collect municipal waste from the real estate owners indicate those recovery and disposal sites to be used until, and after, establishment of the regional waste utilisation plant.
In order to calculate the baseline quantity of biodegradable waste generated in 1995, the Voivodship, County and Municipal waste management plans set out the following factors:
- 155 kg per inhabitant/year, for urban areas;
- 47 kg per inhabitant/year, for the rural areas;
and the number of inhabitants in the organisational unit in a given year.

5.1.4. Arrangements for landfilling of wastes other than hazardous and inert wastes

In order to achieve the objective of safe deposition of wastes, the activities need to be done with the aim of leading by the end of 2009 to situation when all landfills will conform to the legal requirements.
To this end, the revised Voivodship waste management plans will specify detailed activities aimed at implementation of the aforementioned objective, including also the relevant time-schedules for construction of municipal waste landfills as integral elements of waste utilisation plant, or modification of parts of the landfills (provided, such modifications result from the integrated permits), and closure of such landfills which do not meet the relevant requirements.
Moreover, the capacities of landfills to be further used will be also specified in the framework of preparation of the Voivodship plans.

Particular Voivodship should endeavour after reduction of a number of minor ineffective local landfills and provision of operation of supra-municipal landfills, the number of which would amount to (maximum) 5-10 sites on the Voivodship scale by the end of 2014.
For landfills of wastes other than hazardous and inert wastes, the sites are preferred which would service the area inhabited by at least 150 populations. The total combined size (i.e. absorption volume) of landfills in a Voivodship should provide for at least 15-year operating period. It is assumed that for transportation of wastes to be deposited on landfill situated at a more than 30 km distance application of (two-phase) reloading transportation system is cost-effective.

5.2 HAZARDOUS WASTES

Upon analysis of the current status of hazardous waste management, prognoses of hazardous waste produced by 2018 and the investment, including post-investment, needs which result therefrom, as well as of the objectives to be achieved, the following directions for activities have been formulated:
- implement environmentally friendly and economically effective methods for utilisation of hazardous waste based upon the best available techniques (BAT), including development and implementation of innovative technology in the scope of utilisation of particular types of hazardous waste (for instance small-size batteries, waste electrical and electronic equipment),
- minimize the quantity of hazardous wastes generated being subject to disposal processes by means of deposition,
- organise new and develop existing schemes for collection of hazardous waste from diffused sources (small and medium sized enterprises), with regard to hazardous wastes appearing in municipal (households) waste stream, based upon:

- active collection networks for particular types of hazardous wastes, as established by the recovery organisations or the operators,
- active trading businesses, pharmacies, servicing companies, and collection points for reception of particular types of hazardous wastes (for instance overdue medicaments, waste oils, batteries, accumulators),
- stationary or mobile points for collection of hazardous wastes,
- regular collection of hazardous wastes from the inhabitants carrying out their selective collection within bag- or receptacle-scheme, by the entities performing activities in the scope of collection of municipal wastes from the real estate owners.

A model scheme for utilisation of hazardous wastes from diffuse sources, including households is illustrated in Figure 5-1.

The operators and institutions are required to collect hazardous and other wastes in a selective manner as structured into the waste groups which are discussed below.

5.2.1. Waste containing PCBs

Implementation of the following activities is required in order to achieve the objectives assumed for management of waste containing PCBs:
- by the end of June 2010 – eliminate gradually the equipment containing PCBs,
- carry out disposal/decontamination of waste containing PCBs domestically and abroad, as appropriate,
- monitor compliance of handling of wastes and equipment containing PCBs,
- organize and manage PCBs database,
- manage for collection and disposal scheme of PCBs containing equipment which is not subject to inventory,
- introduce incentives stimulating the operators to speed up phasing out from use their PCBs containing equipment.

5.2.2. Waste oils

Implementation of the following activities is required in order to achieve the objectives assumed for management of waste oils:
- develop existing collection scheme for waste oils, including from diffuse sources, and standardize the relevant facilities to this end,
- monitor compliance of handling of waste oils (first, recovery through reclamation, and where not feasible because of high contamination degree – then manage for recovery of waste oils by other processes),
- control those who produce waste oil in the scope of the methods they use to collect, store and qualify wastes for their correct recovery or disposal processes,
- utilize adequately wastes from oil spills.

5.2.3. Waste batteries and accumulators

Implementation of the following activities is required in order to achieve the objectives assumed for management of waste batteries and accumulators:
- transpose and implement Directive 2006/66/EC of the European Parliament and of the Council on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC,
- improve and further develop the collection scheme for small-size waste batteries and accumulators from diffuse sources,
- modify existing installations with view of their conformity to environmental requirements, and determine potential demand of new installations, for instance to treat small-size waste batteries and accumulators,
- develop and implement innovative technologies for treatment of waste batteries and accumulators,
- expand the scope for allocation of financial resources originated from the product charges, by financing purchase of the elements of the collection infrastructure (including receptacles and transportation means), and of research on development of innovative recovery and recycling technologies.

5.2.4. Medical and veterinary wastes

Implementation of the following activities is required in order to achieve the objectives assumed for management of medical and veterinary wastes:
- determine uniform collection scheme, including storage, for medical waste in medical establishments,
- develop disposal scheme for infectious medical and veterinary wastes, including the target of alternative incineration of these wastes in incineration plants capable of reception of this type wastes, or incineration of these wastes in incineration plants, treatment in autoclaves, thermal disinfection, treatment with application of microwave technique (the target objective should be to desist of construction and operation of small waste incinerators appropriated exclusively for treatment of infectious medical and veterinary wastes),
- make inventory of and determine factual throughput capacity of waste incinerators where treatment of infectious medical and veterinary wastes could be carried out upon specifically defined criteria (rated thermal input of the installations and calorific value of waste) on the Voivodship level in the framework of the Voivodship waste management plans prepared,
- develop utilisation method for veterinary wastes, including keeping of the inventory of their quantities generated,
- expand and harmonise existing schemes for collection of overdue medicaments from the public.

5.2.5. End-of-life vehicles

Implementation of the following activities is required in order to achieve the objectives assumed for management of end-of-life vehicles:

- provide for the national collection network of end-of-life vehicles, to secure the opportunity to giving up a vehicle to vehicle dismantling station, or collection point,
- improve data quality, updating and verification in the Central Register of Vehicles and Drivers, including general performance thereof,
- carry out cyclical inspection of particular entities (distributors of vehicles, vehicle collection points, dismantling stations, ripper operators) in the scope of their compliance with the provisions on recycling of end-of-life vehicles.

5.2.6. Waste electrical and electronic equipment

Implementation of the following activities is required in order to achieve the objectives assumed for management of waste electrical and electronic equipment:
- expand technical infrastructure in the scope of collection and treatment of waste electrical and electronic equipment,
- secure organisational instruments and mechanisms to provide for secondary circulation of outdated but operational electrical and electronic equipment.

5.2.7. Wastes containing asbestos

Implementation of the following activities is required in order to achieve the objectives assumed for management of wastes containing asbestos:
- monitor the compliance of handling of wastes containing asbestos, to comprise, in particular, the individual holders and dismantling companies,
- modify and/or construct landfills for wastes containing asbestos.

5.2.8. Overdue pesticides

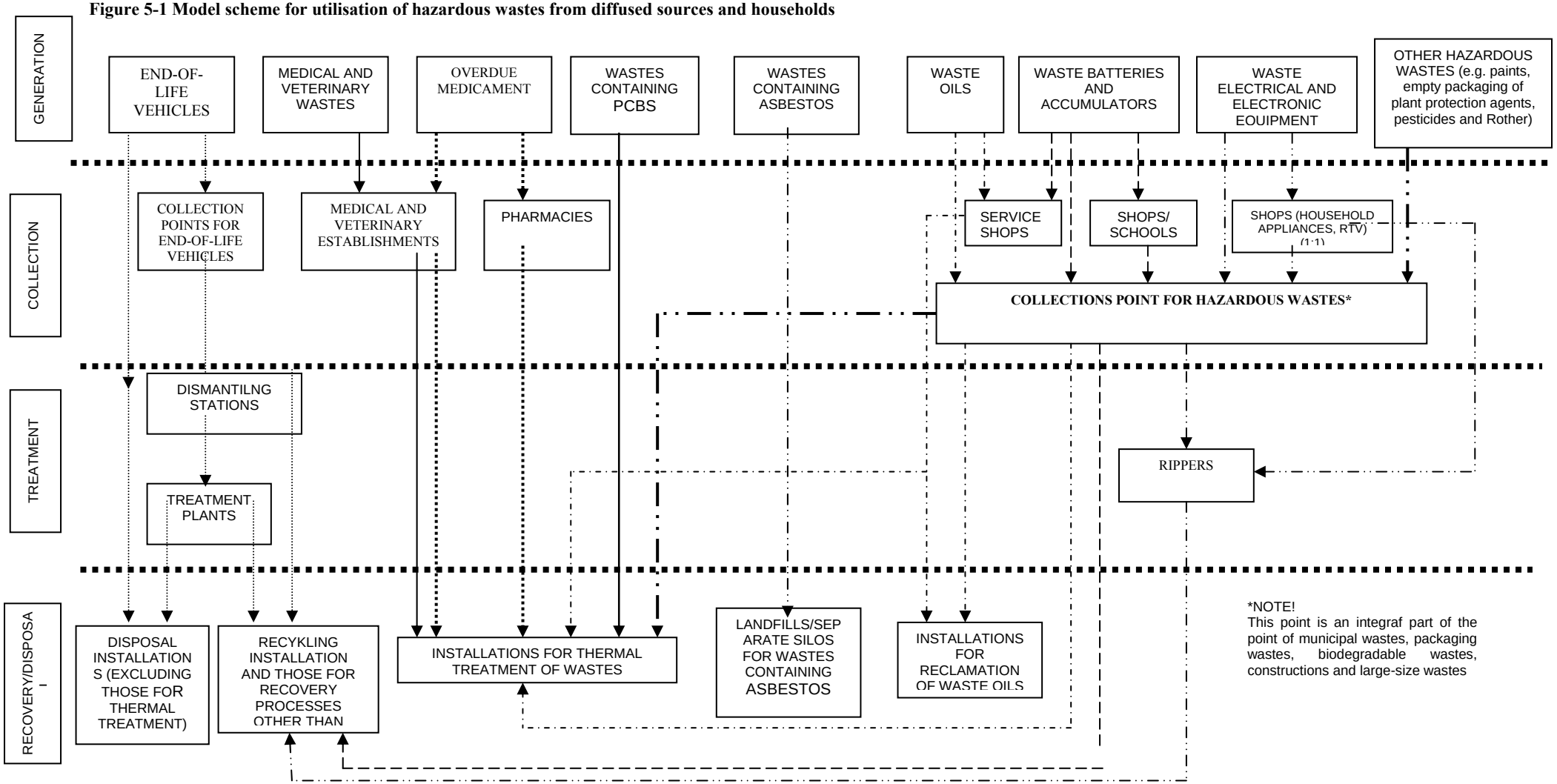
Implementation of the following activities is required in order to achieve the objectives assumed for management of overdue pesticides:
- eliminate gradually existing burials and provide for reclamation of contaminated terrain,
- eliminate hazards resulting from deposition of post-production pesticide waste on the landfills which do not meet environmental requirements,
- carry out monitoring of terrain contaminated by pesticides once the burials are eliminated,
- dispose, by thermal treatment in specialised incinerators, domestically and abroad, of overdue pesticides from eliminated burials and pesticide waste from the current manufacturing and application processes,
- carry out, by non-invasive methods and throughout the national territory, the prospecting work to identify any possible yet non registered burials,
- expand collection scheme of empty packaging of plant protection agents,
- establish and maintain firm organisational, scientific and research, and legal conditions to provide for the highest possible degree of implementation of the Stockholm Convention, as well as adequate control of releases of persistent organic pollutants into the environment.

By the end of 2010 - the burial elimination plans should be set out, as included in the Voivodship waste management plans drawn up for the Voivodships where the burials have not yet been eliminated.

5.2.9. Waste explosives

Implementation of the following activities is required in order to achieve the objectives assumed for management of waste explosives:
- develop waste management scheme for explosives,
- by 2014 - set up comprehensive programme for utilisation of waste ammunition and elimination of the relevant resources accumulated.

Figure 5-1 Model scheme for utilisation of hazardous wastes from diffused sources and households



5.3 OTHER WASTES

5.3.1. End-of-life tyres

Implementation of the following activities is required in order to achieve the objectives assumed for management of end-of-life tyres:
- expand technical infrastructure for collection of end-of-life tyres, particularly in the scope of collection of waste from small and medium sized enterprises,
- control the compliance of handling of end-of-life tyres, particularly in the entities which deal with replacement and repair of tyres.

Application of the following methods and technologies is recommended for utilisation of end-of-life tyres:
- recapping of tyres,
- manufacturing of rubber granulate,
- energy recovery by means of co-incineration in cement plants, power plants or power and heating plants which meet the requirements in the scope of waste co-incineration.

5.3.2. Wastes from construction, repair and demolition of building structures and road infrastructure

Implementation of the following activities is required in order to achieve the objectives assumed for management of wastes from construction, repair and demolition of building structures and road infrastructure:
- expand technical infrastructure for selective collection, treatment and recovery, including recycling of these wastes,
- control adequate handling of these wastes.

5.3.3. Urban waste water sludges

In order to achieve the objectives assumed in the field of urban waste water sludges, consideration of urban waste water sludge utilisation issues is required in course of carrying out implementation of investments in the scope of construction or modification of waste water treatment plants, and control of the quality and quantity of urban waste water sludge to be applied on land surface.

5.3.4. Packaging wastes

Implementation of the following activities is required in order to achieve the objectives assumed for management of packaging waste management:
- expand technical infrastructure in the scope of sorting and recycling of packaging waste,
- control the activities of those who place on market the products in packaging, recovery organizations, and the operators dealing with recovery, including recycling, of packaging wastes,
- introduce instruments to monitor the packaging waste streams and the performance of the scheme, including:
    - establishment of the national recycling register including directory of the operators authorised to issue certification documents on recycling operations performed and those certifying the recovery processes other than recycling, and the inventory of such documents,
    - making a more precise and specific the requirements concerning bankruptcy and winding up the recovery organisations.

5.3.5. Wastes from selected economy sectors that involve management problems

Implementation of the following activities is required in order to achieve the objectives assumed for management of wastes other than municipal and hazardous wastes:

- design new processes and products in a way which provides for reduction to the maximum extent possible of their environmental impacts in their production, use and post-use phases,
- adapt the installations for recovery and disposal of wastes to the relevant environmental requirements,
- transpose and implement the requirements in Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries and amending Directive 2004/35/EC (Official Journal EU L 102 of 11.04.2006, p. 15).

CHAPTER 6. THE TIME-SCHEDULE OF AND FINANCING METHODOLOGY FOR IMPLEMENTATION OF THE RELEVANT TASKS

Following the problems identified above (see Chapter 2 of the 2010 NWMP) and the prognosis of changes in the scope of waste management (Chapter 3 of the 2010 NWMP) and the objectives and targets determined thereupon (Chapter 4 of the 2010 NWMP) and directions for activities (Chapter 5 of the 2010 NWMP) the relevant tasks have been also set out for implementation under the 2010 NWMP. Table 6-1 specifies these tasks, their responsible implementing agencies, entities, and also their timing. Table 6-2 shows the implementation costs of these tasks and their potential funding sources. Given the fact that the 2010 NWMP is to be revised in 2010, most of the tasks specified concern those to be implemented in period between 2007 and 2010.

Table 6-1 Time schedule for implementation of the tasks in the scope of waste management

No.	Year	Scope	Responsibility
		General tasks for waste management:	
1.	2007-2010	Establish comprehensive database on products being placed on market and on waste management in Poland (*prepare its detailed concept, carry pot legislation process to amend the relevant legal provisions, a s required, design and implement the database system*)	Minister of the Environment and the Chief Inspector of Environmental Protection
2.	2007	Update the Voivodship waste management plans (*to comprise verification of the installations for recovery and disposal of waste with view of their compliance with the relevant requirements, draw up the inventory of the recovery and disposal installations including determination of their treatment capacities, produce map illustrating spatial distribution of these installations, set out the time-schedule for closure of the landfills in incompliance with the requirements, including the deadline for reception of wastes for deposition purpose on 31 December 2009, at the latest, determine the municipal waste management regions serviced by the regional waste utilisation plants, plan for liquidation of the burials with its deadline by the end of 2010, at the latest*)	The Voivodship Boards
3.	2007-2010	Provide human resource and technical support to the organisational units of Ministry of the Environment, Chief Inspector of Environmental Protection and its Voivodship Inspectorates and the Marshall Offices in the scope of waste management (*since no institutional support was provided in 2005-2006 when numerous new obligations were imposed on the administrative authorities*)	Minister of the Environment, Chief Inspector of Environmental Protection, Voivodes and the Voivodship Marshalls
4.	2007-2013	Select and approve projects in the framework of the "Infrastructure and Environment" Operating Programme under priority axis II "Waste management and protection of land surface" (*according to the objectives and directions for activity as included in this 2010 NWMP, particularly in the field of promotion of implementation of the environmental management scheme, establishment of the regional schemes for waste management, and modification of the production processes*)	Minister of the Environment
5.	2007 - 2009	Prepare and publish guidelines on the prevention of waste origination and on the recommended handling of waste for particular economy sectors (*agriculture and forestry, agricultural and food processing industry, timber processing industry, extracting industry, leather and fur industry, textile industry, petroleum industry, chemical industry, photo graphic industry, cement industry, energy sector, ferrous and non-ferrous metal processing, foundry engineering, glass manufacturing, shipyard industry, automotive industry, manufacturing of batteries and accumulators, manufacturing of electrical and electronic equipment, building and construction, health care, veterinary, drinking water treatment, waste water treatment, waste treatment, municipal management, trade, services, education, national defence*)	Ministers responsible for particular sectors of the national economy in agreement with the Minister responsible for the environment
6.	2007 - 2009	Determine material consumption and waste generation indicators for particular economy sectors (*see above*)	Ministers responsible for particular sectors of the national economy in agreement with the Minister responsible for the

