

*Matter for Discussion*

# **Waste Management Plans: Tools for Sustainable Development**

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## **Abstract**

Harmonizing economic and social aims with environmental protection is national environmental policy. The high-level goal of the policy in waste management is prevention, reduction, recovery and environmentally safe final treatment. The extensions of the Second National Environmental Policy are waste management plans, prepared and adopted on national, voivodship, powiat and commune level. The plans are a novelty in Polish law, for the first time the opportunity for sorting out waste management in Poland, a particularly municipal, has been created.

**Keywords:** waste management, plan, sustainable development.

## **Introduction**

In 2000 "The Second National Environmental Policy" [1] was prepared, and in 2001 was accepted by parliament. The document established environmental aims for 2010 and 2025. "The Second National Environmental Policy" was actualized by a more detailed document – the "National Environmental Policy for years 2003-06 with the perspective for years 2007-10" [2]. The document referred to priority strategies of the Sixth Environmental Action Programme of the European Community.

According to the Act of 27 April 2001, the Environmental Protection Law [3], the aim of national environmental policy is to create conditions necessary for environmental protection fulfillment. This means the national policy should be first of all the element of balance between economy and social development aims with the aims of environmental protection. Environmental aspects should be implemented obligatorily into policies of all spheres of the national economy and into development strategies and programmes at regional and local levels.

## **Waste Management in National Environmental Policy**

In national environmental policy waste management is regarded as a separate field of environmental protection and as a priority. Undertakings in this range in long-term perspective, besides ecological effects such as threats liquidation, can also bring measurable benefits such as recovery of raw materials and energy. Actions on waste begin with waste prevention, quantity reduction, and then recovery, treatment and, at the end, disposal. This hierarchy results from the Framework Directive on Waste [4], which was implemented into Polish law by the Act of 27 April 2001 on Waste [5].

As priority aims in the field of waste management in the "National Environmental Policy for years 2003-06 with the perspective for years 2007-10" were set up [2]:

- ratification of international conventions relating to waste management and Polish legislative adaptation to the requirements of these conventions;
- increasing the recovery (including recycling) level of industrial waste by the appropriate tax policy and system of environmental-use payments;

- constructing the basis for modern municipal waste management, ensuring the growth of recovery, and decrease of the quantity of disposed wastes, at least by 30% till 2006 and by 75% till 2010 (in relation to 2000);
- construction, in perspective 2010, the national system of hazardous waste treatment.

The most important and primary target, essential for achieving the aims mentioned above, is drawing up and adopting a national waste management plan and also plans at the voivodship, poviast and commune levels.

### Legislative Requirements for Waste Management Plans

The act on waste [5] obligates preparation of waste management plans on national, voivodship, poviast and commune levels. Voivodship, poviast and commune plans are sections of appropriate environmental protection program and therefore they should be created in the same way as environmental protection programs [6]. The procedure of adopting environmental protection programs was defined in the Act of Environmental Protection and the Introductory Act [7]. Likewise, environmental protection programs and waste management plans are prepared by appropriate authorities, approved and adopted afterwards. The Act on waste [5] indicates the entities responsible for preparing and adopting waste management plans. The draft of national waste management plan is prepared by Minister of the Environment and adopted by the cabinet, the draft of voivodship plan is prepared by voivodship marshal adopted by voivodship board, draft of poviast plan is prepared by starosta adopted by poviast board, commune plan is prepared by mayor, adopted by commune board. As waste management plans are sections of environmental protection programs, they should be adopted in the same time schedule, so the National Waste Management Plan should have been adopted by 31st October 2002 voivodship plans by 30th June 2003, poviast plans by 31st December 2003 and commune plans by 30th June 2004.

### The Scope of Waste Management Plans

The Act on Waste contains certain guidelines for preparing waste management plans, but circumstantial clarifications were set up in the executive ordinance on preparing waste management plans [8]. This ordinance defines precisely the form and scope of the waste management plans separately for voivodship, poviast and commune levels. However, the scope for all level plans could be generalized and it could be assumed that the waste management plan should describe:

1. Actual status of waste management.
2. Projected changes in the scope of waste management, including those resulting from population and industrial (commercial) changes.

3. Actions intended to improve the waste management situation.
4. The planned waste management system including collection, transport, recovery and treatment.
5. The types of projects and their implementation timetable as well as the entities responsible for their implementation.
6. Financial requirements: needed investments, operational costs and instruments for the realization of intended goals.
7. Monitoring and evaluation systems for the realization of intended goals.

Scopes of waste management plans at various levels are similar; however, each level should concentrate particularly on following types of waste: voivodship level on hazardous waste, poviast level on waste other than hazardous, commune level on municipal waste.

National as well as voivodship waste management plans according to the Act on Environmental Protection paragraphs 40-45 have to be put to the environmental impact assessment procedure [9]. Additionally, the executive ordinance on preparing waste management plans requires conducting the prognosis of environmental impact for voivodship plans. The Act on environmental protection does not anticipate the environmental impact assessment procedure for waste plans at poviast and commune levels, however, the ordinance on preparing waste plan requires the analysis of environmental impact for these levels [8].

