

## Questionnaire according to Commission Decision 2000/738/EC for the report of the Member States on the transposition and implementation of Directive (99/31/EC) on the landfill of waste

<b>Please provide the following contact information and complete the grey text boxes:</b>	
<b>Institution/Organisation you are representing</b>	Ministry of Agriculture, Natural Resources and Environment – Department of Environment
<b>Country your Organisation is representing</b>	CYPRUS
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<p><b>Support</b></p> <p>Should you have any questions please do not hesitate to contact us. The best way to contact us is via our functional email address: <a href="mailto:estat-waste-statistics@ec.europa.eu">estat-waste-statistics@ec.europa.eu</a></p> <p>Please specify your contact details and indicate what your question is about: e.g. registration in CIRCA, use of the eDAMIS system, waste concepts.</p> <p>With kindest regards, the Waste Data Centre Team at Eurostat EUROPEAN COMMISSION - Eurostat - Environment Statistics L-2920 LUXEMBOURG <a href="http://ec.europa.eu/eurostat/waste">http://ec.europa.eu/eurostat/waste</a></p>
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<p><b>Submission</b></p> <p>The submission is due the 30. September 2010.</p> <p>Please send the completed questionnaire to EUROSTAT via eDAMIS.</p> <p>For more information how to submit the completed questionnaire via eDAMIS see: <a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/reporting#reporting">http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/reporting#reporting</a></p>
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**There is no need to repeat information already supplied but please indicate clearly where and when that information was provided.**

<p><b>I. Transposition into national law</b></p>
<p><b>1. What are the current laws and regulations in force to transpose the Directive into national law? For those Member States where regional entities have responsibilities in making provisions on landfills, these provisions also need to be sent. Please indicate precisely where each provision of the Directive has been transposed.</b></p>
<p>The directive was transposed into national law as Regulations and a Ministerial Decree, under the Solid and Hazardous Law. The Regulations carry the title “The Solid and Hazardous Law Regulations (Landfills) Regulations of 2003” (562/2003 and the amendment 618/2007) while the decree “Setting of Criteria and procedures for the acceptance of waste at Landfills decree of 2007” (282/2007)</p>

**2. Give general information on the use of collected landfill gas to produce energy including the measures to minimise damage to or deterioration of the environment and risk to human health through collection, treatment and use of landfill gas.**

Collection of landfill gas

- a) At the landfill that is in operation already, in the district area of Paphos, there is a provision the biogas that would be collected to be burnt on site by a controlled flaring combustion. However the quantities are not yet enough to justify the use of a flare.
- b) The landfill that is under construction, in the district areas of Larnaca and Ammochostos, is fully compliant with the provisions of the directive. The collected biogas will be burnt on site by a controlled flaring combustion. As the organic material from the domestic waste is separated, stabilized and used as a substitute for the covering soil, the quantities of the collected biogas are not expected to be high. However, there is a provision for future use of it, if the quantity and quality justify this, for energy production.
- c) For the uncontrolled landfills that were closed in the district of Paphos and also the ones that will be closed in the next two years in the districts of Larnaca and Ammochostos, there was a study for their rehabilitation and after care. The rehabilitation works include among other and the sealing of landfills and collection of biogas. The studies revealed that in most of the landfills the quantity and quality of biogas does not justify the utilization of biogas for the production of energy.

Measures to minimize environmental impacts

- a) Where the quantity is limited, a relief of biogas through windows will be followed in the atmosphere,
- b) Where the amount is enough to justify it, that will be controlled by flaring combustion and
- c) Where the amount of collected biogas is significant then its use for energy production (one or two landfills) will be followed.

**3. Give a general description of the measures provided to minimise nuisances and hazards pursuant to Annex I, Section 5?**

For the one landfill that is operated under the provision of the directive there is a complete and detailed monitoring system in place to check and control and minimise to the least any nuisances and hazards described in Annex I, Section 5. For the landfill under construction all these parameters were taken in consideration during the preparation of the Environmental Impact Assessments study and all the measures needed to be followed will be part of the permit terms.