No.	Year	Scope	Responsibility
			environment
7.	2007 and 2008	Manage legislation process aimed at issuance of the Regulation on detailed methods of handling certain types of wastes (*facultative legal delegation included in Article 7, paragraph 4 of the Act of 27 April 2001 on Waste; Official Journal No. 62, Item 628, further amended*)	Ministers responsible for particular sectors of the national economy in agreement with the Minister responsible for the environment
8.	2007 and 2008	Prepare and publish guidelines on the requirements for composting, digestion, mechanical and biological treatment, land reclamation and macro-levelling to be carried out with use of wastes (*with the aim of unification of the criteria to be applied by the public administrative authorities*)	Minister of the Environment
9.	2007	Prepare guidelines on the accounting of the obligation to reduce the quantity of deposition of municipal biodegradable wastes	Minister of the Environment
10.	2007 and 2008	Manage series of training courses for self-governmental administration on the application of legal provisions in the scope of waste management, particularly, in course of granting administrative decisions	Minister of the Environment, the Voivodes and the Voivodship Marshalls *(on 1 January 2008 the Voivodship Marshalls take over the Voivodes' competence in the scope of issuance of decisions relating to waste management)*
11.	2007 and 2008	Carry out country-wide information and education campaign on prevention of wastes and suitable handling of wastes, through the media *(with use of TV, radio, daily newspapers throughout Poland)*	Minister of the Environment
12.	2007 and 2008	Broaden the scope of the school teaching programmes by the issues concerning waste management *(expand the quantum of teaching hours dedicated to the issues of generation of waste* and adequate handling of wastes*)*	Minister of National Education and Minister of Science and Higher Education
13.	2007	Analyse the provisions in force as included in the Public Procurement Act of 29 January 2004 (Official Journal of 2006, No. 164, Item 1163 and No. 170, Item 1217) and introduce any possible amendments thereto *(focusing on promotion of purchasing products manufactured with application of materials recovered from recycled waste wastes)*	President of the Public Procurement Agency
14.	2007	Analyse the provisions in force in the Act of 27 March 2003 on physical planning and management (Official Journal No. 80, Item 717; and of 2004 No. 6, Item 41 and No. 141, Item 1492; and of 2005 No. 113, Item 954 and No. 130, Item 1087; and of 2006 No. 45, Item 319) and introduce any possible amendments thereto *(with the aim of making feasible location of investments in the scope of thermal treatment of wastes)*	Minister of Housing
15.	2007 – 2010	Consider in the public tenders the purchases of products containing materials or substances originated from recycling of waste *(for instance purchase of paper manufactured with at least 50% share of recycled paper)*	Public administration agencies
16.	2007-2010	Carry out activities in the scope of monitoring and enforcement of performance of statutory obligations imposed on the territorial self-governmental entities *(in order to achieve the objectives in the scope of waste management as imposed by way of the Community legal provisions)*	Minister of Interior and Administration
17.	2007-2010	Coordinate and support implementation of scientific and research studies in the scope of waste management *(technologies with reduced indicator of waste generation, product with reduced environmental impacts during their life-time, including their use and afterwards, waste recycling technologies)*	Minister of Science and Higher Education
18.	2007	Carry out legislative process to amend Regulation of Council of Ministers on the rates of fees for use of the environment *(change in Regulation of Council of Ministers of 20 December 2005 on the charge rates for use of the environment (Official Journal No. 260, Item 2176), to be issued under relevant legal delegation included in Article 290 paragraph 2 of the Environmental Protection Act of 27 April 2001 (Official Journal of 2006 No. 129, Item 902, No. 169, Item 1199, No. 170, Item 1217), with the aim to increase the charge rates for deposition of mixed municipal wastes, biodegradable wastes, wastes being potential raw materials – in order to support development of waste recovery technology, including recycling of*	Minister of the Environment

No.	Year	Scope	Responsibility
		wastes)	
19.	2007	Carry out legislative process to amend Act of 27 April 2001 on Wastes *(with the aim to introduce the possibilities to ex officio closure for landfills being in incompliance with the relevant legal requirements, introduce since 1 January 2010 of the ban to deposit selectively collected flammable waste, and since 1 January 2013 of the ban to deposit selectively collected biodegradable waste, introduce the measures to discipline the operators to comply with obligation to submit collective data set)*, and possibly to carry out legislative process to amend Environmental Protection Act of 27 April 2001 *(to make the more stringent sanctions for illegal deposition of wastes)*	Minister of the Environment
20.	2007	Carry out legislative process to amend Regulation of Minister of the Environment of 24 March 2003 on detailed requirements on the location, construction, operation and closure, to be met by particular types of waste landfills (Official Journal No. 61, Item 549) *(in order to make more specific the requirements in the scope of operation of landfills, for instance, what materials are permitted to apply during operation of landfill)*	Minister of the Environment
21.	2007	Identify the sites contaminated by wastes that have no landfill status and issue decisions making the entity using the environment obliged to draw up and submit ecological review (*Article 241 in Environmental Protection Act of 27 April 2001)*.	County Heads
22.	2007 and 2008	Impose the obligation on the entities which use the environment to restore the environment to its proper state, with its implementation deadline by the end of 2009.	The Voivodes and County Heads (the Voivodship Marshalls from 1 January 2008)
23.	2007-2009	Issue decisions addressed to holders of the legal title to land surface that require them to remove waste discarded on the sites which are not designated for deposition and storage of wastes, with their implementation deadline by the end of 2009 *(with the aim of successive elimination of the waste dumping sites being not any legal waste landfills or storage sites).*	Heads of Municipalities, City Mayors and Presidents of Towns
24.	2008	Develop the control and management programme for inspections of landfills as specified in Enclosure attached to this 2010 NWMP in order to check the legality of the relevant related administrative decision, verify the compliance with the decision conditions, and adapt these sites to the respective legal provisions, as required.	Supreme Control Council and Environmental Protection Inspectorate
25.	2009	Make decisions on the closure of the landfills being in incompliance with the relevant legal requirements *(with 31 December 2009, at the latest, as the final deadline for reception of wastes thereon for deposition purpose).*	Minister of the Environment, Voivodes and the Voivodship Marshalls *(on 1 January 2008 the Voivodship Marshalls take over the Voivodes' competence in the scope of issuance of decisions relating to waste management)*
26.	2008-2010	Carry out legislative process to amend the Act of 27 April 2001 on Wastes *(with the aim to transpose the Framework Waste Directive once adopted)*	Minister of the Environment
Tasks for municipal waste management :			
27.	2007	Carry out legislative process to issue Regulation on detailed technical conditions to qualify a part of energy recovered in thermal treatment of municipal waste as the renewable source energy – with the aim to support development of thermal treatment of waste *(under facultative delegation included in Article 44, paragraph 8 of the Act of 27 April 2001 on Waste)*	Minister of the Environment
28.	2008-2009	Establish supra-Municipal structures for implementation of the regional waste utilisation plants and provide for participation of Municipalities thereto *(in relation to the regions designated to this end in the Voivodship waste management plans)*	Municipal Boards
29.	2008-2013	Establish regional schemes for utilisation of municipal wastes *(to cover the activities in the scope of prevention of waste generation, selective collection of municipal wastes following the guidance as provided in this 2010 NWMP, pre-treatment of waste to fit their recovery or disposal processes, deposit mixed municipal waste treated, including construction of the regional waste utilisation plants, and reclamation of closed landfills situated in the area of the plant's activity)*	Inter-Municipality Boards

No.	Year	Scope	Responsibility
Tasks for hazardous waste management:			
Tasks for management of waste persistent organic pollutants			
30.	2007	Carry out legislative process to issue Regulation on the method for keeping by the Voivode of the register of the substances which pose significant environmental risks, and the installations and equipment in which such substances were or are applied *(under facultative delegation included in Article 163, paragraph 8, in Environmental Protection Act of 27 April 2001).*	Minister of the Environment
31.	2007	Implement ratification process of the Stockholm Convention on persistent organic pollutants.	Minister of Foreign Affairs and Minister of the Environment
32.	2007	Establish bureau for persistent organic pollutants *(to coordinate activities carried out under* the *Stockholm Convention).*	Minister of the Environment
Tasks for management of PCBs:			
33.	2007	Place on the list of the priority activities of the Voivodship Funds for Environmental Protection and Water Management the tasks which relate to decontamination and disposal of equipment containing PCBs *(as an incentive encouraging the operators to sooner disposal of PCBs-containing equipment).*	The Voivodship Funds for Environmental Protection and Water Management
Tasks for management of waste oils:			
34.	2007	Develop plan for utilisation of waste from oil spills originated from naval (marine) accidents *(according to the National Plan for Combating Hazards and Pollution of Marine Environment).*	Minister of Marine Economy in agreement with Minister of the Environment
Tasks for management of waste batteries and accumulators:			
35.	2007	Carry out legislative process to transpose Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC *(in form of separate superior legal act).*	Minister of the Environment
Tasks for management of waste electrical and electronic equipment:			
36.	2007	Carry out legislative process to amend the Act of 29 July 2005 on waste electrical and electronic equipment (Official Journal No. 180, Item 1495) *(with the aim to introduce the collection level expressed as the mass percentage of the electrical and electronic equipment placed on the market).*	Minister of the Environment
Tasks for management of asbestos waste			
37.	2007	Update „Programme for removal of asbestos and products containing asbestos applied throughout the Polish national territory".	Minister of Economy
Tasks for management of overdue pesticides:			
38.	2007 and 2008	Carry out by non-invasive methods the exploration works to find possibly non-identified burials *(under Article 109, paragraph 2, and Article 110 in Environmental Protection Act of 27 April 2001, in order to provide for elimination of all burials by 2010, at the latest).*	County Heads
Tasks for management of waste explosives:			
39.	2007	Prepare waste management plan for explosives.	Minister of national Defence
Tasks for management other wastes:			
Tasks for management urban waste water sludge:			
40.	2007	Update the National Programme for Treatment of Urban Waste Water *(to cover the issues of suitable utilisation of urban waste water sludge in undertaken modifications and construction of new waste water treatment plants – following the guidance as included in this 2010 National Waste Management Plan).*	Minister of the Environment
Tasks for management of packaging wastes:			
41.	2007	Carry out legislative process to amend the Act of 11 May 2001 on the operator obligations in the scope of management certain wastes and on the product fee and deposit charge (Official Journal No. 63, Item 639; of 2002, No. 113, Item 984; of 2003, No. 7, Item 78; of 2004, No. 96, Item 959 and No. 121, Item 1263; and of 2005, No. 33, Item 291, No. 175, Item 1458 and No. 180, Item 1495) *in view of establishment of the National Recycling Register, following section 5.3.4 of this 2010 NWMP).*	Minister of the Environment
Tasks for managing wastes from extractive industry:			
42.	2007 and 2008	Carry out legislative process to transpose Directive 2006/21/EC of the European Parliament and of the Council of o 15 March 2006 on the management of waste from extractive industries and amending directive 2004/35/EC (Official Journal EC L 102 of 11.04.2006, p. 15) (in form of a separate superior legal act).	Minister of the Environment

Table 6-2 In-kind and financial time-schedule for implementation of the relevant tasks in the framework of waste management

No.	Task	Total cost [million PLN]	Public financial resources [million PLN]				Private financial resources [million PLN]
			Domestic[1)]		Foreign		Enterprises – Private Investors
			Total	From the Funds for Environmental Protection and Water Management	Total	From the European Union Funds	
Investment Projects							
Period 2007-2010							
IA-1.	Establishment of the regional schemes for municipal waste management	3 350.00	1 250.00	740.00	1 320.00	1 200.00	780.00
	TOTAL	**3 350.00**	**1 250.00**	**740.00**	**1 320.00**	**1 200.00**	**780.00**
Period 2011-2013							
IB-1.	Establishment of the regional schemes for municipal waste management	5 970.00	1 540.00	1 030.00	3 100.00	2 900.00	1 330.00
	TOTAL	**5 970.00**	**1 540.00**	**1 030.00**	**3 100.00**	**2 900.00**	**1 330.00**
Non-Investment Projects							
Period 2007-2010							
IIA-1.	Establish comprehensive database on products being placed on market and on waste management in Poland	2.00	2.00	2.00	-	-	-
IIA-2.	Update the Voivodship waste management plans	2.00	2.00	2.00	-	-	-
IIA-3.	Provide human resource and technical support to the organisational units of Ministry of the Environment, Chief Inspector of Environmental Protection and its Voivodship Inspectorates and the Marshall Offices in the scope of waste management	19.00	19.00	-	-	-	-
IIA-4.	Coordinate implementation of the "Infrastructure and Environment" Operating Programme	0.40	-	-	0.40	0.40	-
IIA-5.	Prepare and publish guidelines on the prevention of waste origination and on the recommended handling of waste for particular economy sectors	4.00	4.00	-	-	-	-
IIA-6.	Determine material consumption and waste generation indicators for particular economy sectors	4.00	4.00	-	-	-	-
IIA-7.	Manage legislation process aimed at issuance of the Regulation on detailed methods of handling certain types of wastes	1.00	1.00	-	-	-	-
IIA-8.	Prepare and publish guidelines on the requirements for composting, digestion, mechanical and biological treatment, land reclamation and macro-levelling to be carried out with use of wastes	0.50	0.50	0.50	-	-	-
IIA-9.	Prepare guidelines on the accounting of the obligation to reduce the quantity of deposition of municipal	0.03	0.03	0.03	-	-	-

No.	Task	Total cost [million PLN]	Public financial resources [million PLN]				Private financial resources [million PLN]
			Domestic[1)]		Foreign		Enterprises – Private Investors
			Total	From the Funds for Environmental Protection and Water Management	Total	From the European Union Funds	
	biodegradable wastes						
IIA-10.	Manage series of training courses for self-governmental administration on the application of legal provisions in the scope of waste management, particularly, in course of granting administrative decisions	2.00	-	-	2.00	2.00	-
IIA-11.	Carry out country-wide information and education campaign on prevention of wastes and suitable handling of wastes, through the media	10.00	-	-	10.00	10.00	-
IIA-12.	Broaden the scope of the school teaching programmes by the issues concerning waste management	0.20	0.20	-	-	-	-
IIA-13.	Analyse the provisions in force as included in the Public Procurement Act of 29 January 2004 and introduce any possible amendments thereto	0.10	0.10	-	-	-	-
IIA-14.	Analyse the provisions in force in the Act of 27 March 2003 on physical planning and management and introduce any possible amendments thereto	0.10	0.10	-	-	-	-
IIA-15.	Consider in the public tenders the purchases of products containing materials or substances originated from recycling of waste	-	-	-	-	-	-
IIA-16.	Carry out activities in the scope of monitoring and enforcement of performance of statutory obligations imposed on the territorial self-governmental entities	0.10	0.10	-	-	-	-
IIA-17.	Coordinate and support implementation of scientific and research studies in the scope of waste management	100.00	100.00	-	-	-	-
IIA-18.	Carry out legislative process to amend Regulation of Council of Ministers of 20 December 2005 on the rates of fees for use of the environment	0.10	0.10	-	-	-	-
IIA-19.	Carry out legislative process to amend Act of 27 April 2001 on Wastes	0.10	0.10	-	-	-	-
IIA-20.	Carry out legislative process to amend Regulation of Minister of the Environment of 24 March 2003 on the detailed requirements on the location, construction, operation and closure, to be met by particular types of waste landfills	0.10	0.10	-	-	-	-
IIA-21.	Identify the sites contaminated by wastes that have no	1.00	1.00	-	-	-	-

No.	Task	Total cost [million PLN]	Public financial resources [million PLN]				Private financial resources [million PLN]
			Domestic[1)]		Foreign		Enterprises – Private Investors
			Total	From the Funds for Environmental Protection and Water Management	Total	From the European Union Funds	
	landfill status and issue decisions making the entity using the environment obliged to draw up and submit ecological review						
IIA-22.	Impose the obligation on the entities which use the environment to restore the environment to its proper state, with its implementation deadline by the end of 2009.	0.50	0.50	-	-	-	-
IIA-23.	Issue decisions addressed to holders of the legal title to land surface that require them to remove waste discarded on the sites which are not designated for deposition and storage of wastes, with their implementation deadline by the end of 2009	0.50	0.50	-	-	-	-
IIA-24.	Develop the control and management programme for inspections of landfills as specified in Enclosure attached to this 2010 NWMP in order to check the legality of the relevant related administrative decision, verify the compliance with the decision conditions, and adapt these sites to the respective legal provisions, as required.	0.40	0.40	-	-	-	-
IIA-25.	Make decisions on the closure of the landfills being in incompliance with the relevant legal requirements	0.50	0.50	-	-	-	-
IIA-26.	Carry out legislative process to amend the Act of 27 April 2001 on Wastes	0.10	0.10	-	-	-	-
IIA-27.	Carry out legislative process to issue Regulation on detailed technical conditions to qualify a part of energy recovered in thermal treatment of municipal waste as the renewable source energy – with the aim to support development of thermal treatment of waste	0.10	0.10	-	-	-	-
IIA-28.	Establish supra-Municipal structures for implementation of the regional waste utilisation plants and provide for participation of Municipalities thereto	0.50	0.50	-	-	-	-
IIA-29.	Carry out legislative process to issue Regulation on the method for keeping by the Voivode of the register of the substances which pose significant environmental risks, and the installations and equipment in which such substances were or are applied	0.10	0.10	-	-	-	-
IIA-30.	Implement ratification process of the Stockholm	0.30	0.30	-	-	-	-

No.	Task	Total cost [million PLN]	Public financial resources [million PLN]				Private financial resources [million PLN]
			Domestic[1)]		Foreign		Enterprises – Private Investors
			Total	From the Funds for Environmental Protection and Water Management	Total	From the European Union Funds	
	Convention on persistent organic pollutants.						
IIA-31.	Establish bureau for persistent organic pollutants	1.00	1.00	-	-	-	-
IIA-32.	Place on the list of the priority activities of the Voivodship Funds for Environmental Protection and Water Management the tasks which relate to decontamination and disposal of equipment containing PCBs	0.05	0.05	0.05	-	-	-
IIA-33.	Develop plan for utilisation of waste from oil spills originated from naval (marine) accidents	0.30	0.30	-	-	-	-
IIA-34.	Carry out legislative process to transpose Directive 2006/66/EC of the European Parliament and of the Council on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC	0.20	0.20	-	-	-	-
IIA-35.	Carry out legislative process to amend the Act of 29 July 2005 on waste electrical and electronic equipment	0.10	0.10	-	-	-	-
IIA-36.	Update „Programme for removal of asbestos and products containing asbestos applied throughout the Polish national territory”	0.10	0.10	-	-	-	-
IIA-37.	Carry out by non-invasive methods the exploration works to find possibly non-identified burials	4.00	4.00	-	-	-	-
IIA-38.	Prepare waste management plan for explosives	0.50	0.50	-	-	-	-
IIA-39.	Update the National Programme for Treatment of Urban Waste Water	0.20	0.20	0.20	-	-	-
IIA-40.	Carry out legislative process to amend the Act of 11 May 2001 on the operators' obligations in the scope of management certain wastes and on the product fee and deposit charge	0.20	0.20	-	-	-	-
IIA-41.	Carry out legislative process to transpose Directive 2006/21/EC of the European Parliament and of the Council of o 15 March 2006 on the management of waste from extractive industries and amending directive 2004/35/EC	0.20	0.20	-	-	-	-
	Total	**156.58**	**144.18**	**4.78**	**12.4**	**12.4**	**-**
Period 2011-2013							
IIB-1.	Coordinate implementation of the Operating Programme „Infrastructure and Environment”	0.30	-	-	0.30	0.30	-
	Total	**0.30**	**-**	**-**	**0.30**	**0.30**	**-**

No.	Task	Total cost [million PLN]	Public financial resources [million PLN]				Private financial resources [million PLN]
			Domestic[1)]		Foreign		Enterprises – Private Investors
			Total	From the Funds for Environmental Protection and Water Management	Total	From the European Union Funds	

[1)] The outlays will be financed in the framework of the expenses planned in budgets of the competent dispatchers under Budgetary Acts for the subsequent years.