Creating waste management plans is a multi-stage process which should include carrying out public consultations.

Waste management plans – localization proposals for waste management facilities have to comply with local physical development plans or to point out the introductory changes in the local physical development plans.

### Approval and Hierarchy of Waste Management Plans

All waste management plans should be prepared in accordance with national environmental policy, while the voivodship, poviast and commune waste management plans should be prepared in accordance with higher level plans [5]. This rule warrants the coherence and complexity of the planned activities in waste management. The entity which prepares the plan has to act in compliance with rules of a direct higher level plan as well as all plans on higher level. The drafts of waste management plans are sent to approval by higher as well as lower level entities:

- national waste management plan to voivodship boards,
- voivodship plans to Minister of the Environment, starostas, mayors,
- poviast plan to voivodship boards and mayors,
- commune plan to voivodship and poviast boards.

The act on waste specifies the time for issuing an opinion – 2 months. In the case of not delivering the opinion in two months time – it is regarded as issuing a

positive opinion. After positive opinions are obtained, the waste management plans are subject to decisions made by proper boards. Decision by voivodship, poviats or commune board, of adopting a waste management plan, which is incompatible with higher level plans, is in conflict with law and should be repealed [6].

The entities responsible for preparing waste management plans report on the realization of the plan once every two years. Additionally, waste management plans have to be updated not less than every 4 years.

### Legal Consequences of Waste Management Plans

Waste management plans do not make up the local law in contrast to physical development plans. They are rather action programs and they should not cause direct legal consequence in the sphere of rights and duties of external entities to authorities [6].

However, paragraph 29 of the Act on Waste [5] states that the entity will refuse to issue waste permission if the planned waste proceedings are incompatible with the waste management plan. Paragraph 16 of the Act on Waste states that only investments included in the waste management plan could be financed by environmental protection funds. Therefore, the waste management plan influences the situation of enterprises but it does not affect their legal status. The Act on waste [5] or the ordinance [7] do not define the consequence of not adopting waste management plan, however, in such a case starosta could not issue a waste permission or investments could not be financed by environmental protection funds.

### National Waste Management Plan

The National Waste Management Plan (NWMP) [10] was adopted on 29th October, 2002. NWMP contains aims essential for realizing the goals of the "Second National Environmental Policy" and the "National Environmental Policy for years 2003-06 with the perspective for years 2007-10" as well as the "Executive Programme to the Second National Environmental Policy" [11]. Therefore, the goal of the national waste management plan is defining the tasks necessary to ensure integrated waste management in the country, without harmful effect on the environment, taking into account current and future techniques, organizational possibilities, economy and the quality of existing infrastructure.

In the NWMP waste have been divided into three main groups:

- waste originating from municipal sector: municipal waste, packaging waste, municipal waste-water sludge;
- waste originating from industrial sector: industrial waste;
- hazardous waste originated from municipal as well as industrial sector.

Based on the facts concerning the current status of waste management in NWMP, it could be stated that waste in industrial sector is handled in a proper way, but the sector of municipal waste management needs to be sorted out. The Plan [10] concentrates particularly on following types of waste: biodegradable waste (kitchen waste, green waste, municipal waste-water sludge, waste paper and cardboard, wood and textiles), packaging waste, reconstruction (building), bulky and hazardous waste. The aims for these group of waste concentrates mainly on separate collection, limitation of disposed waste, recovery of packaging waste, separate treatment of bio-waste, bulky, building and hazardous waste.

### Lower Level Plans

All voivodship waste management plans have been already amended. But only three voivodships: Lubelskie, Podlaskie, Zachodniopomorskie amended waste plans till the legal deadline, i.e. 30th June 2003. Till 31st December 2003 waste plans were amended in 15 voivodships. The last voivodship waste management plan was amended on 29th April 2004 in Dolnoslaskie Voivodship [12]. A national database on poviats waste management plants does not exist. The information on waste plans on poviats and gmina level is only available at the marshal offices. In Malopolska Voivodship all poviats level plans have been amended so far. Most communes have already amended waste plans or are in the process of approving waste management drafts. A few of communes have not started yet the preparations of waste management plans.

### Summary

Waste management is one of the most important sections of environmental protection and should be regarded as a priority. Sorting out the waste management through introducing the complex system of management has an important significance for completing the sustainable development principle. The waste hierarchy consists of: waste prevention, quantity reduction and then recovery, treatment, if they are not justified - final disposal to landfill.

The perfect tools providing the waste problem solutions are waste management plans, prepared on four levels: national, voivodship (regional), poviats and commune (local). According to the principle that lower level plans should be in compliance with higher level plans, the aims adopted in the National Waste Management Plan should be accepted in all voivodship, poviats and commune level plans. It creates an excellent opportunity to unify the proposed waste management systems in different parts of the country and to adapt waste management in Poland to the requirements of National Environmental Policy, that is to the sustainable development principle.

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