**4. Have lists or criteria been set for waste to be accepted or refused at each landfill class? If yes, have these lists or criteria as well as the limit values and analysis methods been sent to the Commission?**

**YES/YES they were sent to the Commission. (Ministerial Decree 282/2007)**

**5. Supply information on the collection method for meteorological data as referred to in Annex III, Section 2.**

The collection of meteorological data at the landfill constructed and operated in the district of Paphos is done through a meteorological station set up at the site. The data measured and the collection frequency are the ones indicated in Annex III, section 2. The same procedure will be followed for the new landfill that has been constructed in 2009 and operated in 2010. This new landfill covers the districts of Larnaca and Ammochostos

**6. Give a short description of the general system for the monitoring of leachate, surface water and potential gas emissions and atmospheric pressure as referred to in Annex III, Section 3.**

The landfill in operation (Paphos) and the landfill under construction (Larnaca/Ammochostos) are designed to include:

- a) at least one bore hole at the groundwater inflow region and two bore holes in the outflow region to monitor groundwater
- b) at least one sampling point (pit) upstream and one downstream of the landfill site to monitor surface water
- c) surface water collection system on the landfill site and parametrically is installed

- d) According to the landfill topography, gas bore holes will be installed not only on site but at near-by areas also.

**7. Give general information on landfill sites for which the measurement of volume and composition of surface water provided in Annex II, Section 3 was deemed not to be required.**

The landfill in operation and the landfill under construction include monitoring of surface water upstream and downstream. There, however, certain periods of the year, like summer months where the temperature is very high and there is no raining, that the no need for such measurements

## **II. Implementation of the Directive**

**1. Have the Member States made use of the option provided in Article 3(3) (non-hazardous waste other than inert waste from prospecting and extraction, treatment and storage of mineral resources as well as from the operation of quarries)? (Yes/No)**

**NO**

**If yes, please give details of these exemptions.**

<b>2. Have the Member States made use of the option provided in Article 3(4) (islands and isolated settlements)? (Yes/No)</b>	<b>NO</b>																
If yes, please give details of these exemptions, including information on the quantities and, where possible, the types of waste going to such exempted sites.																	
<b>3. Have the Member States made use of the option provided in Article 3(5) (underground storage)? (Yes/No)</b>	<b>NO</b>																
If yes, please give details on the storage facilities, the exemptions and information on the quantities and, where possible, the types of waste going to such exempted sites.																	
<b>4. (a) Has the national strategy for the reduction of biodegradable waste going to landfills pursuant to Article 5(1) been developed and notified to the Commission? (Yes/No)</b>	<b>YES</b>																
If no, please state the reasons why.																	
<b>(b) Give an indication of which wastes are classified at national level as biodegradable waste and which wastes as biodegradable municipal waste.</b>																	
Biodegradable municipal waste includes paper, kitchen waste and gardening. Biodegradable waste in general includes also manure and agriculture by-products.																	
<b>(c) Indicate the experiences made with the practical application of the strategy.</b>																	
The requirements set out in the Waste Management Strategy regarding the reduction of municipal biodegradable waste in landfills will be applied by next year (2010) when the first Integrated Municipal Waste Management Unit in Cyprus will be set in operation. This unit will separate the biodegradable fraction in the mixed domestic waste and, where is possible, convert it into compost otherwise neutralize it and use it as a substitute for the soil in landfilling.																	
<b>(e) Indicate the amount of biodegradable municipal waste and other biodegradable waste (both in tonnes, if possible broken down in waste streams) going to landfills for each year of the reporting period.</b>																	
Up to the year of 2009 all municipal biodegradable waste was going to landfills. As information is available on municipal waste composition only for the year 1993 and not for the year 1995, Cyprus will use those figures to calculate its targets. In the calculation of biodegradable waste paper/carbon is included along with green waste (waste from gardens, parks, streets) and the organic material from households. According to the information from 1993, 71% is consider to be biodegradable:																	
<table border="1"> <thead> <tr> <th>Composítion</th> <th>t/y</th> <th>percentage %</th> <th>25% Diversion by 16.07.10 for biodegradable</th> </tr> </thead> <tbody> <tr> <td>Glass</td> <td>11.000</td> <td>3</td> <td></td> </tr> <tr> <td>Paper/Carbon</td> <td>92.200</td> <td>25</td> <td>23.050</td> </tr> <tr> <td>Metallic</td> <td>14.800</td> <td>4</td> <td></td> </tr> </tbody> </table>		Composítion	t/y	percentage %	25% Diversion by 16.07.10 for biodegradable	Glass	11.000	3		Paper/Carbon	92.200	25	23.050	Metallic	14.800	4	
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Glass	11.000	3															
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Plastic	47.900	13	
Green	40.600	11	10.150
Biodegradable	129.100	35	32.275
Inerts	33.200	9	
<b>Total</b>	<b>368.800</b>	<b>100</b>	<b>65.475</b>