CHAPTER 7. CONCLUSIONS DERIVED FROM THE PROGNOSIS OF ENVIRONMENTAL IMPACT OF THE DRAFT PLAN

The conclusions specified below relate to environmental impacts anticipated from implementation of the 2010 National Waste Management Plan (the 2010 NWMP). Besides these conclusions, also proposals for activities which relate not only to the environmental impacts anticipated from implementation of the 2010 NWMP, but are also aimed at proper implementation of this Plan in the forthcoming years.

1. In the 2010 NWMP, a general tendency may be noted towards solving waste utilisation problems with regard to recovery and disposal of wastes, beyond deposition. The assumed objectives of the 2010 NWMP conform to requirements included in the Polish and the Community laws.

2. Implementation in a non-timely manner of the relevant activities set out in the 2010 NWMP will pose the major environmental risk. That regards first of all the implementation of the tasks in the scope of collection and recovery or disposal of wastes. With the assumption that wastes, particularly municipal wastes, are generated continuously, upgrading of the efficiency of their selective collection is required, since otherwise these wastes will undergo deposition on the landfills, the capacity of which is not appropriated for reception of all waste types. If this is the case, it could also happen that wastes would be discarded into the environment in an uncontrolled manner, and that would pose yet worse environmental risk. Therefore, reduction of the quantity of wastes deposited should be considered an overriding priority.

3. The waste treatment installations planned under the 2010 NWMP could pose risk in a local scale to both the environmental and human health. Depending upon type of installation, such impacts could take form of odorous nuisances, and could also be arduous in terms of their land occupation. When planning location of such projects all their potential impacts on the area in question, either with human presence, or on the protected areas, have to be taken into account.

4. Hover, deposition of waste will be in many instances an unavoidable instance. Existing control technologies and approval procedures of documents and authorisation in the scope of landfilling of wastes are capable of efficient reduction of adverse environmental impacts from the landfills implemented. Existing waste landfills are problematic, since given their scale, the economic considerations could make impossible the attempts to closure of such sites.

5. It is indispensable to introduce mechanisms supporting performance of existing and newly established schemes for collection and recovery or disposal of wastes. Moreover, it needs to carry out continuous educational and informative actions concerning required necessity for the local inhabitants to be involved into a scheme of selective collection wastes, with particular regard to separation of hazardous waste from municipal waste stream. Health risks have to be explained that relate to impacts from hazardous wastes managed in an inadequate way.

6. The supra-Municipal structures are hardly available which would have been commonly operated in the field of delivering wastes to waste recovery and disposal sites. The poor participation on part of the Municipalities in actions carried out in the field of waste management is the reason for that. Hence, it is impossible to discipline the territorial self-governmental entities to perform their statutory obligations in this scope where no legal instrument is in place to this end.

7. Situation is similar in case of new landfills which, given the high waste reception prices loose competition against old landfills yet operated, but having no adequate controls in place. That could result in non-allocation of the Community assistance resources for construction of the subsequent new landfills in case when the scales of the area and population, as required, have not been provided for these new landfills.

8. Low waste deposition charges are also one of the reasons why the respective economic incentives to implement up-to-date technology for waste recovery and disposal are unavailable. No breakthrough in transition to advanced technology can be expected in that way.

CHAPTER 8. MONITORING AND ASSESSMENT METHODS FOR IMPLEMENTATION OF THIS PLAN

Implementation of particular tasks, as set out in Chapter 7 of the 2010 NWMP, will undergo assessment whereas the indicators compiled in Table 8-1 below will serve for monitoring achievement of the targets determined Chapter 4 of this 2010 NWMP. Reports on implementation of the Voivodship, County and Municipal waste management plans and also information collected from particular Ministries will form the basis for that assessment. During initial phase, source data will be acquired from existing databases, as collected in the framework of the administrative system and from statistical survey. Further, once the comprehensive database on products place on the market and on waste management in Poland, this database will become the principal information source. The value of certain indicator will be determined upon data obtained from reports on implementation of the Voivodship, County and Municipal waste management plans. The assessment will be carried out in 2009 and 2011, as for 31 December 2008 and 31 December 2010, respectively, with certain indicators being determined on the annual basis.

Information relating to particular territorial self-governmental entities, as set out in Table 8-1, will be included in the reports on implementation of the Voivodship, County and Municipal waste management plans for each year of the reporting period (with general information and that on municipal waste, to be included in the Municipal reports). Information on the implementation status of the tasks determined for territorial self-governmental entities, as referred to in Chapter 6, with their implementation costs and funding sources will be also set out in those reports. Moreover, the Voivodship reports will include indicators specified in Table 8-2.
Lists of installations for utilisation of municipal wastes, as for the final day of the reporting period, will be specified in Municipal (or supra-Municipal) reports on implementation of waste management plans, as structured into:

- composting plants for organic waste collected in a selective manner,
- digestion plants,
- plants for mechanical and biological treatment of mixed municipal wastes,
- sorting plants for municipal waste collected in a selective manner (with sorted fractions, for instance, paper, glass, indicated),
- sorting plants for mixed municipal wastes,
- sorting plants for both municipal waste collected in a selective manner (with sorted fractions, for instance, paper, glass, indicated), and mixed municipal wastes,
- incineration plants for mixed municipal waste,
- legally operated landfills for waste other than hazardous and inert wastes, where municipal wastes are deposited,

including also the basic data on at least installations type, name, address, treatment capacity, and additionally for landfills, also: empty volumes of particular landfills and anticipated waste mass to be potentially received thereon until closure of a given landfill. For each installation assessment will be made of its compliance with the relevant legal and technical requirements. In case of incompliance, the requirements will be specified to be complied with and the method to improve the current situation.
Lists of all the Municipal waste utilisation installations situated in the County territory, as for the final day of the reporting period, will be specified in reports on implementation of the County waste management plans, including the Municipal (and/or supra-Municipal) installations as specified above and additionally, those as follows:

- dismantling stations for end-of-life vehicles,
- treatment plants fro waste electrical and electronic equipment,
- landfills for waste other than hazardous and inert wastes, where municipal wastes are not deposited,
- landfills for inert wastes,
- landfills for hazardous wastes,
- landfills for hazardous wastes, where waste containing asbestos is deposited ,and landfills for wastes other than hazardous and inert wastes, with separate silos for deposition of waste containing asbestos,
- incineration plants designated exclusively for incineration of medical and veterinary wastes,
- their waste incineration plants,

including also the basic data on at least installations type, name, address, treatment capacity, and additionally for landfills also: empty volumes of particular landfills and anticipated waste mass to be

potentially received thereon until closure of a given landfill. For each installation assessment will be made of its compliance with the relevant legal and technical requirements. In case of incompliance, the requirements will be specified to be complied with and the method to improve the current situation. Moreover, the lists of burials will be included with indication of their location and estimated quantity of overdue plant protection agents contained therein, and information on the burials eliminated during the reporting period.
Lists of all the Municipal and County waste utilisation installations situated in the Voivodship territory, as for the final day of the reporting period, will be specified in reports on implementation of the Voivodship waste management plans, including the installations as specified above and additionally, those as follows::

- installations for recovery and recycling of packaging waste (with indication of the packaging materials used),
- installations for utilisation urban waste water sludge,
- installations for recycling of waste batteries and accumulators,
- installations for reclamation of waste oils,
- installations for disposal of PCBs,

including also the basic data on at least installations type, name, address, treatment capacity, and additionally for landfills also: empty volumes of particular landfills and anticipated waste mass to be potentially received thereon until closure of a given landfill. For each installation assessment will be made of its compliance with the relevant legal and technical requirements, and this assessment will be performed irrespective of those done on the Municipal and County level. In case of incompliance, the requirements will be specified to be complied with and the method to improve the current situation. Moreover, the lists of burials will be included with indication of their location and estimated quantity of overdue plant protection agents contained therein, and information on the burials eliminated during the reporting period. Analysis will be carried out in order determine whether the total combined treatment capacities of the installations are sufficient enough to provide for utilisation waste generated in the Voivodship territory, i.e. whether the Voivodship is self-sufficient in the field of waste management, with both the surpluses and deficiencies to be determined thereby for treatment capacities for particular waste types. General assessment of waste management status in the area of the Voivodship in question will be also performed.

The implementation report on the National Waste Management Plan will include information specified pursuant to the listing of its scope as given in Table 8-1 and by the indicators specified in Table 8-2 for each year in the reporting period, and also information on the implementation status of the tasks, as referred to in Chapter 6. The total combined treatment capacities by particular types of installations will be included together with the relevant analysis which will determine whether the total combined treatment capacities of waste treatment installations are sufficient enough to provide for utilisation of waste generated throughout the national territory. Overall assessment of the status of national waste management will be also included.

Table 8-1 Information on waste generation and management

No.	Information on waste generation and management	Unit
	General	
1.	Mass of waste generated – total	Mg
2.	Mass percentage of waste generated and recycled (excluding organic recycling)	%
3.	Mass percentage of waste generated and recycled by organic processes	%
4.	Mass percentage of waste generated and thermally treated with energy recovery	%
5.	Mass percentage of waste generated and applied directly on land surface	%
6.	Mass percentage of waste generated and disposed of by biological methods	%
7.	Mass percentage of waste generated and disposed of by thermal methods	%
8.	Mass percentage of waste generated and stored without treatment	%
9.	GDP value	billion PLN
10.	Percentage of the Voivodship waste management plans updated	%
11.	Percentage of the County waste management plans updated	%
12.	Percentage of the Municipal waste management plans updated	%
13.	Percentage of decisions issued by the Municipality Heads, City Mayors or Presidents of Towns in the scope of waste management, against which appeals were submitted	%
14.	Percentage of decisions issued by the County Heads in the scope of waste management, against which appeals were made	%

15.	Percentage of decisions issued by the Voivodship Marshalls in the scope of waste management, against which appeals were made	%
16.	Percentage of decisions issued by Environmental Protection Inspectorate in the scope of waste management, against which appeals were made	%
17.	Percentage of decisions issued by the Municipality Heads, City Mayors or Presidents of Towns in the scope of waste management, upheld in the appeal proceedings	%
18.	Percentage of decisions issued by the County Heads in the scope of waste management, upheld in the appeal proceedings	%
19.	Percentage of decisions issued by the Voivodship Marshalls in the scope of waste management, upheld in the appeal proceedings	%
20.	Percentage of decisions issued by Environmental Protection Inspectorate in the scope of waste management, upheld in the appeal proceedings	%
21.	Financial resources spent for construction or modification of waste management installations – total	million PLN
22.	Financial resources spent for construction or modification of waste management installations – with the Community Funds	million PLN
23.	Financial resources spent for scientific and research studies in the scope of waste management	million PLN
24.	Number of posts in the central administration for waste management	post
25.	Number of posts in the Voivodship administration for waste management	post
26.	Number of posts in the County administration for waste management	post
27.	Number of posts in the Municipal administration for waste management	post
28.	Number of environmental management systems implemented in waste management companies and institutions	post
	Municipal wastes	
29.	Percentage of inhabitants covered by organized municipal waste collection scheme	%
30.	Mass of municipal waste collected – total	million Mg
31.	Mass of municipal waste collected in a selective manner	million Mg
32.	Mass of municipal waste collected as mixed municipal waste	million Mg
33.	Mass percentage of municipal waste collected as mixed waste and treated by mechanical and biological methods	%
34.	Mass percentage of municipal waste collected as mixed municipal waste and treated by thermal methods in waste incineration plants	%
35.	Mass percentage of municipal waste collected as mixed municipal waste and treated by thermal methods in waste co-incineration plants	%
36.	Mass percentage of municipal waste collected as mixed municipal waste and deposited without treatment	%
37.	Mass percentage of municipal waste collected in a selective manner and recycled (without organic recycling)	%
38.	Mass percentage of municipal waste collected in a selective manner and recycled by organic processes	%
39.	Mass percentage of municipal waste collected in a selective manner and treated by thermal methods in waste incineration plants (with energy recovery)	%
40.	Mass percentage of municipal waste collected in a selective manner and treated by thermal methods in waste co-incineration plants (with energy recovery)	%
41.	Mass percentage of municipal waste collected in a selective manner and disposed of (beyond deposition)	%
42.	Mass percentage of municipal waste collected in a selective manner and deposited	%
43.	Mass municipal biodegradable waste deposited waste landfills	million Mg
44.	The ratio of mass of municipal biodegradable waste deposited on landfills and mass of this type waste generated in 1995	%
45.	Number of active landfills where municipal wastes are deposited – total	Sets
46.	Number of active landfills where municipal wastes are deposited after their thermal or biological treatment	Sets
47.	Capacity of the landfills where municipal wastes are deposited that remains to fill in with wastes – total	m^3
48.	Capacity of the landfills where municipal wastes treated by thermal or biological methods are deposited that remains to fill in with wastes	m^3
49.	Number of installations for biological and mechanical treatment of mixed municipal wastes	sets
50.	Treatment capacities of installations for biological and mechanical treatment of mixed municipal wastes	million Mg
51.	Number of incineration plants for mixed municipal waste	sets
52.	Treatment capacities of incineration plants for mixed municipal waste	million Mg
	Hazardous wastes	
53.	Mass generated hazardous waste	thousand Mg
54.	Mass percentage of hazardous wastes generated and recycled	%
55.	Mass percentage of hazardous wastes generated and treated by thermal methods	%
56.	Mass percentage of hazardous wastes generated and deposited without treatment	%
57.	Mass in a selective manner collected municipal hazardous waste	thousand Mg

58.	Mass percentage of municipal hazardous waste collected in a selective manner and recycled	%
59.	Mass percentage of municipal hazardous waste collected in a selective manner and treated by thermal methods	%
60.	Mass percentage of in a selective manner collected municipal hazardous waste deposited without treatment	%
61.	Mass of equipment containing PCBs which remains for elimination	thousand Mg
62.	Recovery level of waste oils	%
63.	Recycling of (reclamation) level of waste oils	%
64.	Mass of portable batteries and accumulators placed on the market	thousand Mg
65.	Mass of portable batteries and accumulators collected in a selective manner	thousand Mg
66.	Recycling level of lead-acid batteries and accumulators (as calculated according to Directive[)]	%
67.	Recycling level of nickel-cadmium batteries and accumulators (as calculated according to Directive [1)])	%
68.	Recycling level of other batteries and accumulators (as calculated according to Directive [1)])	%
69	Mass of remaining registered products containing asbestos – to be removed or disposed of	million Mg
70.	Number of remaining registered burials to be eliminated	sets
71.	Number of burials eliminated in a given reporting period	sets
72.	Estimated mass of overdue pesticides contained in remaining registered burials to be eliminated	thousand Mg
73.	Mass of electrical and electronic equipment placed on the market	thousand Mg
74.	Mass of collected waste electrical and electronic equipment – total	thousand Mg
75.	Mass of collected household waste electrical and electronic equipment	thousand Mg
76.	Mass of collected household waste electrical and electronic equipment *per capita*	kg/inhabitant
77.	Recovery level of group 1 and 10 [2)] waste equipment	%
78.	Recycling level of group 1 and 10 [2)] waste equipment	%
79.	Recovery level of group 3 and 4 [2)] waste equipment	%
80.	Recycling level of group 3 and 4 [2)] waste equipment	%
81.	Recovery level of group 2, 5-7 and 9 [2)] waste equipment	%
82.	Recycling level of group 2, 5-7 and 9 [2)] waste equipment	%
83.	Recycling level of waste discharge tubes	%
84.	Recovery level for dismantling stations [3)]	pcs.
85.	Number for vehicle collection points [3)]	pcs.
86.	Mass collected end-of-life vehicles [3)]	thousand Mg
87.	Recovery level waste originated from dismantled end-of-life vehicles [3)]	%
88.	Recycling level of waste originated from dismantled end-of-life vehicles [3)]	%
	Urban waste water sludge	
89.	Mass generated urban waste water sludge	thousand Mg
90.	Mass percentage of generated urban waste water sludge treated by biological methods	%
91.	Mass percentage of generated urban waste water sludge treated by thermal methods	%
92.	Mass percentage of generated urban waste water sludge used directly in agriculture	%
93.	Mass percentage of generated urban waste water sludge used directly for other purposes	%
94.	Mass percentage of generated urban waste water sludge deposited on landfills without treatment	%
	Packaging waste	
95.	Mass of packaging placed on the market together with products	thousand Mg
96.	Mass of glass packaging placed on the market together with products	thousand Mg
97.	Mass of plastic packaging placed on the market together with products	thousand Mg
98.	Mass of paper and cardboard packaging placed on the market together with products	thousand Mg
99.	Mass of steel packaging placed on the market together with products	thousand Mg
100.	Mass of aluminium packaging placed on the market together with products	thousand Mg
101.	Mass of wooden packaging placed on the market together with products	thousand Mg
102.	Recovery level for packaging waste – total	%
103.	Recycling level of packaging waste – total	%
104.	Recycling level of glass packaging waste	%
105.	Recycling level of plastic packaging waste	%
106.	Recycling level of paper and cardboard packaging waste	%
107.	Recycling level of steel packaging waste	%
108.	Recycling level of aluminium packaging waste	%
109.	Recycling level of wooden packaging waste	%

1) – Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (Official Journal ED L 266 of 26.09.2006, pr. 1),
2) – according to Annex 1 to Act of 29 July 2005 on waste electrical and electronic equipment (Official Journal No. 180, Item 1495),
3) – as set out in the Act of 20 January 2005 on recycling end-of-life vehicles (Official Journal No. 25, Item 202 and No. 175, Item 1458).

Table 8-2 General indicators to monitor achievement of the target levels established in the 2010 NWMP

No.	Name of indicator	Unit	Base year or the year determining the current situation	Year when the target has to be achieved			Data source	Measuring frequency
			The value of indicator	The level to be achieved in the target year				
1.	The number of landfills municipal waste		2005	2014			CWS[1)]	Once a year
		sets	764	200				
2.	The share of municipal wastes deposited in their generated total		2004	2014			CWS[1)]	Once a year
		%	95.3	85				
3.	Reduction rate or mass of municipal biodegradable wastes deposited on landfills in relation to those generated in 1995		1995	2010	2013	2020	CWS[1)]	Once a year
		%	-	75	50	35		
		thousand Mg	4380.8	3285.6	2190.4	1533.3		
4.	The share of portable waste batteries and accumulators collected in a selective manner in those placed on the market		2004	2012	2016		CWS[1)]	Once a year
		%	10	25	45			

[1)] Central Waste System

CHAPTER 9. SUMMARY

The 2010 National Waste Management Plan results from review of the first national waste management plan, approved in 2002, and it takes into account the recommendations included in „Report on Implementation of the National Waste Management Plan for the period between 29 October 2002 and 29 October 2004".

