

## Waste Audit Case Collection Form

Name of SAI	State Audit Office of the Republic of Latvia	
Title of audit	Performance audit “Municipal Waste Management Compliance with Planned Objectives and Legal Requirements”	
Publishing year	2015	
What risks/policy areas did the audit approach?	<ul style="list-style-type: none"> <li>• Are only reasonable and economically justified expenses included in the payment for waste management?</li> <li>• Has separate waste collection been ensured by authorities?</li> </ul>	
Main audit questions and corresponding criteria	<b>Audit questions:</b>	<b>Criteria:</b>
	1. Have local governments, by organizing municipal waste management, ensured that only reasonable expenses are included in the payment for waste management?	Waste management enterprise, owned by the local government, in the payment for waste management has included only technologically and economically reasonable expenses necessary for the effective provision of the service.
		If there is no possibility for waste managers to weigh the amount of waste on-spot, the amount of waste in volume units (cubic meters) has been declared as close as possible to the actual amount of waste, using methodology for conversion of waste from weight units (tons) to volume units (cubic meters), based on the previous experience or other assessment (for example, by technological process, expert assessment or in other way).
		Managers of municipal waste sorting lines (local governments and managers of waste landfills) payment for the disposal of municipal waste have applied only for the disposed waste (not including the sorted and recycled waste).
2. Have responsible institutions ensured that municipal waste managers, when organizing waste management, respect environmental requirements for municipal waste management?	By 2015, local government, in cooperation with waste managers, has established separate waste collection system (for paper, metal, plastic and glass).	Biological waste <sup>1</sup> is separated before its disposal in landfill.
		According to the Directive <sup>2</sup> by 16 July 2013 biodegradable municipal waste going to landfills must be reduced to 50 % of

<sup>1</sup> Biodegradable garden or park waste, household waste, food and kitchen waste from restaurants, catering establishments and retail premises, as well as other similar food-production waste.

<sup>2</sup> Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, Article 5, paragraph 2(b).

		<p>the total amount of biodegradable municipal waste produced in 1995.</p>
		<p>The State Environmental Service must periodically monitor the operations of waste managers in accordance with the waste management regulations and the relevant waste management permit, in particular as regards the origin, properties, quantity and destination of the collected and shipped waste.</p>
		<p>Municipal waste collected in the local government has been disposed only in the municipal waste landfill of the respective waste management region or has been handled to the respective waste transfer stations.</p>
		<p>Proportion between households having agreements for waste management and total households in local government.</p>
		<p>Annual Waste statistical data prepared by waste managers about the amount of waste collected is mutually coherent (for example, closing balance of the year 2012 corresponds to the opening balance of the year 2013)<sup>3</sup>.</p>
	<p>3. Has the Ministry of Environmental Protection and Regional Development, by coordinating implementation of the national waste management plan and drafting legal acts for waste management, ensured that in the agreements between local governments and waste managers, as well as in the agreements between waste managers and inhabitants only fair and clear rules should have been included for all parties of municipal waste management system?</p>	<p>During the audit the waste managers' agreements with the local governments included in the sample will be assessed with regard to the following recommendations of the Ministry:</p> <ol style="list-style-type: none"> <li>1) necessity to prepare an annual report by the waste manager on the progress, results and problems of waste management;</li> <li>2) rules and procedures for reviewing of the payment for waste management;</li> <li>3) procedures for informing inhabitants about changes in the payment for waste management;</li> <li>4) procedure for the transfer of information on agreements with inhabitants in cases of waste managers' changes.</li> </ol> <p>During the audit the waste managers' agreements with the local governments included in the sample will be assessed with regard to the following rules of legal acts:</p> <ol style="list-style-type: none"> <li>1) determining the procedure how waste manager shall coordinate with the local government the draft contracts with inhabitants;</li> <li>2) providing penalty to waste manager in cases when the agreement is not fully or partially fulfilled;</li> <li>3) determining the quality rules of the fulfilment of contract and measurable evaluation criteria.</li> </ol>

<sup>3</sup> Discrepancies greater than 2% are considered as significant.

It is planned to rely on the work done by the Consumer Rights Protection Centre, summarizing the conclusions on the consequences of the waste managers' actions in the cases when in the agreements with inhabitants there are not included fair and consumer interests protecting rules.