	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>Total municipal waste</b>	537 265	548 707	568 473
<b>Recycle paper/carbon</b>	9 984	16 471	25 425
<b>Biodegradable landfilled</b>	<b>371 474</b>	<b>373 110</b>	<b>378 190</b>

**(f) Which adaptations of the strategy are envisaged?**

From the provisions of the strategy referred in landfills and the reduction of biodegradable for landfilling the following were envisaged:

- One landfill was constructed and operated, one was under construction and two are at the stage of tendering (four landfills are required according to the strategy)
- Separate collection at source was promoted at households, from the collective system created under the packaging directive. The System was also authorised to collect and material other than packaging as far as the stream of paper/carbon is concerned.
- Also, all necessary studies are on going for the establishment of a green point network (collection points for the depositing of various waste streams out of households – bulky waste, green, textile, furniture, weee, etc)
- One Intergraded Municipal Waste Management Unit is under construction and will be in operation in 2010 (out of the four mentioned in the strategy). This Unit is designed in a way that a high separation of recycled and biodegradable material is achieved. Two more such units are at the stage of tendering
- Preparation of studies regarding the rehabilitation/restoration of the old non approved landfills which are closed at the area of Paphos.
- Preparation of studies regarding the rehabilitation/restoration of the old non approved landfills which are to be closed at the area of Larnaca and Ammochostos.
- A study was launched in 2007 regarding the development of a hazardous waste unit where a landfill was included. Following the study institutional structures were put in place, such as Technical Committees and a Ministerial Committee, to follow the implementation of the development including the possibility for EU financing.

**5. Indicate the number of existing landfills:**

	Landfill for hazardous waste	Landfill for non-hazardous waste	Landfill for inert waste	Others (*)	
Total number of existing landfills	1**	104	2	11*	
Number of these landfills complying with the directive		1			
Number of landfills closed (no more depositing) since 16 July 2001		71			
Number of landfills re-equipped					
Rest capacity (tonnes)		Unable to estimate	Unable to estimate	Unable to estimate	
(*) where necessary, until the end of the transitional period; specify the type of landfill * closed landfills for mixed municipal waste that are now used only for green waste, and waste from demolition, construction and excavation ** The landfill was constructed before the publication of the directive.					

**6. What measures have been taken to ensure that the provisions of Article 10 concerning the costs of landfilling are met?**

The article 10 is transposed into the national law as a regulation (regulation no 14) in the Regulations 562/2003 (see point 1, part D). According to this regulation 14 the amount charged by a landfill (landfill fee) must be approved by the competent authority and have also the positive opinion of the local authority, in the area of which the landfill is constructed and operated.

**7. Give a general description of the measures provided to avoid adverse environmental effects of the closed landfills pursuant to Article 13?**

According also to the national legislation, the operator is obliged to follow all the provisions of the article 13

**8. Give a short description of the planning procedure for landfills with regard to Annex I, Section 1 (location of the landfill).**

The criteria set out in Annex I were taken into consideration at the stage of selecting the most appropriate location for the construction of a landfill (district of Paphos and the districts of Larnaca/Ammochostos). All the parameters taken into consideration were evaluated using a Multicriteria Decision Support System together with GIS system.

**9. Give a general description of the technical measures provided to ensure that the requirements of Annex I, Section 2 (water control and leachate management) are met.**

See point 6 in part I.

**10. Have general or specific requirements as set out in Annex I been provided for inert waste landfills?**

There are no inert waste landfills complying with the directive yet. However all requirements of Annex I will be taken into consideration when such new landfills will be constructed.

<b>11. Have the requirements set out in Annex I, paragraphs 3.2 and 3.3 been reduced for certain landfills? (Yes/No)</b>	<b>NO</b>
<b>If yes, give general information on these landfills.</b>	