Improvements in certain fields of waste management were noted during implementation of the first NWMP and attainment of certain objectives was possible, for instance, in the scope of packaging waste management. Reduction in the mass of waste produced has been noted. The earlier introduced system of granting decisions on waste generation contributed to decoupling of the national economic growth (as expressed in GDP) from the quantities of waste mass generated.
However, many problems still remain to be gradually resolved.
Given the highly disintegrated waste management data collection system (as required under a number of legal acts, and pursued by numerous institutions, via administrative channels and through statistical surveys performed with application of various methodologies), the difficulties are encountered in monitoring of the current status of waste management. Therefore, in some cases, is difficult to determine whether the rated installations' capacities are sufficient.
In spite of numerous legal changes, the difficulties appear also in understanding and adequate application of the provisions in the scope of waste management by both the operators and the public administration authorities.
Despite continuously growing environmental awareness of the general public the old ways of thinking on certain matters still linger (for instance, on allegedly high adverse environmental and human health impacts from thermal methods of waste treatment) that make difficult the location of the relevant new investments. Non-uniform guidelines on selective collection of municipal wastes (often complicated and thus unfavourable and non-eligible for people of the common run) are one of the development curbs affecting selective collection of waste.
Deposition of waste on landfill is still commonly considered the major method to be applied for management of municipal waste. The high percentage of municipal and other types of biodegradable wastes being deposited, or their application on landfills as so called boosters separating subsequent layers of urban waste water sludge, causes that deposition of waste has become a significant source of methane emissions which are one of the most dangerous components of greenhouse gas.
Failure to use wastes of vegetation and animal origin as renewable energy source, particularly for substitution of fossil fuels, slows down the process of achievement of the limits on use renewable energy in Poland.
Unfortunately, many recovery methods, including recycling, rely on the technologies, the environmental quality of which is doubtful and their application is only aimed at issuance of documents confirming that the act of recovery or recycling has taken place.
Also, a trend has been noted towards the highest possible intense spreading of waste on the land surface for, amongst others, the purpose of land macro-levelling, reclamation or fertilization. While in certain instances that could be fully justifiable on ecological grounds, nevertheless in many other cases the aim of such perpetration was to avoid deposition of waste on the sites designed to this purpose (i.e. waste landfills). Those cases caused environmental propagation of pollutants contained in wastes.
Since the 1st of May 2004, being the date when Poland became the Member State of the European Union, certain new alarming phenomena have appeared. About 1.7 million used cars were imported to Poland in that period, while 10-year old or post-accidental vehicles are the prevailing ones which tend to become waste within a short time-period. These vehicles are imported principally by private individuals and this imposes a considerable burden on just only developing management scheme for this type of waste, yet that according to legal regulations being a transposition of the Community law, the recent car-owner has the right do give up such an end-of-life vehicle free of charge. Similar trends have been noted for other market segments being under similar regulations on the Community level, for instance as regards electrical and electronic equipment. Another, separate issue is the introduction in certain EU Member States of a more stringent requirements than those laid down on the Community level in the scope of deposition of municipal waste. That causes seeking by the operators in these countries for the opportunities to export such wastes to other countries where their utilization costs will be lower. Although transitional periods have been granted to Poland in the scope of transboundary shipment of wastes, and apart from merely restrictive policies being pursued in this regard by the Chief Inspector of

Environmental Protection, a tendency has been noted to importing to Poland of waste considered still a product (that refers particularly to attempts being undertaken to obtain classification of these wastes as fuels). In result of that the domestic potential for treatment of domestic wastes is becoming unavailable.

The long-term objective of development of the national waste management plan provides for achievement waste management system conforming to the principle of sustainable development with waste management principles being fully implemented, and in particular the principle of conduct of waste in accordance with waste management hierarchy being pursued, i.e. firstly, to prevent generation of waste and minimise the quantity of waste generated and reduce their hazardous properties, and secondly, reuse the material and energy properties of wastes, and in case when it is impossible for waste to undergo recovery processes – this waste must be disposed of, while its deposition on landfill is generally considered the least desirable method of conduct. Implementation of this objective will make possible achievement of other objectives, such like: reduction of the climate change which results from waste management, to be done through minimisation of greenhouse gas emissions from waste utilisation technologies, or through enhancement of the share of renewables in the national energy balance by means of substituting fossil fuels with combustible waste of the vegetation and animal elements.

In spite of the above and according to the National Environmental Policy, the following major objectives are assumed in the 2010 National Waste Management Plan:

- uphold the tendency to decoupling the national economic growth, as expressed in GDP, from the quantities of waste generated,
- enhance the share of recovery, including in particular energy recovery from wastes, in conformity with environmental requirements,
- reduce the quantity of all wastes subject to deposition on waste landfills,
- provide for closure, by the end of 2009, of all domestic landfills which do not conform to the legal requirements,
- eliminate illegal waste deposition practices,
- develop comprehensive database on products being placed on the market, and on waste management in Poland,

whereas the amendments to be introduced in legal provisions will be restricted to the farthest minimum possible which results from necessity to the transpose the Community law and the need to introduce changes as indicated in this 2010 NWMP. Significant emphasis will be put on enforcement of legal provisions concerning waste management, also in the context of the transboundary waste shipments.
Given the fact that directions for change in environmental law are currently determined principally on the level of the European Union, Poland's active participation in activities as carried out on the European Union forum, in particular, in the work on new legal acts, has become one of the principal objectives in the field of waste management. Poland, as the member of the international community, yet before its accession to the European Union signed the Stockholm Convention on persistent organic pollutants. Given the fact that the European Union already ratified this Convention, the target for Poland is to ratify this Convention by the end of 2007, at the latest.

No essential change is anticipated in the management schemes for particular types of waste, with regard to overall development of waste management policy. Nevertheless, some corrections could be possible in course of establishment and development of particular schemes.
The following activities will be undertaken in the field of prevention and minimisation of waste generation:

- continuation of research on new technologies contributing to avoidance and minimisation of waste generation and reduction of its adverse environmental impact,
- supporting implementation of low-waste production technologies and those which provide for utilisation of all possible components of the raw materials applied,
- promotion of implementation of environmental management system,
- intensification of environmental education promoting minimisation of waste and carrying out effective information and education campaign in this scope,
- implementation of „The 2007–2009 National Action Plan In the Scope of Green Public Procurements" including its versions for the subsequent years,

- application of economic instruments, including gradual increase of the charge rates for deposition of wastes, in particular mixed municipal wastes, biodegradable wastes and those subject to recovery processes, including recycling.

The major directions for activities in the field of waste management are following:

- intensification of environmental education promoting suitable conduct of waste and carrying out effective information and education campaign in this scope,
- development and monitoring of real indicators of waste generation and morphology that are aimed at diagnosing the needs in the field of waste management,
- supporting economically and environmentally effective technologies of waste recovery and disposal, including technologies which provide for recovery of energy contained in waste, through its thermal and biochemical treatment processes,
- verification of the locations of currently existing waste landfills and elimination of environmental arduousness resulting from their operation, including closure and reclamation of such landfills which do not meet legal requirements,
- strengthening of control of the entities active in the field waste collection, transport, recovery and disposal,
- introduction of financial instruments which provide for implementation of waste management tasks as entrusted to the territorial self-governmental entities, and which discipline these entities in performance of their statutory responsibilities,
- elimination of inadequate landfill operation and reclamation practices.

Following the problems identified above (see Chapter 2) and the prognosis of changes in the scope of waste management (Chapter 3) and the objectives and targets determined thereupon (Chapter 4) and directions for activities (Chapter 5) the relevant tasks have been set out for implementation under the 2010 NWMPW (Chapter 6). Conclusions derived from environmental impact prognosis, as presented in Chapter 7, indicate legitimacy of the solutions adopted. Powerful strengthening of human resources and technical capabilities of personnel dealing with waste management issues on all levels of governmental administration is required in order to provide for adequate coordinate the implementation of the 2010 NWMP. That regards principally the Ministry of the Environment, the Chief Inspectorate for Environmental Protection and its Voivodship Inspectorates, and the Marshall Offices in particular Voivodships.

Implementation of particular tasks, as set out in Chapter 7 of the 2010 NWMP, will undergo assessment whereas the indicators compiled in Table 8-1 below will serve for monitoring of achievement of the targets determined Chapter 4 of this 2010 NWMP. Reports on implementation of the Voivodship, County and Municipal waste management plans and also information collected from particular Ministries will form the basis for that assessment. During initial phase, source data will be acquired from existing databases, as collected in the framework of the administrative system and from statistical survey. Further, once the comprehensive database on products place on the market and on waste management in Poland, this database will become the principal information source. The value of certain indicator will be determined upon data obtained from reports on implementation of the Voivodship, County and Municipal waste management plans. The assessment will be carried out in 2009 and 2011, as for 31 December 2008 and 31 December 2010, respectively, with certain indicators being determined on the annual basis.

ENCLOSURE TO „THE 2010NATIONAL WASTE MANAGEMENT PLAN"

Inventory of legal landfills for waste other than hazardous and inert waste for deposition of municipal waste in Poland, as of 31 December 2005

(prepared upon data provided by the Marshall Offices, in coordination with the Voivodship Offices and the Voivodship Inspectorates for Environmental Protection**)**

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
DOLNOŚLĄSKIE VOIVODSHIP			
1.	1.	Municipal waste landfill, in Gręboszyce	Gręboszyce, 56 – 400 Oleśnica
2.	2.	Municipal waste landfill, in Grabowno Wielkie	Grabowno Wielkie, 56 – 416 Twardogóra
3.	3.	Municipal waste landfill, in Strzegomiany	Strzegomiany, 55 – 010 Sobótka
4.	4.	Municipal waste landfill, in Sośnica	Sośnica, 55 – 080 Kąty Wrocławskie
5.	5.	Municipal waste landfill, in Bielawa	Bielawa, Municipality Długołęka 55 – 095 Mirków
6.	6.	Landfill of the Municipal Waste Utilisation and Recycling Plant, in Sulęcin	Sulęcin, 55-010 Św. Katarzyna
7.	7.	Municipal waste landfill, in Wojczyce	Wojczyce 55 – 300 Środa Śląska
8.	8.	Municipal waste landfill, in Rusko	Rusko, 55 – 320 Malczyce
9.	9.	Landfill of the Waste Management Plant, Ltd., in Gać	Gać 90, 55 – 200 Oława
10.	10.	Municipal waste landfill, in Wiązów	Stary Wiązów, 57 – 120 Wiązów
11.	11.	Municipal waste landfill, in Wąwolnica	Wąwolnica, 57 – 100 Strzelin
12.	12.	Municipal waste landfill, in Podgaj	Podgaj, Municipality Kondratowice 57 – 150 Prusy
13.	13.	Municipal waste landfill, in Guzowice	Guzowice, 56 – 330 Cieszków
14.	14.	Municipal waste landfill, in Wołów	Wołów, Rawicka Str., 56 – 100 Wołów
15.	15.	Plant for Utilisation, Recycling, Treatment and Disposal of Municipal and Industrial Waste, Landfill in Rudna Wielka	Rudna Wielka 56 – 210 Wąsosz
16.	16.	Municipal waste landfill, in Legnica	Rzeszotarska/Dobrzejowska Str., 59-220 Legnica
17.	17.	Municipal waste landfill, in Biechów	Biechów n/Głogów 67 – 200 Głogów
18.	18.	Municipal waste landfill, in Wierzchosławice	Wierzchosławice, 59 – 420 Bolków
19.	19.	Municipal waste landfill, in Jawor	Słowackiego, Str., 59-400 Jawor
20.	20.	Municipal waste landfill, in Lubin	1, Zielona Str., 59 – 300 Lubin
21.	21.	Municipal waste landfill, in Trzebcz	Trzebcz 59 – 100 Polkowice
22.	22.	Municipal waste landfill, in Przemków	59 – 170 Przemków
23.	23.	The Pielgrzymka Municipal Utility	59 – 524 Pielgrzymka
24.	24.	Municipal waste landfill, in Wojcieszów	59 – 550 Wojcieszów
25.	25.	Municipal waste landfill Gilów-Byszów	58 – 200 Dzierżoniów
26.	26.	Municipal waste landfill, in Przystronie	Przystronie, 58 – 210 Łagiewniki
27.	27.	Municipal waste landfill, in Wałbrzych	58 – 300 Wałbrzych, Beethovena Str.,

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
28.	28.	Municipal waste landfill, in Czarny Bór, No. 49	58 – 379 Czarny Bór
29.	29.	Municipal waste landfill, in Mieroszów	58 – 350 Mieroszów
30.	30.	Waste landfill for ballast waste at municipal waste composting plant, in Lądek Zdrój	57 – 540 Lądek Zdrój
31.	31.	Municipal waste landfill, in Międzylesie	57 – 530 Międzylesie
32.	32.	Landfill for municipal and industrial wastes, in Stronie Śląskie	57 – 550 Stronie Śląskie
33.	33.	Municipal waste landfill, in Ścinawka Dolna	57 – 420 Radków
34.	34.	Municipal waste landfill, in Stary Jaworów	Stary Jaworów, 58 – 140 Jaworzyna Śląska
35.	35.	Municipal waste landfill, in Jaroszów (The Halina Mine Pit)	58 – 120 Jaroszów
36.	36.	Municipal waste landfill, in Żarów	58 – 130 Żarów
37.	37.	Municipal waste landfill, in Sulisławice	Zawiszów 5, 58 – 100 Świdnica
38.	38.	Municipal waste landfill, in Bogatynia	59 – 920 Bogatynia
39.	39.	Plant No. 2, for municipal waste landfill and stabilisation of waste water sludge, in Jędrzychowice	Jędrzychowice 59-900 Zgorzelec
40.	40.	Municipal waste landfill, in Pieńsk	Stojanówek 59-930 Pieńsk
41.	41.	Municipal Waste Disposal Plant for the City and Municipality of Bolesławiec, in Trzebień	Trzebień, 24, Spacerowa Str., 59-700 Bolesławiec
42.	42.	Landfill for municipal and industrial wastes, in Świętoszów	Świętoszów 59-724 Osiecznica
43.	43.	Municipal waste landfill, in Nowogrodziec	59-730 Nowogrodziec
44.	44.	Waste landfill, in Tomaszów Bolesławiecki	59 – 708 Tomaszów Bolesławiecki
45.	45.	Waste landfill, in Raciborowice Dolne	59 – 720 Raciborowice Dolne
46.	46.	Waste landfill, in Warta Bolesławiecka	59 – 722 Warta Bolesławiecka
47.	47.	Centre for Utilisation of Wastes from Municipalities of the Łużyce Region, in Księginki	1, Bazaltowa Str., Księginki, 59 – 800 Lubań
48.	48.	Municipal waste landfill, in Olszyna	59 – 830 Olszyna
49.	49.	Municipal waste landfill, in Ciechanowice	58 – 410 Marciszów
50.	50.	Municipal waste landfill, in Lubawka	Zielona Str., 58 – 420 Lubawka
51.	51.	Municipal waste landfill, in Płóczki Dolne	Płóczki Dolne 59-600 Lwówek Śl.
52.	52	Municipal waste landfill, in Wieża	Wieża 59-620 Gryfów
53.	53.	Municipal waste landfill, in Karłowiec	Karłowiec 59-630 Mirsk
54.	54.	Municipal waste landfill, in Lubomierz	59-623 Lubomierz
55.	55.	Municipal waste landfill, in Siedlęcin	Siedlęcin 58-521 Jeżów Sudecki
56.	56.	Municipal waste landfill, in Ścięgny-Kostrzyca	Ścięgny-Kostrzyca 58-533 Mysłakowice
57.	57	Municipal waste landfill, in Mienice	Mienice, 55 – 111 Wisznia Mała
58.	58	Municipal waste landfill, in Stróża	Stróża, 55 – 081 Mietków
59.	59	Municipal waste landfill, in Wierzchowice	Wierzchowice, 56 – 320 Krośnice
60.	60	Municipal waste landfill, in Kudowa Zdrój - Brzozowie	57 – 350 Kudowa Zdrój
61.	61	Municipal waste landfill, in Polanica Zdrój	57 – 320 Polanica Zdrój
62.	62	Landfill for municipal and industrial wastes of the KGHM Polish Copper S.A., for Coppert Smelter in Cedynia and Municipality of Rudna - Orsk	59 – 305 Rudna - Orsk
KUJAWSKO-POMORSKIE VOIVODSHIP			
63.	1.	Inter-Municipal waste landfill, in Służewo	87, Polna Str., 87-710 Służewo
64.	2.	Municipal waste landfill, in Trzemiętówek	Trzemiętówek, 86-014 Sicienko
65.	3.	Municipal waste landfill, in Stanomin	Stanomin,