What were the data sources and how was data analysed?

Analysing data from the invoice databases of the waste managers (half million of entries per waste manager) by Data Analytics software (MS Excel) it was found that total of 3,6 million euro were overpaid in 44 local governments within 2,5 years (such overpayment was found because waste managers have applied an incorrect methodology for conversion from the volume units to weight units contrary to the actual situation, as well as by improperly charging the natural resources tax for disposal of waste not actually disposed in the landfill site, as a result of introduction of waste treatment lines).

For the question regarding the protection of consumers' interests and fair rules in agreements between municipal waste managers and inhabitants, the audit relied on the work done by the Consumer Rights Protection Centre. The Consumer Rights Protection Centre had conducted a research on the consequences of the waste managers' actions in the cases when in the agreements with inhabitants there were not included fair and consumer interests protecting rules.

See also Audit Design Matrix in attachment.

Conclusions and main recommendations

**Payment system of waste management in Latvia**



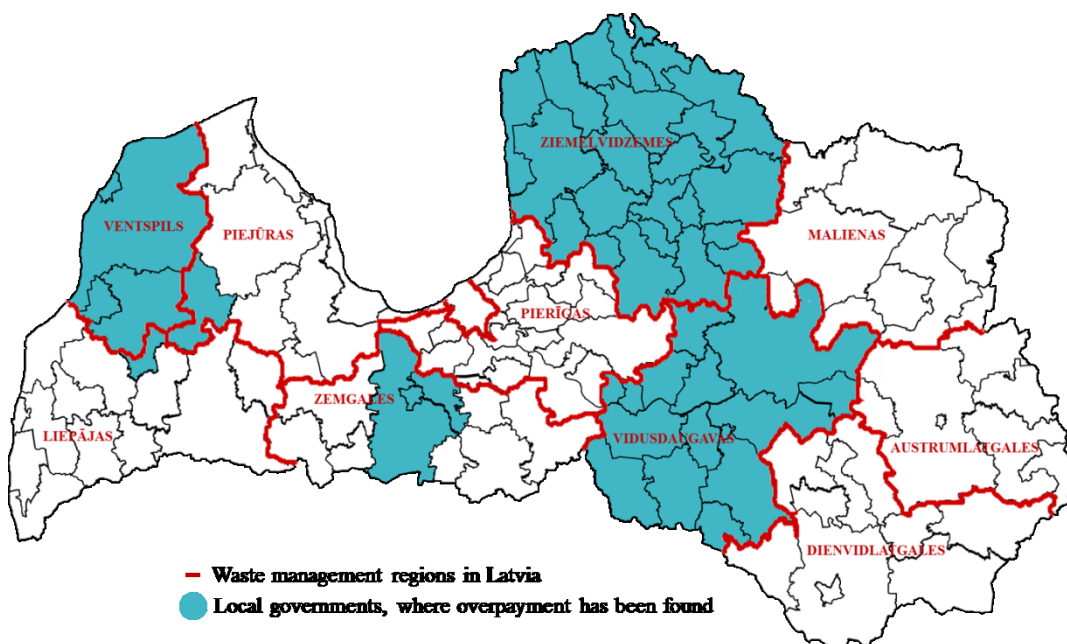
**Improper payments of waste management**

The SAO concluded that during 01.01.2012 - 30.06.2014 waste producers (including households) in 44 local governments have overpaid **3.6 million euro** for waste management service.

Such overpayment was established because waste managers have applied an incorrect methodology for calculation of the payment contrary to the actual situation, as well as by improperly charging the natural resources tax for disposal of waste not actually disposed in the landfill site:

- application of incorrect methodology for conversion from the volumes units to weight units has resulted in overcharge of 2 million euro from waste producers of 25 municipalities for disposal of actually non-existent waste in the landfill site;
- the amount of waste disposed in landfill sites were decreased as a result of introduction of waste sorting lines, but the amount of natural resource tax collected from waste producers, including inhabitants, remained at the previous level, thus waste producers of 44 local governments, including inhabitants, have overpaid the total of 1.6 million euro.

*Total of 3.6 million euro were overpaid in 44 local governments*



***Waste management agreements do not provide enough protection of interests of inhabitants and efficient organisation of waste management***

The agreements signed by local governments with waste managers and agreements signed by the waste managers with inhabitants in **most cases do not provide for protection of interests of inhabitants and ability to efficiently organise waste management in the territory of respective municipality.**

***More than half of households have not signed waste management agreements***

The local governments have not performed sufficient actions to ensure fulfilment of requirement of the *Waste Management Law* that inhabitants have to sign agreements for collection and transportation of municipal waste.

An average of 56% of individual households (in the local governments included in the sample) have not signed waste management agreements, which in practice means that the households which have not signed the agreements are either polluting environment, or are disposing their waste in containers of other inhabitants. This in turn means that inhabitants who have signed the agreements are forced to pay also for those inhabitants which have not signed the agreements.

***Separate waste collection system not established in one local government***

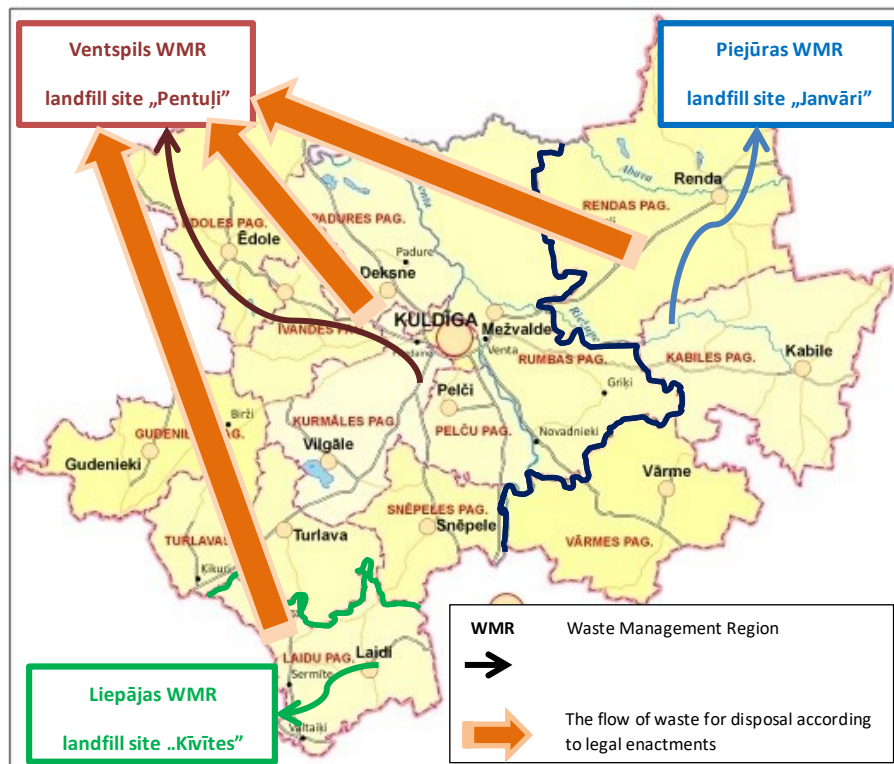
One local government has not supervised the agreements of management of municipal waste signed with waste managers concerning fulfilment of the provisions, as a result of which

inhabitants of the municipality are paying for the services of separately collected (sorted) waste management, which actually have not been received.

**Waste disposed in improper landfills**

According to the national regulation municipal waste should be disposed in the municipal waste landfill site associated with the corresponding waste management region. In one local government the produced waste was transferred to only one landfill site although waste from different areas had to be disposed in three various landfill sites, thus **endangering sustainable operations of the landfill sites.**

*Split of Kuldīgas municipality in waste management regions and landfill sites associated with regions*



**Impact of Audit (by implementing Audit recommendations):**

- Amendments of Waste Management Law have been adopted (clarification of the calculation process for the payment of waste management);
- Payments of waste management have been revised;
- Increase of households who have signed waste management agreements;
- Separate waste collection system has been established;
- Waste is disposed in proper landfills.