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
			88-133 Dąbrowa Biskupia
66.	4.	Municipal waste landfill, in Karczyn	Karczyn, 88-100 Inowrocław
67.	5.	Waste landfill for the City and Municipality of Dobrzyń nad Wisłą, in Płomiany	Płomiany, 87-610 Dobrzyń nad Wisłą
68.	6.	Municipal waste landfill, in Grodzeń	Grodzeń, 87-620 Kikół
69.	7.	Municipal waste landfill, in Lipno	47, Wyszyńskiego Str., 87-600 Lipno
70.	8.	Municipal waste landfill, in Skępe	Warszawska Str., 87-630 Skępe
71.	9.	Municipal waste landfill, in Teodorowo	Teodorowo, 87-603 Wielgie
72.	10.	Municipal waste landfill, in Wandynowo	Wandynowo, 88-231 Bytoń
73.	11.	Municipal waste landfill, in Byczyna	Byczyna, 88-210 Dobre
74.	12.	Municipal waste landfill, in Borucin	Borucin, 88-220 Osięciny
75.	13.	Municipal waste landfill, in Jerzyce	Jerzyce, 88-230 Piotrków Kujawski
76.	14.	Municipal waste landfill, in Broniewek	Broniewek, 88-200 Radziejów
77.	15.	Municipal waste landfill, in Puszcza Miejska (The "Rypin" Regional Plant for Utilisation of Municipal Wastes)	Puszcza Miejska, 87-500 Rypin
78.	16.	Waste landfill, in Szczawno	Szczawno, 87-510 Skrwilno
79.	17.	Municipal waste landfill, in Radziki Duże	Radziki Duże, 87-337 Wąpielsk
80.	18.	Waste landfill, in Białe Błota	Białe Błota, 86-131 Świecie
81.	19.	Waste landfill, in Sulnówek	Sulnówek, 86-100 Świecie
82.	20.	Municipal waste landfill, in Toruń	37, Kociewska Str., 87-100 Toruń
83.	21.	Municipal waste landfill, in Kurowo Kolonia	Kurowo Kolonia, 87-821 Baruchowo
84.	22.	Municipal waste landfill, in Machnacz	Machnacz, 87-880 Brześć Kujawski
85.	23.	Municipal waste landfill, in Stary Brześć	Stary Brześć, 87-880 Brześć Kujawski
86.	24.	Municipal waste landfill, in Niemojewo	Niemojewo, 87-850 Choceń
87.	25.	Municipal waste landfill, in Mielno Lubieniec	Mielno Lubieniec, 87-860 Chodecz
88.	26.	Municipal waste landfill, in Wilczeniec Fabiański	Wilczeniec Fabiański, 87-811 Fabianki
89.	27.	Municipal waste landfill, in Naczachowo	Naczachowo, 87-865 Izbica Kujawska
90.	28.	Municipal waste landfill, in Przydatki Gołaszewskie	Przydatki Gołaszewskie, 87-820 Kowal
91.	29.	Waste landfill, in Kucerz	Kucerz, 87-732 Lubanie
92.	30.	The "Narty" Waste landfill, in Narty	Narty, 87-840 Lubień Kujawski
93.	31.	Municipal waste landfill, in Agnieszkowo	Agnieszkowo, 87-890 Lubraniec
94.	32.	Municipal waste landfill, in Białkowo	Białkowo 51, 87-400 Golub-Dobrzyń
95.	33.	Municipal waste landfill, in Skotniki	Skotniki, 88-150 Kruszwica
96.	34.	Municipal waste landfill, in Brodnica	Str., Ustronie, 87-300 Brodnica
97.	35.	Waste Disposal Plant, in Niedźwiedź	Niedźwiedź 1, 87-207 Dębowa Łąka

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
98.	36.	Inter-Municipal waste landfill, in Bladowo	Bladowo, 89-500 Tuchola
99.	37.	Municipal waste landfill, in Rojewo - Jaszczółtowo	Jaszczółtowo, 88-111 Rojewo
VOIVODSHIP LUBELSKIE			
100.	1	Municipal waste landfill, in Janów Podlaski	21-505 Janów Podlaski
101.	2	Municipal waste landfill, in Międzyrzec Podlaski	Zahajkowska Str., 21-560 Międzyrzec Podlaski
102.	3	Municipal waste landfill, in Komarno	21-543 Komarno
103.	4	Municipal waste landfill, in Kodeń I	20, 1-go Maja Str., 21-509 Kodeń
104.	5	Municipal waste landfill, in Piszczac	21-530 Piszczac
105.	6	Municipal waste landfill, in Lebiedzew	21-550 Terespol
106.	7	Municipal waste landfill, in Wisznice	21-581 Wisznice
107.	8	Municipal waste landfill, in Wola Obszańska	23-413 Obsza
108.	9	Municipal waste landfill, in Korczów	23-400 Biłgoraj
109.	10	Municipal waste landfill, in Radzięcin	23-440 Frampol
110.	11	Municipal waste landfill, in Józefów	23-460 Józefów
111.	12	Municipal waste landfill, in Króle	23-425 Księżpol
112.	13	Municipal waste landfill, in Biszcza II	23-425 Biszcza
113.	14	Municipal waste landfill, in Potok Górny	22-435 Potok Górny
114.	15	Municipal waste landfill, in Turobin-Żabno	23-465 Turobin
115.	16	Municipal waste landfill, in Srebrzyszcze	22-100 Chełm
116.	17	Municipal waste landfill, in Świerże	22-175 Dorohusk
117.	18	Municipal waste landfill, in Strachosław	22-113 Kamień
118.	19	Municipal waste landfill, in Rudka	22-110 Ruda Huta
119.	20	Municipal waste landfill, in Malinówka	22-107 Sawin
120.	21	Municipal waste landfill, in Władysławów	22-150 Wierzbica 5
121.	22	Municipal waste landfill, in Wojsławice	22-120 Wojsławice
122.	23	Municipal waste landfill, in Żmudź	22-114 Żmudź
123.	24	Municipal waste landfill, in Podsośnina	23-412 Łukowa
124.	25	Municipal waste landfill, in Hulcze	22-540 Dołhobyczów
125.	26	Municipal waste landfill, in Kopyłów	22-523 Horodło
126.	27	Municipal waste landfill, in Trzeszczany	22-554 Trzeszczany,
127.	28	Municipal waste landfill, in Uchanie	22-510 Uchanie
128.	29	Municipal waste landfill, in Batorz I	23-320 Batorz
129.	30	Municipal waste landfill, in Chrzanów III	23-305 Chrzanów
130.	31	Municipal waste landfill, in Godziszów	23-302 Godziszów
131.	32	Municipal waste landfill, in Potok Wielki	23-313 Potok Wielki
132.	33	Municipal waste landfill, in Suchodoły	22-355 Fajsławice
133.	34	Municipal waste landfill, in Łasków	22-530 Mircze
134.	35	Municipal waste landfill, in Wincentów	22-302 Wincentów
135.	36	Municipal waste landfill, in Zagroda	22-304 Siennica Różana
136.	37	Municipal waste landfill, in Wola Żółkiewska	22-335 Żółkiewka
137.	38	Municipal waste landfill, in Annopol	27-635 Annopol
138.	39	Municipal waste landfill, in Księżmierz Gościeradowska	23-210 Kraśnik
139.	40	Municipal waste landfill, in Polichna IV	23-225 Szastarka
140.	41	Municipal waste landfill, in Rzeczyca Ziemiańska	23-230 Trzydnik Duży
141.	42	Municipal waste landfill, in Nowodwór	21-100 Lubartów
142.	43	Municipal waste landfill, in Sosnówka	21-143 Abramów
143.	44	Municipal waste landfill, in Kamionka	24-132 Kamionka
144.	45	Municipal waste landfill, in Kock II	21-150 Kock
145.	46	Municipal waste landfill, in Rokitno	21-100 Lubartów
146.	47	Municipal waste landfill, in Michów	21-140 Michów
147.	48	Municipal waste landfill, in kolNiedźwiada	21-104 Niedźwiada
148.	49	Municipal waste landfill, in Luszawa	21-102 Ostrówek
149.	50	Municipal waste landfill, in Bełżyce	24-200 Bełżyce
150.	51	Municipal waste landfill, in Zdrapy	23-110 Bychawa
151.	52	Municipal waste landfill, in Tuszów	23-114 Jabłonna
152.	53	Municipal waste landfill, in Iżyce	23-107 Strzyżewice
153.	54	Municipal waste landfill, in Wysokie	23-145 Wysokie
154.	55	Municipal waste landfill, in Zakrzew	23-155 Zakrzew

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
155.	56	Municipal waste landfill, in Dratów	21-075 Ludwin
156.	57	Municipal waste landfill, in Stara Wieś	21-010 Łęczna
157.	58	Municipal waste landfill, in Stoczek Łukowski	21-450 Stoczek Łukowski
158.	59	Municipal waste landfill, in Adamów	21-412 Adamów
159.	60	Municipal waste landfill, in Krzywda	21-470 Krzywda
160.	61	Municipal waste landfill, in Wola Myslawska	21-426 Wola Mysławska
161.	62	Municipal waste landfill, in Łuków	21-400 Łuków
162.	63	Municipal waste landfill, in Ożarów II	24-300 Opole Lub.
163.	64	Municipal waste landfill, in Rogów	24-313 Wilków
164.	65	Municipal waste landfill, in Poniatowa Wieś	24-320 Poniatowa
165.	66	Municipal waste landfill, in Królewski Dwór	21-200 Parczew
166.	67	Municipal waste landfill, in Hołowno	21-222 Podedwórze
167.	68	Municipal waste landfill, in Cichostów	21-210 Milanów
168.	69	Municipal waste landfill, in Sosnowica	21-230 Sosnowica
169.	70	Municipal waste landfill, in Puławy	96, Dęblińska Str., 24-110 Puławy
170.	71	Municipal waste landfill, in Baranów	24-105 Puławy
171.	72	Municipal waste landfill, in Gołąb	24-111 Puławy
172.	73	Municipal waste landfill, in Dąbrówka	24-120 Kazimierz Dolny
173.	74	Municipal waste landfill, in Markuszów	24-173 Markuszów
174.	75	Municipal waste landfill, in Szumów	24-170 Kurów
175.	76	Municipal waste landfill, in Adamki	21-300 Radzyń Podlaski
176.	77	Municipal waste landfill, in Derewiczna	21-311 Komarówka Podlaska
177.	78	Municipal waste landfill, in Rozwadów	21-307 Ulan Majorat
178.	79	Municipal waste landfill, in Wohyń	21-310 Wohyń
179.	80	Municipal waste landfill, in Przestrzeń	08-504 Nowodwór
180.	81	Municipal waste landfill, in Ryki,	Janiszewska Str., 08-504 Ryki
181.	82	Municipal waste landfill, in Brzeźce	08-540 Stężyca
182.	83	Municipal waste landfill, in Sobieszyn	08-504 Ułęż
183.	84	Municipal waste landfill, in Dorohucza	21-044 Trawniki
184.	85	Municipal waste landfill, in Wereszczyca	22-664 Jarczów
185.	86	Municipal waste landfill, in Zimno	22-650 Łaszczów
186.	87	Municipal waste landfill, in Grodysławice	22-640 Rachanie
187.	88	Municipal waste landfill, in Susiec	22-672 Susiec
188.	89	Municipal waste landfill, in Tarnawatka	22-604 Tarnawatka
189.	90	Municipal waste landfill, in Telatyn	22-652 Telatyn
190.	91	Municipal waste landfill, in Tomaszów Lubelski	22-600 Tomaszów Lub.
191.	92	Municipal waste landfill, in Dyniska	22-678 Ulhówek
192.	93	Municipal waste landfill, in Włodawa	22-200 Włodawa
193.	94	Municipal waste landfill, in Hanna	22-220 Hanna
194.	95	Municipal waste landfill, in Dubeczno	22-235 Hańsk
195.	96	Municipal waste landfill, in Hańsk II	22-235 Hańsk
196.	97	Municipal waste landfill, in Stary Brus	22-244 Stary Brus
197.	98	Municipal waste landfill, in Bytyń	22-230 Wola Uhruska
198.	99	Municipal waste landfill, in Andrzejów	22-234 Urszulin
199.	100	Municipal waste landfill, in Wyryki -Połód	22-205 Wyryki
200.	101	Municipal waste landfill, in Grabowiec	22-425 Grabowiec
201.	102	Municipal waste landfill, in Grabnik	22-440 Krasnobród
202.	103	Municipal waste landfill, in Zaboreczno	22-460 Krasnobród
203.	104	Municipal waste landfill, in Dębowiec	22-420 Skierbieszów
204.	105	Municipal waste landfill, in Strzelce	Strzelce, 22-135 Białopole
205.	106	Municipal waste landfill, in Pawłów	Pawłów, 22-169 Rejowiec Fabryczny
206.	107	Municipal waste landfill, in Hrubieszów	Gródecka Str., 22-500 Hrubieszów
207.	108	Municipal waste landfill, in Dubienka	22-145 Dubienka
208.	109	Municipal waste landfill, in Błonie	22-460 Szczebrzeszyn
LUBUSKIE VOIVODSHIP			
209.	1	The "USKOM" Municipal Service Utility, Waste landfill, in Stypułów	7, Moniuszki Str., 67-120 Kożuchów, Municipality of Kożuchów, plot No.

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
			15
210.	2	Waste landfill in Jasieniec, The "Mrówka" Environmental Enterprise	Trzciel
211.	3	Municipal Management Plant, in Bledzew, Waste landfill	Bledzew
212.	4	The "Słonów" Waste landfill, in Dobiegniew, The "KOMUNALNI" Municipal Service Utility	Dobiegniew
213.	5	Inter-Municipal waste landfill, in Jeziory	Jeziory, Municipal Office, in Świebodzin
214.	6	Municipal waste landfill of the „Wschowa", Municipal Company, in Tylewice	Tylewice, 67-400 Wschowa
215.	7	Municipal waste landfill, in Kleśno	Kleśno. Plot No. 66, 472/3
216.	8	Municipal waste landfill, in Kiełcz	Kiełcz, Municipality of Nowa Sól
217.	9	Municipal waste landfill of the Municipal and Housing Management Plant, in Lubsko	Złota Str.
218.	10	Przedsiębiorstwo Komunalne "PEKOM" S.A., 9-11, Bohaterów Getta Str., in Żary	Żurawia Str.
219.	11	Municipal waste landfill, in Gozdnica	Gozdnica, Kościuszki Str.
220.	12	Municipal waste landfill, in Kunowice, Municipal Service Utility Ltd., in Słubice	Kunowice, The Słubice County
221.	13	Waste landfill, in Czyżówek	Municipal and Housing Management Plant, 7, Żagańska Str., Iłowa
222.	14	Municipal waste landfill, in Dryżyno, Municipal and Housing Management Plant, in Szlichtyngowa	Szlichtyngowa
223.	15	The "Racula" Waste landfill	73, Wrocławska Str., Zielona Góra
224.	16	Municipal waste landfill, in Kargowa	The Wojnowa and Jaromierz Stary District
225.	17	Waste landfill, in Łochowice	Mieczysław Zarzycki, 14/6, Piastów Str. 66-600 Krosno Odrzańskie
226.	18	Micro-Rregional Municipal Landfill	The Klępina District, Municipality of Nowogród Bobrzański
227.	19	Municipal waste landfill, in Strzelce Krajeńskie	66-500 Strzelce Krajeńskie, Al. Piastów Str.
228.	20	The „RE-KOM" Waste Management Plant Ltd., in Kartowice	Kartowice 37, 67-300 Szprotawa, The Żagań County
229.	21	Municipal waste landfill, in Krześniczka	66-461 Krześniczka, Municipality of Witnica, Rural Area, The Gorzów County
230.	22	Municipal waste landfill, in Lutynka	Lutynka, Municipality of Wymiarki, The Żagań County
231.	23	Municipal and Housing Management Plant, in` Trzebiel, Municipal waste landfill, in Buczyny	Buczyny, Municipality of Trzebiel
232.	24	Municipal waste landfill, in Łęknica	Wiejska Str., 68-208 Łęknica
233.	25	Waste landfill, in Bukowiec, CZG-12 Długoszyn	Bukowiec Municipality Międzyrzecz
234.	26	Waste landfill, in Kolsko	Municipality of Kolsko, The Nowa Sól County
235.	27	Waste landfill, in Drzeńsk Mały	Municipality of Gubin, The Krosno County
236.	28	Waste landfill, in Górki Noteckie	Zwierzyn, The Strzelce-Drezdenko County
237.	29	Municipal waste landfill, in Dziećmiarowice	Szprotawa
ŁÓDZKIE VOIVODSHIP			
238.	1	Municipal solid waste landfill, in Rudzisko	Rudzisko 97-420 Szczerców
239.	2	Waste landfill, in Wola Kruszyńska	Wola Kruszyńska 97-400 Bełchatów

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
240.	3	Waste landfill, in Rogowiec	Rogowiec 97-410 Kleszczów
241.	4	Municipal waste landfill, in Brzeziny	11,Łódzka Str., 95-060 Brzeziny
242.	5	Landfill for waste other than hazardous and inert wastes	Krzyżanówek 99-314 Krzyżanów
243.	6	Landfill for waste other than hazardous and inert wastes, in Franki	Franki 99-340.Krośniewice
244.	7	Municipal waste landfill, in Brodnia Górna	Brodnia Górna 98-113 Buczek
245.	8	Landfill for waste other than hazardous and inert wastes, in Borek	Borek 99-100 Łęczyca
246.	9	Waste landfill, in Sławęcin	Sławęcin 99-150 Grabów
247.	10	Municipal waste landfill, in Czatolin	Czatolin 99-420 Łyszkowice
248.	11	Waste landfill for Łowicza, in Jastrzębia	Jastrzębia 99-400 Łowicz
249.	12	Waste landfill, in Łaskowice	Łaskowicka Str., 93-460 Łódź
250.	13	Waste landfill, in Rzgów	115, Ogrodowa Str., 95-030 Rzgów
251.	14	Municipal waste landfill, in Kruszowo	Wolborska Str., 97-315 Tuszyn
252.	15	Municipal waste landfill, in Koluszki	Reymonta Str., 95-040 Koluszki
253.	16	Municipal waste landfill, in Sławno Kolonia	Sławno Kolonia 26-332 Sławno
254.	17	Municipal waste landfill, in Różanna Karwice	Różanna Karwice 26-300 Opoczno
255.	18	Landfill for waste other than hazardous and inert wastes, in Domaszno	Domaszno 26-430 Drzewica
256.	19	Landfill for waste other than hazardous and inert wastes, in Dylów "A"	Dylów A 98-330 Pajęczno
257.	20	Landfill for waste other than hazardous and inert wastes in Działoszyn	Cmentarna Str., 98-355 Działoszyn
258.	21	Waste landfill, in Studziennica	Studziennica 98-358 Kiełczygłów
259.	22	Municipal waste landfill, in Łochyńsko	Łochyńsko 97-340 Rozprza
260.	23	Waste landfill, in Mąkolice	Mąkolice 97-371 Wola Krzysztoporska
261.	24	Landfill for waste other than hazardous and inert wastes, in Sulejów	Wschodnia Str., 97-330 Sulejów
262.	25	Waste landfill, in Krzemieniewice	Krzemieniewice 97-350 Gorzkowice
263.	26	Municipal waste landfill for the City of Piotrków Trybunalski, in Doły Brzeskie	Doły Brzeskie 97-306 Grabica
264.	27	Waste landfill, in Młynary	Młynary 97-320 Wolbórz
265.	28	Municipal waste landfill, in Moszcze Moszczenica	Cegielniana Str., 97-310 Moszczenica
266.	29	Municipal waste landfill, in Czarnocin	Reymonta Str., 97-318 Czarnocin
267.	30	Municipal waste landfill, in Stary Gostków	Stary Gostków 99-220 Wartkowice
268.	31	Municipal waste landfill, in Poddębice	95, Łódzka Str., 99-200 Poddębice
269.	32	Municipal waste landfill, in Zygry	Zygry 99-232 Zadzim
270.	33	Municipal waste landfill, in Uniejów	Dąbska Str., 99-210 Uniejów
271.	34	The "Złota Góra" waste landfill	Pławno 97-540 Gidle
272.	35	The AMEST Ltd. , in Kamieńsk	50, Wieluńska Str., 97-360 Kamieńsk