**INNOVATE and thus – STAY RELEVANT!**

**Demonstrate our relevance to the country and its people by calculating financial, consumer and economic benefits of audit recommendations**



**Our audit is completed only, when real changes in our country and lives of our citizens are achieved!**

<p>Which of the following aspects are covered in the audit and you can provide case?  (select all that apply)</p>	<p>Sustainable Development Goals, International Conventions, EU Directives related to waste management</p>	<p>National legal instruments (description of instruments, weakness in legislation and regulation, incoherence of acts)</p>	<p>Economic Incentives in waste management (i.e. charges, taxes, subsidies)</p>	<p>Mapping out the actors of waste management and their responsibilities</p>	<p>Methods of collecting and analysing data</p>	<p>Cooperative audit</p>
		<p>X</p>	<p>X</p>	<p>X</p>	<p>X</p>	
<p>Challenges and risks</p>	<ul style="list-style-type: none"> <li>• Be careful to take audit criteria from scientific workbooks (especially outdated and taken from the experience from other countries), because sometimes it will not correspond to the actual situation in your country;</li> <li>• Limited availability of independent experts to support audit findings;</li> <li>• Limited financial and human resources;</li> <li>• Limited assessment can be made when there are newly approved waste management plans (no objectives should have been met yet);</li> <li>• No channels for usage of the recycled waste (especially for RDF (fuel produced from solid waste) – sustainability issue;</li> <li>• Comparison of waste management fees in different municipalities – carefully, because varied package of services are covered under waste management fees;</li> <li>• Considering to examine all components of waste management fee during the audit to give the overall opinion of the approved fee;</li> <li>• Separate waste collection – really free of charge or expenses included in the waste management fee?</li> </ul>					
<p>Link to audit report</p>	<p><a href="http://www.lrvk.gov.lv/uploads/Majaslapa%20ENG/Audit%20report/2014/2.4.1-14_2014/informativais-zinojums_06-02-final-eng.pdf">http://www.lrvk.gov.lv/uploads/Majaslapa%20ENG/Audit%20report/2014/2.4.1-14_2014/informativais-zinojums_06-02-final-eng.pdf</a></p>					

Other relevant information and comments	-
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**Specifying questions and comments**

**Question:**

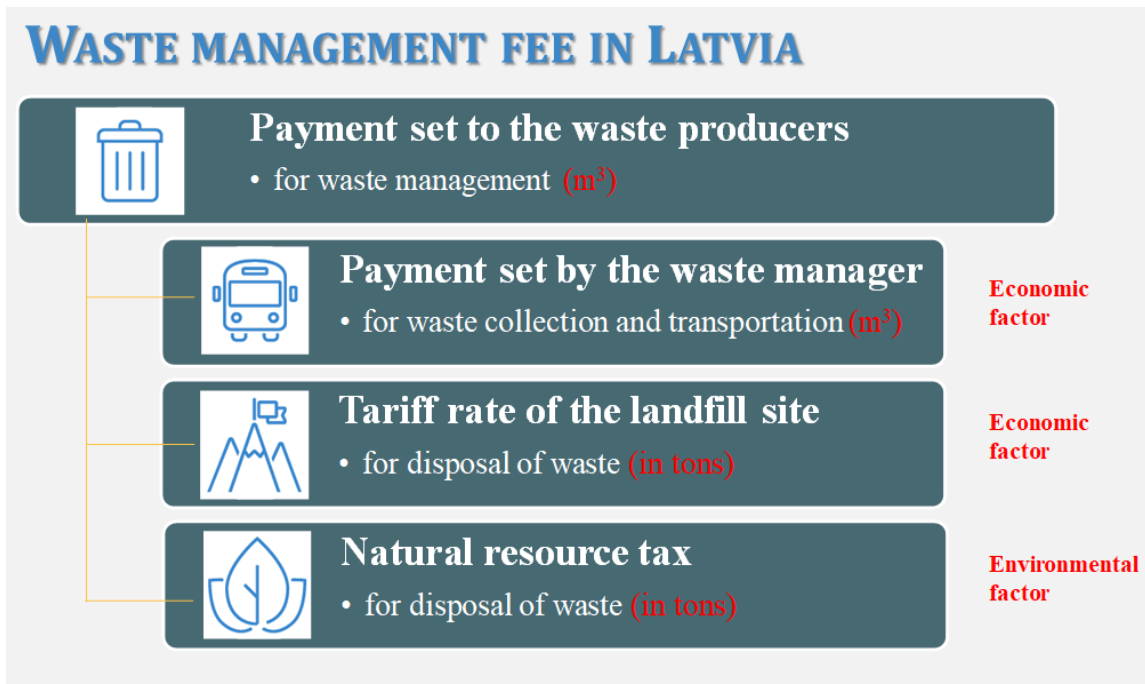
What economic incentives were included in audit/were part of audit scope? What you can recommend to other SAI-s regarding auditing economic incentives?