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
273.	36	Landfill for waste other than hazardous and inert wastes, in Jadwinówka n/Radomsko	Jadwinówka 97-500 Radomsko
274.	37	Municipal waste landfill, in Strzelce Małe	Strzelce Małe 97-515 Masłowice
275.	38	Waste landfill, in Pukinin	Pukinin 96-200 Rawa Mazowiecka
276.	39	Solid waste landfill, in Rokszyce Nowe	Rokszyce Nowe, 96-230 Biała Rawska
277.	40	Municipal waste landfill, in Bartochów	Bartochów 98-290 Warta
278.	41	Landfill for waste other than hazardous and inert wastes, in Julków	Julków 96-100 Skierniewice
279.	42	Municipal waste landfill, in Sokołówka	Sokołówka 97-146 Żelechlinek
280.	43	Municipal waste landfill, in Będków	97-319 Będków
281.	44	Landfill for waste other than hazardous and inert wastes, in Brzustów	Brzustów 97-215 Inowłódz
282.	45	Solid waste landfill, in Roszkowa Wola	Roszkowa Wola 97-220 Rzeczyca
283.	46	Waste landfill, in Ruda	Ruda, Leśna Str., 998-300 Wieluń
284.	47	Municipal waste landfill, in Strobin	Strobin 1 98-313 Konopnica
285.	48	Municipal waste landfill, in Kraszkowice	Kraszkowice 98-324 Wierzchlas
286.	49	Solid waste landfill, in Mokrsko	98-345 Mokrsko
287.	50	Inter-municipal waste landfill, in Mareże	Mareże 98-346 Skomlin
288.	51	Municipal waste landfill, in Łubnice	98-432 Łubnice
289.	52	Unsorted solid waste landfill, in Krzyż	Krzyż 98-410 Czastary
290.	53	Municipal waste landfill, in Kluski	Kluski 98-360 Lututów
291.	54	Municipal waste landfill, in Teklinów	Teklinów 98-400 Wieruszów
292.	55	Waste landfill, in Mostki	Mostki 25 98-220 Zduńska Wola
293.	56	Waste landfill, in Modlna	Modlna 95-035 Ozorków
294.	57	Landfill for waste other than hazardous and inert wastes, in Piaski	Piaski 97-410 Kleszczów
295.	58	Municipal waste landfill, in Żychlin	38, Graniczna Str., 99-320 Żychlin
296.	59	Municipal waste landfill Odopadów, in Kręczynki	Kręczynki 99-235 Pęczniew
297.	60	Waste landfill, in Lubochnia Górki	Lubochnia Górki 68/74, 97-217 Lubochnia
MAŁOPOLSKIE VOIVODSHIP			
298.	1	Municipal waste landfill, in Oświęcim	Oświęcim, 36, Nadwiślańska Str.
299.	2	Municipal waste landfill, in Kęty	Kęty, Kęckie Góry Północne
300.	3	The Zoniówka Municipal Waste Disposal Plant	Zakopane, 25, Gawlaki Str.
301.	4	Municipal waste landfill, in Andrychów	Andrychów, Biała Droga Str.
302.	5	Municipal waste landfill, in Chocznia	Chocznia, 304, Kościuszki Str.
303.	6	Regional Sorting Plant and Municipal waste landfill, in Sucha Beskidzka	Sucha Beskidzka, 4a, Wadowicka Str.
304.	7	The Barycz Municipal waste landfill	Kraków, 40, Krzemieniecka Str.
305.	8	Municipal waste landfill, in Żębocin	Żębocin
306.	9	Municipal waste landfill, in Niepołomice	Niepołomice,

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
			1, Wodna Str.
307.	10	Municipal waste landfill, in Szczawnica-Jaworki	Jaworki
308.	11	Municipal waste landfill, in Myślenice-Borzęta	Myślenice-Borzęta
309.	12	Municipal waste landfill, in Sułkowice	Sułkowice, Tysiąclecia Str.
310.	13	Municipal waste landfill, in Miechów	Miechów, Doły Komorowskie Str.
311.	14	Municipal waste landfill, in Kulerzów	Kulerzów
312.	15	Municipal waste landfill, in Polanowice	Polanowice
313.	16	Municipal waste landfill, in Trzebinia	Trzebinia, Piłsudskiego Str.
314.	17	Municipal waste landfill, in Trzebinia	Trzebinia, 75, Głogowa Str.
315.	18	Municipal waste landfill, in Gołaczewy	Gołaczewy-Piaski
316.	19	Municipal waste landfill, in Brzeszcze	48, Graniczna Str.
317.	20	Municipal waste landfill, in Ujków Stary	1, Osadowa Str.
318.	21	Municipal waste landfill, in Krynica Zdrój	Krynica Zdrój, Uroczysko-Głębokie
319.	22	Municipal waste landfill, in Biała Niżna-Nowe	Biała Niżna - Nowe
320.	23	Municipal waste landfill, in Słupnice	Słopnice
321.	24	Municipal waste landfill, in Piaski - Stary Sącz	Piaski - Stary Sącz
322.	25	Municipal waste landfill, in Nowy Sącz-Zabełcze	Nowy Sącz-Zabełcze
323.	26	Municipal waste landfill, in Podegrodzie-Osowo	Podegrodzie - Osowo
324.	27	Municipal waste landfill, in Muszyna	Muszyna
325.	28	Municipal waste landfill, in Świdnik	Świdnik
326.	29	Municipal waste landfill, in Tarnów - Krzyż	33-100 Tarnów, Cmentarna Str.
327.	30	Waste landfill, in Borek	Borek, 32-765 Rzezawa
328.	31	Waste landfill, in Nowy Wiśnicz	Nowy Wiśnicz
329.	32	Waste landfill, in Tuchów	33-170 Tuchów, Tarnowska Str.
330.	33	Waste landfill, in Szarwark	Szarwark
331.	34	Waste landfill, in Maszkienice	Maszkienice
332.	35	Waste landfill, in Lipnica Murowana	32-724 Lipnica Murowana
MAZOWIECKIE VOIVODSHIP			
333.	1.	Municipal waste landfill, in Wyśmierzyce	26-811 Wyśmierzyce
334.	2.	Municipal waste landfill, in Sucha	Sucha, 26-800 Białobrzegi
335.	3.	Landfill for waste other than hazardous and inert wastes, in Wola Pawłowska	Wola Pawłowska, 83, Gostkowska Str, 06-400 Ciechanów
336.	4.	Municipal waste landfill, in Humięcino-Kostki	Humiecino-Kostki, 06-460 Grudusk
337.	5.	Municipal waste landfill, in Puznówka	Al..Wyzwolenia 2, 08-440 Pilawa
338.	6.	Municipal waste landfill for Łaskarzew	Las "Dworska Choina", Kolejowa Str.
339.	7.	Waste landfill, in Słup Pierwszy	Słup Pierwszy, 08-412 Borowie
340.	8.	Municipal waste landfill, in Krępa	Krępa, 08-460 Sobolew
341.	9.	Municipal waste landfill, in Gostynin	Kowalska Str., 09-500 Gostynin
342.	10.	Municipal waste landfill, in Petrykozy	Petrykozy, 96-321 Żabia Wola
343.	11.	Waste landfill, in Wężowiec	Wężowiec, 05-640 Mogielnica
344.	12.	Municipal waste landfill, in Częstoniew	Częstoniew, 05-600 Grójec
345.	13.	Municipal waste landfill, in Łęgonice	Łęgonice, Nowe Miasto Nad Pilicą
346.	14.	Municipal waste landfill, in Warka	41, Fabryczna Str., 05-660 Warka

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
347.	15.	Municipal waste landfill, in Kozienicach	Chartowa Str., 26-900 Kozienice
348.	16.	Municipal Solid waste landfill, in Garbatka Zbyczyn	Municipal Management Plant, 1, Skrzyńskich Str., 26-930 Garbatka-Letnisko
349.	17.	Municipal waste landfill, in Dębe	Dębe, 05-140 Serock
350.	18.	Miejsko-Municipal waste landfill, in Wola Solecka	Wola Solecka, 27-300 Lipsko
351.	19.	Municipal waste landfill, in Stara Kornica	08-205Stara Kornica No.191
352.	20.	Inter-Municipal waste landfill, in Łosice	1, Ekologiczna Str., Łosice 08-200
353.	21.	Municipal landfillśmieci, in Jaciążek	Jaciążek, 06-210 Płoniawy-Bramura
354.	22.	Waste landfill, in Krasnosielc Leśny	Krasnosielc Leśny, 06-212 Krasnosielc
355.	23.	LandfillKomunalne, in Mroczki Rębiszewo	Mroczki Rębiszewo, 06-320 Różan
356.	24.	Waste landfill, in Chyliny	Chyliny, 06-220 Szelków
357.	25.	Municipal waste landfill, in Małki	Małki, 06-225 Rzewnie
358.	26.	Waste landfill, in Maków Mazowiecki	06-200 Maków Mazowiecki
359.	27.	Municipal waste landfill, in Dąbrówka	Dąbrówka, Czerwonka
360.	28.	Municipal waste landfill, in Moczydła	Moczydła, 05-306 Jakubów
361.	29.	Municipal waste landfill, in Siennica	Siennica 05-332
362.	30.	Municipal waste landfill, in Latowicz-Rozstanki	Latowicz-Rozstanki, 05-334 Latowicz
363.	31.	Waste landfill, in Mińsk Mazowiecki	Str., Przemysłowa, 05-300 Mińsk Mazowiecki
364.	32.	Municipal waste landfill, in Woźbin	Cegłów
365.	33.	Waste landfill, in Makówiec Duży	Makówiec Duży, 05-307 Dobre
366.	34.	Waste landfill, in Uniszki Cegielnia	Uniszki Cegielnia, 06-500 Wieczfnia Kościelna
367.	35.	Municipal waste landfill, in Konotopie	Konotopie, 06-530 Strzegowo
368.	36.	Municipal waste landfill, in Miączyn Duży	Miączyn Duży, 06-550 Szreńsk
369.	37.	Inter-Municipal landfill for waste other than hazardous and inert wastes, in Jaskółowo	Jaskółowo, 05-190 Nasielsk
370.	38.	Solid waste landfill, in Zakroczym	05-170 Zakroczym
371.	39.	Municipal waste landfill, in Goworki	1, Turskiego Str., 07-410 Ostrołęka
372.	40.	Waste landfill, in Myszyniec	Kolejowa Str., 07-430 Myszyniec
373.	41.	Municipal waste landfill, in Gibałka	Gibałka, 07-402 Lelis
374.	42.	Municipal waste landfill, in Troszyn	Troszyn, 07-405 Troszyn
375.	43.	Waste landfill, in Stare Lubiejewo	Stare Lubiejewo, 07-300 Ostrów Mazowiecka
376.	44.	Waste landfill, in Boguty-Pianki	Boguty-Pianki, 07-325 Boguty
377.	45.	Municipal waste landfill	Ludwinowo, 07-306 Brok
378.	46.	Landfill for waste other than hazardous and inert wastes, in Brzezienku Rościszewskim	Brzezienko Rościszewskie, 07-311 Wąsewo
379.	47.	Municipal waste landfill, in Lubotyń Włóki	Lubotyń Włóki, 07-303 Stary Lubotyń
380.	48.	Waste landfill, in Zawisty Podleśne	Zawisty Podleśne, 07-320 Małkinia Górna
381.	49.	Ekological municipal waste landfill, in Otwock-Świerk	4, Lennona Str., 05-400 Otwock

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
382.	50.	Municipal Waste Utilisation Plant - silos for deposition of municipal and ballast waste, in Kobierniki	Kobierniki 42, 09-413 Kobierniki, Municipality of Stara Biała
383.	51.	Municipal waste landfill, in Wilczkowo	Wilczkowo, 09-450 Wyszogród
384.	52.	Landfill for waste other than hazardous and inert wastes, in Łąck	Długa Str., 09-520 Łąck
385.	53.	Municipal waste landfill, in Grabowiec	Grabowiec, 09-533 Słubice
386.	54.	Municipal waste landfill, in Cieszewo	Cieszewo, 09-210 Drobin
387.	55.	Municipal waste landfill, in Dalanówku	Dalanówek, 09-100 Płońsk
388.	56.	Skadowisko waste, in Oględa	Oględa, 06-300 Przasnysz
389.	57.	Waste landfill, in Chorzele	06-330 Chorzele, Cmentarna Str.
390.	58.	Waste landfill, in Jednorożec	Jednorożec
391.	59.	Municipal waste landfill, in Odrzywół	26-320 Odrzywół
392.	60.	Waste landfill, in Gielniów	Szkolna, Str., 26-434 Gielniów
393.	61.	Municipal waste landfill, in Wola Więcierzowa	Wola Więcierzowa, 26-400 Przysucha
394.	62.	Municipal waste landfill, in Płocochowo	Płocochowo, 06-100 Pułtusk
395.	63.	Municipal waste landfill, in Zatory-Biele	07-217 Zatory
396.	64.	Landfill for waste other than hazardous and inert wastes, in Jedlanka Stara	Jedlanka Stara, 27-100 Iłża
397.	65.	Municipal waste landfill, in Cudnów	Cudnów, 26-630 Jedlnia-Letnisko
398.	66.	Waste landfill, in Urbanów	Urbanów, 26-660 Jedlińsk
399.	67.	Municipal waste landfill, in Bieniędzice	Bieniędzice, 26-625 Wolanów
400.	68.	Municipal waste landfill, in Skaryszew	15, Piaseckiego Str., 26-640 Skaryszew
401.	69.	Landfill for waste other than hazardous and inert wastes in Radom	76, Witosa Str., 26-600 Radom
402.	70.	Municipal waste landfill, in Kolonia Mordy	Kolonia Mordy, 08-140 Mordy
403.	71.	Waste landfill, in Oleśnica	Oleśnica, 08-117 Wodynie
404.	72.	Landfill for waste other than hazardous and inert wastes, in Bale	Bale, 08-124 Mokobody
405.	73.	Waste landfill, in Kotuń	08-130 Kotuń
406.	74.	Municipal waste landfill, in Dąbrówka-Ług	08-114 Skórzec
407.	75.	Waste landfill, in Wola Suchożebrska	Wola Suchożebrska, 08-125 Suchożebry
408.	76.	Municipal waste landfill for the City of Sierpc, in Rachocin	09-200 Sierpc
409.	77.	Municipal waste landfill, in Gozdy	Gozdy, 09-214 Mochowo 20
410.	78.	Municipal Waste Utilisation Plant, in Topołowa	Topołowa, 96-515 Teresin
411.	79.	Municipal waste landfill, in Suchodół Włościański	Suchodół Włościański, 08-331 Sabnie
412.	80.	Municipal waste landfill, in Szydłowiec	26-500 Szydłowiec
413.	81.	Solid waste landfill, in Guzów	Guzów, 26-505 Orońsko
414.	82.	Waste landfill, in Węgrów-Ruszczyzna	Węgrów-Ruszczyzna, 07-100 Węgrów
415.	83.	Inter-Municipal waste landfill for Municipalities of Wierzbno and Grębków	Wierzbno
416.	84.	Collective municipal waste landfill, in Gajówka Zachodnia	Gajówka Zachodnia, 07-104 Stoczek
417.	85.	Waste landfill, in Łojewo	

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
418.	86.	Waste landfill, in Wólka Kozłowska	Wólka Kozłowska, 05-220 Zielonka
419.	87.	Waste landfill, in Lipiny Stare	Lipiny Stare, 05-200 Wołomin
420.	88.	Solid waste landfill, in Nowe Bosewo	Nowe Bosewo, 07-210 Długosiodło
421.	89.	Municipal waste landfill, in Janki	Janki, 07-203 Somianka
422.	90.	Municipal waste landfill, in Zwoleń	65, Partyzantów Str., 26-700 Zwoleń
423.	91.	Municipal waste landfill, in Kuczbork-Osada, Kuczbork-Wieś	09-310 Kuczbork-Osada, Kuczbork-Wieś
424.	92.	Municipal waste landfill, in m.Brudnice	Brudnice, 09-300 Żuromin
425.	93.	Municipal waste landfill, in Marków-Świnice	Marków Świnice, 96-320 Mszczonów
426.	94.	The "Słabomierz-Krzyżówka" Municipal waste landfill	5, Czysta Str., 96-300 Żyrardów
OPOLSKIE VOIVODSHIP			
427.	1	Landfill for waste other than hazardous and inert wastes, in Wronów	Wronów, 49-125 Skorogoszcz
428.	2	Municipal waste landfill, in Obórki	Obórki, 49-351 Przylesie
429.	3	Municipal waste landfill, in Przylesie Dolne	Przylesie Dolne, 49-220 Lipowa
430.	4	Urban and municipal waste landfill, in Dzierżysław	Dzierżysław, 48-135 Dzierżysław
431.	5	Municipal waste landfill, in Głubczyce	Rożnowska, Str., 48-100 Głubczyce
432.	6	Urban and municipal waste landfill, in Baborowie	Str., Głubczycka 48-120 Baborów
433.	7	The „Zębowice-Malinów" Municipal waste landfill	2, Murka Str. 46-048 Zębowice
434.	8	Municipal waste landfill, in Błachów	Błachów, Opolska Str., 46-380 Dobrodzień
435.	9	Municipal waste landfill, in Kowale	Kowale, 46-320 Praszka
436.	10	Municipal waste landfill, in Krzyżanowice	Krzyżanowice, 46-310 Gorzów Śląski
437.	11	Municipal waste landfill, in Świercze	Świercze, 46-300 Olesno
438.	12	Municipal waste landfill, in Radłów	46-331 Radłów
439.	13	Municipal waste landfill, in Rudniki	46-325 Rudniki
440.	14	Municipal waste landfill, in Fałkowice	Fałkowice, 46-034 Pokój
441.	15	Landfill for waste other than hazardous and inert wastes, in Ziemiełowice	Ziemiełowice, 46-161 Smarchowice Wielkie
442.	16	Municipal waste landfill Szymiszów	47-161 Szymiszów
443.	17	Landfill for waste other than hazardous and inert wastes, in Krasowa	Krasowa, 47-150 Leśnica
444.	18	Municipal landfill for waste other than hazardous and inert wastes, in Suchodaniec	Suchodaniec, 46-049 Izbicko
445.	19	Landfill for municipal and industrial wastes, in Kielcza, at Nowe Osiedle Str.	Nowe Osiedle Str., 47-126 Kielcza
446.	20	Municipal landfill for solid waste, in Ciężkowice	Ciężkowice, 47-260 Polska Cerekiew
447.	21	Municipal waste landfill, in Kędzierzyn-Koźle	7, Naftowa Str., 47-230 Kędzierzyn -Koźle
448.	22	Municipal waste landfill, in Grabówka	Grabówka, Gliwicka Str., 47-240 Bierawa
449.	23	Municipal waste landfill, in Pawłowiczki	47-280 Pawłowiczki
450.	24	Municipal waste landfill, in Bierdzany	Bierdzany, 46-046 Ligota Turawska

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
451.	25	Municipal waste landfill, in Dylaki	46-043 Dylaki
452.	26	Municipal waste landfill, in Kępa	Kępa, 46-022 Luboszyce
453.	27	Inter-Municipal landfill for waste other than hazardous and inert wastes, in Domecko	46-064 Domecko
454.	28	Municipal waste landfill, in Chróścice	46-080 Chróścice
455.	29	Municipal waste landfill, in Opole	69, Podmiejska Str. 45-574 Opole
456.	30	Landfill for waste other than hazardous and inert wastes, in Kosorowice	Kosorowice, 46-050 Tarnów Opolski
457.	31	Municipal waste landfill, in Rogi	Rogi, 49-156 Gracze
458.	32	Waste landfill, in Gogolin	Ligonia, Str., 47-320 Gogolin
459.	33	Municipal waste landfill, in Rozkochów (for the Citiy of Głogówek and Walce Municipality)	Rozkochów, 47-344 Walce
460.	34	Landfill for sludge and municipal waste in Prudnik	Wiejska Str., 48 – 200 Prudnik
461.	35	Municipal waste landfill, in Gołkowice	Gołkowice, 46-220 Byczyna
462.	36	Municipal landfill for waste other than hazardous and inert wastes, in Gotartów	Gotartów, 46-211 Kujakowice Górne
463.	37	Municipal waste landfill, in Wierzbicy Górnej	46-255 Wierzbica Górna
464.	38	Municipal waste landfill Ujeździec	Ujeździec, 48-368 Dziewiętlice
465.	39	Landfill for waste other than hazardous and inert wastes, in Okopy n/Łambinowice	Okopy, 46-074 Łambinowice
466.	40	Landfill for waste other than hazardous and inert wastes, in Konradów	Konradów, 48-340 Głuchołazy
467.	41	Municipal waste landfill, in Domaszkowice	Domaszkowice, 48-321 Niwnica
468.	42	Municipal waste landfill, in Chróścina	Chróścina, 49-223 Skoroszyce
469.	43	Municipal waste landfill, in Puszyna	Puszyna, 49-137 Korfantów
470.	44	Landfill for construction and municipal waste at the Kędzierzyn S.A. Nitrogen Plant	30A, Mostowa Str. P.O. Box 163 47-220 Kędzierzyn - Koźle
PODKARPACKIE VOIVODSHIP			
471.	1	Landfill for waste other than hazardous and inert wastes, in Sokołów Małopolski (old)	36-050 Sokołów Małopolski
472.	2	Landfill for waste other than hazardous and inert wastes, in Kozodrza	Kozodrza
473.	3	Landfill for waste other than hazardous and inert wastes, in Sokołów Małopolski (new)	36-050 Sokołów Małopolski
474.	4	Landfill for waste other than hazardous and inert wastes, in Strzyżów	Strzyżów
475.	5	Miejskie Landfill for waste other than hazardous and inert wastes, in Paszczyna	Paszczyna
476.	6	Landfill for waste other than hazardous and inert wastes, in Jawornik Niebylecki	Jawornik Niebylecki
477.	7	Municipal Landfill for waste other than hazardous and inert wastes, in Paszczyna	Paszczyna
478.	8	Landfill for waste other than hazardous and inert wastes, in Giedlarowa	Giedlarowa
479.	9	Landfill for waste other than hazardous and inert wastes, in Strzegocice	Strzegocice
480.	10	Landfill for waste other than hazardous and inert wastes, in Wola Zarczycka	Wola Zarczycka
481.	11	Landfill for waste other than hazardous and inert wastes, in Jodłowa	Jodłowa
482.	12	Landfill for waste other than hazardous and inert wastes, in Dynów	Dynów
483.	13	Landfill for waste other than hazardous and inert	Przemyśl,

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
		wastes, in Przemyśl	22. Piastowska Str.
484.	14a	Landfill for waste other than hazardous and inert wastes, in Młyny I, II silo	Młyny
485.	14b	Landfill for waste other than hazardous and inert wastes, in Młyny III silo	Młyny
486.	15	Landfill for waste other than hazardous and inert wastes, in Jarosław	Jarosław, Kamienna Str.
487.	16	Landfill for waste other than hazardous and inert wastes, in Przeworsk	Przeworsk, Czarnieckiego Str.
488.	17	Landfill for waste other than hazardous and inert wastes, in Wólka Pełkińska	Wólka Pełkińska
489.	18	Landfill for waste other than hazardous and inert wastes, in Bóbrka Kańczucka	Bóbrka Kańczucka
490.	19	Landfill for waste other than hazardous and inert wastes, in Lubaczów	Lubaczów
491.	20	Landfill for waste other than hazardous and inert wastes, in Narol	Narol
492.	21	Landfill for waste other than hazardous and inert wastes, in Stężnica	Stężnica, 38-606 Baligród
493.	22	Landfill for waste other than hazardous and inert wastes, in Dukla	38-450 Dukla, Pocztowa Str.
494.	23	Landfill for waste other than hazardous and inert wastes, in Krosno	38-400 Krosno, Białobrzeska Str.
495.	24	Landfill for waste other than hazardous and inert wastes, in Brzozów	36-200 Brzozów, Zdrojowa Str.
496.	25	Landfill for waste other than hazardous and inert wastes, in Jasło	38-200 Jasło, Żniwna Str.
497.	26	Landfill for waste other than hazardous and inert wastes, in Brzegi Dolne	38-700 Ustrzyki Dolne
498.	27	Landfill for waste other than hazardous and inert wastes, in Radoszyce	38-543 Komańcza
499.	28	Landfill for waste other than hazardous and inert wastes, in Średnie Wielkie	Średnie Wielkie, 38-540 Zagórz
500.	29	Landfill for waste other than hazardous and inert wastes, in Smolnik	38-713 Lutowiska
501.	30	Landfill for waste other than hazardous and inert wastes, in Karlików	Karlików, 38-505 Bukowsko
502.	31	Landfill for waste other than hazardous and inert wastes, in Jaszczew	38-405 Jaszczew
503.	32	Landfill for waste other than hazardous and inert wastes, in Lipie	Lipie, 38-710 Czarna
504.	33	Landfill for waste other than hazardous and inert wastes, in Stalowa Wola	37-450 Stalowa Wola
505.	34	Landfill for waste other than hazardous and inert wastes, in Jeżowe	37-430 Jeżowe
506.	35	Landfill for waste other than hazardous and inert wastes, in Borowa	Borowa
507.	36	Landfill for waste other than hazardous and inert wastes, in Padew Narodowa	Padew Narodowa
508.	37	Landfill for waste other than hazardous and inert wastes, in Sigiełki	Sigiełki, Municipality of Krzeszów
509.	38	Landfill for waste other than hazardous and inert wastes, in Jeziórko	Jeziórko
510.	39	Landfill for waste other than hazardous and inert wastes, in Nisko	37-400 Nisko
511.	40	Landfill for waste other than hazardous and inert wastes, in Krzątka	Krzątka
512.	41	Landfill for waste other than hazardous and inert wastes, in Zaklików	37-470 Zaklików
513.	42	Landfill for waste other than hazardous and inert wastes, in Kolbuszowa	Kolbuszowa
514.	43	Landfill for waste other than hazardous and inert wastes, in Pysznica	Pysznica-Kaczyłów
515.	44	Landfill for waste other than hazardous and inert wastes, in Jarocin	37-405 Jarocin
516.	45	Landfill for waste other than hazardous and inert	39-300 Mielec

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
		wastes, in Mielec	
517.	46	Landfill for waste other than hazardous and inert wastes, in Rudnik	37-420 Rudnik
PODLASKIE VOIVODSHIP			
518.	1	Municipal waste landfill, in Hryniewicze	ZUOK Hryniewicze, 16-061 Juchnowiec Kościelny
519.	2	Municipal waste landfill, in Czerwonka	Czerwonka, 16-423 Bakałarzewo
520.	3	Municipal waste landfill, in Augustowo	Augustowo, 17-100 Bielsk Podlaski
521.	4	Municipal waste landfill, in Siemiatycze	17-300 Siemiatycze
522.	5	Municipal waste landfill, in Wojdy	Wojdy, 19-206 Rajgród
523.	6	Municipal waste landfill, in Brańsk	17-120 Brańsk
524.	7	Municipal waste landfill, in Konstantynówka	Konstantynówka, 16-500 Sejny
525.	8	Municipal waste landfill, in Świerzbienie	Świerzbienie, 19-100 Mońki
526.	9	Municipal waste landfill, in Piątnica	18-421 Piątnica
527.	10	Municipal waste landfill, in Czartoria	Czartoria, 18-413 Miastkowo
528.	11	Municipal waste landfill, in Szołtany	Szołtany, 16-515 Puńsk
529.	12	Municipal waste landfill, in Karcze	Karcze, 16-100 Sokółka
530.	13	Municipal waste landfill, in Gródek	16-040 Gródek
531.	14	Municipal waste landfill, in Studzianki	Studzianki, 16-010 Wasilków
532.	15	Municipal waste landfill, in Czerwony Bór	Czerwony Bór, 18-300 Zambrów
533.	16	Municipal waste landfill, in Kroszówka	Kroszówka, 16-320 Bargłów Kościelny
534.	17	Municipal waste landfill, in Filipów	16-424 Filipów
535.	18	Municipal waste landfill Suwałki – Zielone Kamedulskie	ZUOK Suwałki 16-400, 150 A, M. Buczka Str.
536.	19	Municipal waste landfill, in Dąbrowa Białostocka	16-200 Dąbrowa Białostocka
POMORSKIE VOIVODSHIP			
537.	1	Municipal waste landfill for the Miastko Municipality, in Gatka	Gatka 77-200 Miastko
538.	2	Municipal waste landfill, in Kozy	76-243 Mikorowo
539.	3	Municipal waste landfill, in Rokity	77-116 Czarna Dąbrówka
540.	4	Municipal waste landfill, in Unichowie, Municipality of Czarna Dąbrówka	77-116 Czarna Dąbrówka
541.	5	Municipal Waste Utilisation Plant, in Sierżno	Sierżno 1a/1, 77-100 Bytów
542.	6	Municipal waste landfill, in Bądki	82-515 Kwidzyn
543.	7	Waste landfill, in Gonty	Gonty, 82-515 Prabuty
544.	8	Waste landfill, in Jałowiec	Jałowiec, 82-420 Ryjewo
545.	9	Municipal waste landfill, in Karpiny	Karpiny, 82-522 Sadlinki
546.	10	Municipal waste landfill, in Bietowo	Bietowo, 83-240 Lubichowo
547.	11	Municipal waste landfill, in Borowiec	Borowiec, 83-230 Smętowo Graniczne
548.	12	Waste landfill, in Linowiec	Linowiec, 83-200 Starogard Gdański
549.	13	Municipal waste landfill, in Osiek	83-221 Osiek
550.	14	Municipal waste landfill in Osówek	83-242 Osieczna
551.	15	Municipal waste landfill in Skarszewy	83-250 Skarszewy

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
552.	16	Temporary municipal waste landfill, in Skórcz	1, Leśna Str., 83-220 Skórcz
553.	17	Municipal waste landfill, in Strych	83-260 Kaliska
554.	18	Waste landfill, in Zblewo	83-210 Zblewo
555.	19	Municipal waste landfill, in Nowy Dwór n/Angowice	Nowy Dwór n/Angowice 89-600 Chojnice
556.	20	Municipal waste landfill, in Chojniczki	89-606 Chojniczki
557.	21	Municipal waste landfill, in Ciechocin	89-662 Ciechocin
558.	22	Municipal waste landfill, in Gockowice	89-661 Gockowice
559.	23	Municipal waste landfill, in Kosobudy	89-632 Kosobudy
560.	24	Municipal waste landfill, in Nieżurawa	89-650 Nieżurawa
561.	25	Municipal waste landfill, in Swornegacie	89-608 Swornegacie
562.	26	Municipal waste landfill, in Zielona Huta	89-607 Zielona Huta
563.	27	Municipal waste landfill, in Grzymisław	77-310 Debrzno
564.	28	Municipal waste landfill, in Kiełpin	Kiełpin, 77-300 Człuchów
565.	29	Landfill for waste other than hazardous and inert wastes, in Nadziejecie	12, Moniuszki Str., 77-330 Czarne
566.	30	Municipal waste landfill, in Przechlewo	61, Człuchowska Str., 77-320 Przechlewo
567.	31	Municipal waste landfill, in Kaplica	Kaplica, 83-314 Somonino
568.	32	Municipal waste landfill, in Kłodno	83-320 Sulęczyno
569.	33	Municipal waste landfill, in Liniewskie Góry,	83-420 Liniewo
570.	34	Municipal waste landfill, in Gostom	83-400 Kościerzyna
571.	35	Municipal waste landfill, in Osów	83-440 Karsin
572.	36	Municipal waste landfill, in Dziemiany	83-425 Dziemiany
573.	37	Waste Disposal and Treatment Utility Ltd., in Czarnówek	84-351 Nowa Wieś Lęborska
574.	38	Municipal waste landfill, in Lucin	84-352 Wicko
575.	39	Waste landfill, in Świerki	82-230 Nowy Staw
576.	40	Municipal waste landfill, in Lisewo Malborskie	82-224 Lichnowy
577.	41	Municipal waste landfill, in Szaleniec	82-220 Stare Pole
578.	42	Waste Disposal Utility, in Gdańsk-Szadółki	55, Jabłoniowa Str., 80-180 Gdańsk
579.	43	Municipal waste landfill, in Miłocin	83-020 Miłocin
580.	44	Municipal waste landfill, in Łebcz	84-100 Puck
581.	45	Municipal waste landfill Operation and Degasification Utility, in Bierkowo	Bierkowo 120, 76-206 Słupsk
582.	46	Inter-Municipal waste landfill, in Chlewnicy	76-230 Potęgowo
583.	47	Municipal waste landfill, in Obłęże	Obłęże, 77-230 Kępice
584.	48	Municipal waste landfill, in Minięty	82-440 Dzierzgoń
585.	49	Municipal waste landfill, in Nowa Wieś Sztumska	82-400 Sztum
586.	50	Municipal waste landfill, in Nicpoń	83-140 Gniew
587.	51	Municipal waste landfill, in Rokitki	16, Rokicka Str., 80-110 Tczew
588.	52	Municipal waste landfill in Ropuchy	83-130 Pelplin
589.	53	Waste landfill, in Gniewino	84-250 Gniewino
590.	54	The „EKO DOLINA" Ltd., in Łężyce	Łężyce, 84-207 Koleczkowo
591.	55	Municipal waste landfill, in Rybska Karczma	Rybska Karczma, 84-200 Wejherowo
ŚLĄSKIE VOIVODSHIP			
592.	1	Municipal waste landfill, in Wojkowice, as subordinated to the „Recycling Wojkowice" Ltd.	27, Długosza Str.; 42-580 Wojkowice
593.	2	Municipal waste landfill, in Bielsko Biała, as subordinated to the Bielsko Biała Waste Management Plant S.A.	315d, Krakowska Str., 43-300 Bielsko Biała
594.	3	Municipal waste landfill, in Czechowice-Dziedzice, as subordinated to the Czechowice-Dziedzice Municipal Resource Administration	2, Bestwińska Str.; 43-502 Czechowice-Dziedzice
595.	4	Municipal waste landfill, in Wilkowice, as subordinated to the Wilkowice „EKO-ŁAD" Ltd.	1, Woprowska Str.; 43-365 Wilkowice

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
596.	5	Municipal waste landfill, in Bytom, as subordinated to the Bytom Municipal Utility Ltd.	10, Jana Pawła II Str., 41-902 Bytom
597.	6	Municipal waste landfill, in Pałysz, as subordinated to the Municipal Office, in Konopiska	20, Przemysłowa Str. 42-274 Konopiska
598.	7	Municipal waste landfill, in Radoszewnica, as subordinated to the Municipal Service Utility, in Koniecpol	Radoszewnica, Municipality of Koniecpol, The Częstochowa County
599.	8	Municipal waste landfill, in Sobuczyna, as subordinated to the Częstochowskie Municipal Utility Ltd., in Sobuczyna	Sobuczyna, 1, Konwaliowa Str.; 42-263 Wrzosowa
600.	9	Waste landfill municipal sewage sludge, in Cieszyn, as subordinated to the Cieszyn Municipal Management Utility	Motokrosowa Str., Cieszyn-Marklowice
601.	10	Municipal waste landfill, in Cieszyn, as subordinated to the Cieszyn Municipal Management Utility	Motokrosowa Str., Cieszyn-Boguszowice
602.	11	Municipal waste landfill, in Chorzów, as subordinated to the "ALBA" Sanitary Engineering Enterprise, in Chorzów	Brzezińska Str., 41-508 Chorzów
603.	12	Municipal waste landfill „Lipówka I”, in Dąbrowa Górnicza, as subordinated to the MPGK "ALBA" Ltd.	4, Koksownicza Str.; 42-523 Dąbrowa Górnicza
604.	13	Municipal waste landfill, in Gliwice, as subordinated to the Gliwice Enterprise for Waste Utilisation and Storage Ltd.	Rybnicka Str., 44-100
605.	14	Municipal waste landfill, in Trachy, as subordinated to the Municipal and Housing Management Plant, in Sośnicowice	Trachy Leboszowska Str.
606.	15	Municipal waste landfill, in Knurów, as subordinated to the Knurów PPHU "Komart" Enterprise Ltd.	Szybowa 44 Str., 44-193 Knurów
607.	16	Municipal waste landfill, in Pyskowice Zaolszany, as subordinated to the „Ekofol II” S.A., in Bytom	Wrzosowa Str., 44-120 Pyskowice
608.	17	Municipal waste landfill, in Jastrzębie Zdrój, as subordinated to the „Cofinco-Poland” Ltd., in Katowice	36, Dębiny Str., 44-335 Jastrzębie Zdrój
609.	18	Municipal waste landfill, in Katowice, as subordinated to the Katowice Municipal and Medical Waste Utilisation Plant	Żwirowa Str.; 40-310 Katowice
610.	19	Municipal waste landfill, in Więcki, as subordinated to the Popów Municipal Office	Więcki, Plot No. 973, Municipality of Popów, The Kłobuck County
611.	20	Municipal waste landfill, in Krzepice, as subordinated to the Krzepice Municipal and Housing Enterprise	19, Targowa Str.; 42-160 Krzepice The Kłobuck County
612.	21	Municipal waste landfill, in Lipie Śląskie, as subordinated to the ITOŚ, in Warsaw	22, Cegielniana Str., Lipie Śląskie, 42-700 Lubliniec, Municipality of Pawonków
613.	22	Municipal waste landfill, in Sadowie Górnym, as subordinated to the „ASA EKO- Polska” Ltd., in Katowicach	Municipality of Koszęcin, The Lubliniec County
614.	23	Municipal waste landfill, in Łaziska Górne, as subordinated to the PGKiM Ltd., in Łaziska Górne	Łazy Str., 43-170 Łaziska Górne
615.	24	Municipal waste landfill, in Piekary Śląskie, as subordinated to the PUPH "Ecorobud" Company, in Piekary Śląskie	Piekary Śląskie, 1Maja Str.
616.	25	Municipal waste landfill, in Tworków, as subordinated to the Tworków Municipal Management Plant w Krzyżanowicach, in Roszków	Tworków, Dworcowa Str.
617.	26	Municipal waste landfill, in Racibórz, as subordinated to the Racibórz Municipal waste landfills Co.	Racibórz, 125, Rybnicka Str.
618.	27	Municipal waste landfill, in Jankowice, as subordinated to the GZGK, in Świerklany	3, Ks. Walentego Str., 44-264 Jankowice Rybnickie
619.	28	Municipal waste landfill, in Rybnik, as subordinated to the Rybnik Municipal Services Co.	Rybnik 67, Kolberga Str.
620.	29	Municipal waste landfill, in Siemianowice Śląskie, as subordinated to the "Landeco" Ltd., in Siemianowice Śląskie	Siemianowice Śląskie. 4, Zwycięstwa Str.,