**Answer:**

In our audit we checked whether only reasonable and economically justified expenses have been included in the payment for waste management.

According to the payment system of waste management in Latvia there are two economic factors and one environmental factor (natural resource tax) included in the payment for waste management (see the picture below).

**Payment system of waste management in Latvia**



It means that the first two components should be economically justified – that is, payments should be based on actual costs.

Regarding the environmental factor – this payment is set as an incentive to reduce waste landfilling and financing different environmental programmes.

Natural resource tax (or sometimes also called as landfill tax) is a good economic incentive to reduce amounts of waste disposed in landfill sites, such as this one, because this tax affects every waste producer’s pocket, that means, pocket of any of us.

There is a visible relationship – the higher is the natural resource tax and, therefore, also the overall waste management fee, the more people are aware about options and willingness to reduce the payment.

One option to reduce waste management fee is to separate waste into different categories at home.

Other option to reduce waste in landfills is to install mixed waste sorting facilities, such as this one, besides landfill sites.

During the audit we found that several waste sorting facilities have been installed besides landfill sites, which have led to significant (at least two times) reduction of waste disposed in waste landfill sites.

Although waste disposed in landfill sites has reduced as a result of operation of mixed waste sorting facilities, the managers of waste sorting lines were still charging natural resource tax for the entire amount of waste – also for the waste not disposed in the landfill site as a result of waste sorting. According to our national law, the natural resource tax should be imposed only on the disposed waste.

As a result of the audit, after two years and intensive discussions with industry players, amendments of the Waste Management Law have been adopted. Amendments clarify the calculation process for the waste management fee, demonstrating the economic benefits of introduction of waste sorting facilities also to inhabitants.

Regarding recommendations to other SAI-s for auditing economic incentives, please see the next answer on challenges and risks when **auditing waste management fee**.

**Question:**

How did you try to overcome the challenges and risks which appeared during audit? i.e lack of independent experts, creating criteria, auditing waste management fee.

**Answer:**

Challenges and risks and how to try to overcome them:

- 1) Lack of independent experts – filtering experts' opinions (professional judgement) and try to make independent analysis on our own to support findings;
- 2) Creating criteria – be careful to take audit criteria from scientific workbooks/manuals (especially outdated and taken from the experience of other countries), better try to formulate audit criteria using the terms like “corresponding to the actual situation” etc.

For example, in Latvia many waste managers in order to calculate waste management fee for conversion from tons to cubic meters have used the waste volume – mass conversion factors summarised in *the Manual for Application of Factors in Accounting of Municipal Waste by Conversion from Volume to Weight Units* (developed in 2002 and based on Finland's experience), where a factor of 0,2 is set for mixed non-pressed municipal waste, thus assuming that one cubic meter of waste corresponds to 200 kilograms of waste. The audit results showed that this conversion factor significantly differs from the actual situation (from the measurements and observations based on the actual experience, i.e., what was the real weight of one cubic meter of waste).

It is very important to calculate conversion factor from tons to cubic meters, if the waste management fee is invoiced in cubic meters while waste has been weighted totally only on the landfill site.

- 3) Auditing waste management fee:
  - when comparing waste management fees in different municipalities, take into account if varied package of services is covered under different waste management fees;
  - consider to examine all components of waste management fee during the audit to give the overall opinion on the approved fee and avoid possible disputes that overpayment in one component is compensated by underpayment in other component of the fee;
  - when examining separate waste collection system, consider to examine if it is really free of charge or, these expenses are still included in the waste management fee.