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
621.	30	Municipal waste landfill, in Sosnowiec, as subordinated to the Sosnowiec Municipal Waste Deposition Plant	Grenadierów Str., 41-200 Sosnowiec
622.	31	Municipal waste landfill, in Świętochłowice, as subordinated to the Świętochłowice Municipal Waste Management Plant Ltd.	Wojska Polskiego Str., 41-600 Świętochłowice
623.	32	Municipal waste landfill, in Tarnowskie Góry – Rybna, as subordinated to the "Remondis" Ltd., in Tarnowskie Góry	Laryszowska Str., 42-680 Tarnowskie Góry
624.	33	Municipal waste landfill, in Tychy, as subordinated to the Inter-Municipal Przedsiębiorstwo Waste management "Master" Ltd., in Tychy	100, Serdeczna Str., 43-100 Tychy
625.	34	Municipal waste landfill, in Poręba, as subordinated to the Poręba Municipal and Housing Management Plant	Partyzantów Str., 42-480 Poręba
626.	35	Municipal waste landfill, in Zawiercie, as subordinated to the Zawiercie Municipal Management (old landfill)	Podmiejska Str., 42-400 Zawiercie
627.	36	Municipal waste landfill, in Ogrodzieniec, as subordinated to the Ogrodzieniec Waste Treatment and Storage Plant Ltd.	Bzowska Str., 42-440 Ogrodzieniec
628.	37	Municipal waste landfill in Włodowice, as subordinated to the Włodowice Municipal Budgetary Plant	42-421 Włodowice, The Zawiercie County
629.	38	Municipal waste landfill, in Żywiec, as subordinated to the „Beskid" Ltd., in Żywiec	2, Kabaty Str.; Żywiec
630.	39	The LIPÓWKA II Municipal Waste Treatment Plant, in Dąbrowa Górnicza	144 a, Główna Str., 42-530 Dąbrowa Górnicza
ŚWIĘTOKRZYSKIE VOIVODSHIP			
631.	1.	The „Promnik" Municipal waste landfill	Promnik, Municipality of Strawczyn, 26-067 Strawczyn
632.	2.	The „Janik" Municipal waste landfill	1, Borowska Str., Janik, Municipality of Kunów, 27-415 Kunów
633.	3.	The "Grabowiec" Municipal waste landfill	Grabowiec, Municipality of Osiek, 28-221 Osiek
634.	4.	The "Przededworze" Municipal waste landfill	Przededworze, Municipality of Chmielnik, 26-020 Chmielnik
635.	5.	The "Piaseczno" Municipal waste landfill	Piaseczno, Municipality of Łoniów, 27-670 Łoniów
636.	6.	The "Janczyce" Municipal waste landfill	Janczyce, Municipality of Baćkowice, 27-552 Baćkowice
637.	7.	The "Szymanowice Dolne" Municipal waste landfill	Szymanowice Dolne, Municipality of Klimontów, 27-640 Klimontów
638.	8.	The "Dobrowoda" Municipal waste landfill	Dobrowoda, Municipality of Busko-Zdrój, 28-100 Busko-Zdrój
639.	9.	The "Końskie" Municipal waste landfill	26-200 Końskie, Spacerowa Str., Municipality of Końskie
640.	10.	The "Staszów" Municipal waste landfill	Pocieszka Str., 28-200 Staszów
WARMIŃSKO-MAZURSKIE VOIVODSHIP			
641.	1.	Municipal waste landfill, in Medyny	Medyny
642.	2.	Municipal waste landfill, in Srokowo	7, Węgorzewska Str., 11-420 Srokowo
643.	3.	Municipal waste landfill, in Czerwony Dwór	Czerwony Dwór

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
644.	4.	Waste landfill, in Zakrzewo	Zakrzewo
645.	5.	Municipal waste landfill, in Orneta-Nowy Dwór	Nowy Dwór
646.	6.	Waste landfill, in Worpławki	Worpławki
647.	7.	Waste Utilisation Plant Ltd. – waste landfill, in Elbląg	42, Mazurska Str., 82-300 Elbląg
648.	8.	Waste landfill, in Stare Dolno	Stare Dolno
649.	9.	Waste landfill, in Zbożne	Morąg , 1, Wenecka Str.
650.	10.	Waste landfill, in Mażany	Mażany, 11-400 Kętrzyn
651.	11.	Waste landfill, in Iława	11-200 Iława
WIELKOPOLSKIE VOIVODSHIP			
652.	1	Municipal waste landfill, in Łucjanowo	Łucjanowo, 64-840 Budzyń, The Chodzież County
653.	2	Municipal waste landfill, in Kamionka	Kamionka, 64-800 Chodzież, The Chodzież County
654.	3	Municipal waste landfill, in Jaktorowo	Jaktorowo, 64-820 Szamocin, The Chodzież County
655.	4	Municipal waste landfill, in Huta Szklana, Municipality of Krzyż Wielkopolski	Huta Szklana, 64-721 Krzyż, The Czarnków and Trzcianka County
656.	5	Municipal waste landfill, in Sławienko, Municipality of Lubasz	Sławienko, 64-720 Lubasz, The Czarnków and Trzcianka County
657.	6	Municipal waste landfill for Municipalities of Połajewo and Ryczywół, in Sierakówko	Sierakówko, 64-710 Połajewo, The Czarnków and Trzcianka County
658.	7	Municipal waste landfill, in Trzcianka	64-980 Trzcianka, The Czarnków and Trzcianka County
659.	8	Municipal waste landfill, in Lulkowo	Lulkowo, 62-200 Gniezno
660.	9	Municipal waste landfill, in Karolew	Karolew, 63-810 Borek Wlkp., The Gostyń County
661.	10	Municipal waste landfill, in Dalabuszki	Dalabuszki, 63-800 Gostyń, The Gostyń County
662.	11	Municipal waste landfill, in Karzec	Karzec, 63-840 Krobia, The Gostyń County
663.	12	Municipal waste landfill, in Czeluścin	Czeluścin, 63-830 Pępowo, The Gostyń County
664.	13	Municipal waste landfill, in Smogorzewo	Smogorzewo, 63-820 Piaski, The Gostyń County
665.	14	Municipal waste landfill, in Wydawy	Wydawy n/Poniec, 64-125 Poniec, The Gostyń County
666.	15	Municipal waste landfill, in Granowo	Granowo, 62-066 Granowo, The Grodzisk County
667.	16	Municipal waste landfill, in Czarna Wieś	Czarna Wieś, 62-065 Grodzisk, The Grodzisk County
668.	17	Municipal waste landfill, in Goździn	Goździn, 62-067 Rakoniewice, The Grodzisk County
669.	18	Municipal waste landfill, in Łubnica	Łubnica, 64-050 Wielichowo, The Grodzisk County

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
670.	19	Waste landfill, in Witaszyczki for the City and Municipality of Jarocin	Witaszyczki 1A, 63-200 Jarocin, The Jarocin County
671.	20	Municipal waste landfill, in Kamień	62-863 Kamień, Municipality of Ceków Kolonia, The Kalisz County
672.	21	Municipal waste landfill, in Zbójno	Zbójno, 62-650 Kłodawa, The Koło County
673.	22	Waste landfill in Bonikowo	Maciejewo, 62-613 Osiek Mały, The Koło County
674.	23	Municipal waste landfill, in Bonikowo	Bonikowo, 48, Dworcowa Str., 64-000 Kościan
675.	24	Municipal waste landfill, in Czerwona Wieś	Czerwona Wieś, 64-010 Krzywiń, The Kościan County
676.	25	Municipal waste landfill for the City and Municipality of Koźmin Wielkopolski, in Orla	Sapieżyn-Orla, 63-720 Koźmin Wlkp., The Krotoszyn County
677.	26	Waste landfill, in Chwałki,	Chwałki, Municipality of Rozdrażew 60-708 Rozdrażew, The Krotoszyn County
678.	27	Municipal waste landfill, in Sulmierzyce	Kaliska Str., 63-750 Sulmierzyce
679.	28	Municipal waste landfill, in Konarzew	Konarzew, 63-760 Zduny, The Krotoszyn County
680.	29	Municipal waste landfill, in Krzemieniewo	Leśna, Str., 64-120 Krzemieniewo, The Leszno County
681.	30	Waste landfill, in Trzebania	Trzebania, 64-113 Osieczna, The Leszno County
682.	31	Municipal waste landfill, in Moraczewo	Moraczewo, 64-130 Rydzyna, The Leszno County
683.	32	Municipal Waste Management Plant, in Konin	13, Sulańska Str., 62-510 Konin
684.	33	Landfill for waste other than hazardous and inert wastes, in Mnichy	2, Piłsudskiego Str., 64-400 Międzychód The Międzychód County
685.	34	Municipal waste landfill, in Grobia	Grobia, 64-410 Sieraków, The Międzychód County
686.	35	Municipal waste landfill, in Kuślin	Kuślin, 64-316 Kuślin, The Nowy Tomyśl County
687.	36	Municipal waste landfill, in Nowy Dwór	Nowy Dwór, 64-360 Zbąszyń, The Nowy Tomyśl County
688.	37	Waste landfill, in Uścikówiec	Willage of Uścikówiec, 64-600 Oborniki Wlkp., The Oborniki County
689.	38	Waste landfill, in Ostrów Wielkopolski	121, Staroprzygrodzka Str., 63-400 Ostrów Wielkopolski, The Ostrów Wielkopolski County
690.	39	Inter-Municipal waste landfill, in Psary	8, Komunalna Str., Psary, 62-731 Przykona, The Turek County
691.	40	Municipal waste landfill, in Luchowo	Luchowo, 89-310 Łobżenica, The Piła County
692.	41	Municipal waste landfill, in Kłoda,	Kłoda, Municipality of Szydłowo 64-930 Szydłowo, The Piła County
693.	42	Water and Waste Water Wanagement Plant, in Wyrzysk, Ltd.	Wyrzysk, 89-300 Wyrzysk,

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
			The Piła County
694.	43	Inter-Municipal waste landfill, in Pleszew	Dobra Nadzieja, 63-300 Pleszew, The Pleszew County
695.	44	Municipal waste landfill dla for the City and Municipality of Buk, in Wysoczka	Wysoczka, 64-320 Buk, The Poznań County
696.	45	Municipal waste landfill, in Owińska	Owińska, 62-004 Czerwonak, The Poznań County
697.	46	Municipal waste landfill, in Dopiewo	Trzcielińska Str., 62-070 Dopiewo, The Poznań County
698.	47	Municipal waste landfill, in Białęgi	Białęgi 15, 62-095 Murowana Goślina, The Poznań County
699.	48	Municipal waste landfill, in Borówko	Borówko; 62-010 Pobiedziska, The Poznań County
700.	49	Landfill for waste other than hazardous and inert wastes, in Suchym Lesie	1, Meteorytowa Str., 62-002 Suchy Las, The Poznań County
701.	50	Municipal waste landfill, in Rabowice	Świerkowa Str., 62-020 Swarzędz, The Poznań County
702.	51	Municipal waste landfill, in Rumianek	Rumianek, 62-080 Tarnowo Podgórne, The Poznań County
703.	52	Municipal waste landfill for the Bojanowo Municipality, in Sowiny	Sowiny, 63-940 Bojanowo, The Rawicz County
704.	53	Municipal waste landfill, in Rawicz-Sarnowa	Rawicz-Sarnowa, 63-900 Rawicz The Rawicz County
705.	54	Municipal waste landfill, in Nadziejewo	Nadziejewo, Municipality of Środa Wlkp., The Środa Wlkp. County
706.	55	Inter-Municipal waste landfill, in Mateuszewo	Mateuszewo, 63-100, The Śrem County
707.	56	Municipal waste landfill, in Turek-Dzierżązna	Dzierżązna, 62-720, The Turek County
708.	57	Municipal waste landfill, in Niemczyn	Niemczyn, 62-110 Damasławek The Wągrowiec County
709.	58	Municipal waste landfill, in Aleksandrowo	Aleksandrowo, 62-120 Wapno, The Wągrowiec County
710.	59	Inter-Municipal waste landfill, in Kopaszyn - Toniszewo Nowe	Kopaszyn, 62-100 Wągrowiec, The Wągrowiec County
711.	60	Municipal waste landfill, in Bardo	Bardo, 62-300 Września, The Września County
712.	61	Inter-Municipal waste landfill, in Międzybłocie	Międzybłocie, 77-400 Złotów, The Złotów County
ZACHODNIOPOMORSKIE VOIVODSHIP			
713.	1	Municipal waste landfill, in Krzywopłoty	Krzywopłoty, 78-230 Karlino
714.	2	Municipal waste landfill, in Pławienko	Pławienko, Municipality of Bierzwnik
715.	3	Municipal waste landfill, in Stradzewo	Stradzewo, 73-200 Choszczno
716.	4	Municipal waste landfill, in Niwka	Niwka, 78-440 Czaplinek

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
717.	5	Municipal waste landfill, in Mielenko	Mielenko, 78-500 Drawsko Pomorskie
718.	6	Municipal waste landfill, in Stawno	Sławno, 78-520 Złocieniec
719.	7	Municipal waste landfill, in Podańsko	Podańsko, Municipality of Goleniów
720.	8	Municipal waste landfill, in Godowo	Godowo, 2-130 Maszewo
721.	9	Municipal waste landfill, in Osina	Osina, Municipality of Osina
722.	10	Municipal waste landfill, in Dragosław	Dargosław, Municipality Brojce
723.	11	Municipal waste landfill, in Smolęcin	Smolęcin, 72-300 Gryfice
724.	12	Municipal waste landfill, in Włodarka	Wlodarka, Municipality of Trzebiatów
725.	13	Municipal waste landfill, in Gryfino	74-100 Gryfino
726.	14	Municipal waste landfill, in Lubiechów	Lubiechów Górny, 74-520 Cedynia
727.	15	Municipal waste landfill, in Kaliska	Kaliska, Municipality of Chojna
728.	16	Municipal waste landfill, in Kurzycko	Kurzycko, 74-133 Mieszkowice
729.	17	Municipal waste landfill, in Drzesz	Drzesz, 74-225 Trzcińsko Zdrój
730.	18	Municipal waste landfill, in Dębogóra	Dębogóra, Municipality Widuchowa
731.	19	Municipal waste landfill, in Mirowo	Leszczyn Kalina, 78-125 Rymań
732.	20	Municipal waste landfill, in Cewlin	Cewlino, Municipality of Manowo
733.	21	Municipal waste landfill, in Wietrzno	Wietrzno, Municipality Polanów
734.	22	Municipal waste landfill, in Sianów	Sianów, Municipality of Sianów
735.	23	Municipal waste landfill, in Komorowo	Komorowo, 72-315 Resko
736.	24	Municipal waste landfill, in Kraśnik	Kraśnik, 73-320 Węgorzyno
737.	25	Municipal waste landfill, in Dalsze	Dalsze, Municipality of Myślibórz
738.	26	Municipal waste landfill, in Smolęcin II	Smolęcin, Municipality of Kołbaskowo
739.	27	Municipal waste landfill, in N. Warpno	72-022 Nowe Warpno
740.	28	Municipal waste landfill, in Leśno. Górne	Leśno Górne, Municipality of Police, 72-004 Tanowo
741.	29	Municipal waste landfill, in Karniewo	Karniewo, Municipality of Pyrzyce
742.	30	Municipal waste landfill, in Bylica	Bylica, 76-113 Postomino
743.	31	Municipal waste landfill, in Gwiazdowo	Gwiazdowo, 76-100 Sławno
744.	32	Municipal waste landfill, in Dolice	Dolice, Municipality of Dolice
745.	33	Municipal waste landfill, in Marianowo	73-121 Marianowo
746.	34	Municipal waste landfill, in Klucz	Szczecin-Klucz
747.	35	Municipal waste landfill, in Powalice	Powalice, 73-140 Ińsko
748.	36	Municipal waste landfill, in Łęczyca	Łęczyca, Municipality of Stara Dąbrowa
749.	37	Municipal waste landfill, in Bor.Sulinow	78-449 Borne Sulinowo
750.	38	Municipal waste landfill, in Grzmiąca	78-450 Grzmiąca
751.	39	Municipal waste landfill, in Trzesieka	Trzesieka, Municipality of Szczecinek
752.	40	Municipal waste landfill, in Przyt.Ognica	Przytór Ognica,

No.	No. of landfill in the Voivodship	LANDFILL NAME AND LOCATION	LANDFILL ADDRES
			72-065 Świnoujście
753.	41	Municipal waste landfill, in Świdwinek	Świdwinek II, 78-300 Swidwin
754.	42	Municipal waste landfill, in Człopa -Bogda.	Człopa-Bogdank, 78-630 Człopa
755.	43	Municipal waste landfill, in Mirosławiec	Mirosławiec, Municipality of Mirosławiec
756.	44	Municipal waste landfill, in Wałcz II	Wałcz II, 78-600 Wałcz
757.	45	Municipal waste landfill, in Kunowo	Kunowo, Municipality of Banie
758.	46	Municipal waste landfill, in Kłęby	Kłęby. Municipality Golczewo
759.	47	Municipal waste landfill, in Janiska	Janiska, Municipality of Kołobrzeg
760.	48	Municipal waste landfill, in Lepino	Lepino, Municipality of Sławoborze
761.	49	Municipal waste landfill, in Kołacz	Kołacz, Municipality of Połczyn Zdrój
762.	50	Municipal waste landfill, in Chrząstowo	Chrząstowo, 72-400 Kamień Pomorski
763.	51	Municipal waste landfill, in Recław	Recław, 72-510 Wolin
764.	52	Municipal waste landfill, in Sierakowo	Sierakowo, Municipality of Police