



# ***Decrease in the Number of Operated Landfills and Upgrading of their Technical Level in Years 1991-2009***

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- ✚ **Act No 238/1991 Coll. on wastes**
- ✚ **Order of MoE SR No 19/1996 – waste catalogue**
- ✚ **Governmental Regulation No 606/1992 Coll. on waste management**
  - Established requests for construction of three classes of landfills (1,2 a 3)
  - Thickness of natural geological barrier, mineral insulation, plastic foils
  - Distance from the landfill bottom to the maximum (100-year) groundwater level min. 1m
  - Drainage of leachate, surface water draining, landfill gas management
  - Underground water monitoring
  - Maximal available concentrations of chemicals in water leachate for individual landfill construction classes
  - Specified wastes not suitable for landfilling
- ✚ **Directive of the MoE SR S – 1/1993 on assessment of existing landfills**
- ✚ **Act No 127/1994 Coll. on EIA.**
- ✚ **During 1997 – 1998 first technical standards STN 83 81 01-05 on landfills were published**



In 1992 in Slovakia 686 landfills were permitted

Survey of number of landfills fulfilling requirements of valid legislation and landfills operated under special conditions (source: State of Environment Report of the Slovak republic 1994 – July 31st., 2000)

Year	1994	1995	1996	1997	1998	1999	31.7.2000	1.8.2000
Landfills under special conditions	408	436	424	416	429	362	159	0
Landfills meeting legislative conditions	31	102	114	124	139	141	141	141
Number of operated landfills	617	538	538	540	568	503	300	141
<i>Operated not assessed</i>	178							



It is expected that **till the end of 2007 the Act on Environmental Burden will be adopted**, that will solve problems of closed landfills where above all hazardous industrial wastes were landfilled. These wastes damage individual environmental components and they do not underlie the waste legislation because in the time when it was adopted they were not under operation.

Till the end of 2007 **Register of Environmental Burden** will be prepared.

The **State Decontamination Plan** for 5 year period will be adopted – preferably the areas with the highest environmental risks will be decontaminated.



**Number of operated landfills in SR before Act No 223/2001 Coll. coming into force :**

Landfill class	Landfills with special designation	Landfills of the 3rd construction class	Landfills of the 2nd construction class	Landfills of the 1st construction class	N° of landfills in SR
N° in 2001	6	133	5	21	165



***Act No 223/2001 Coll. On wastes***

***Order of MoE No 284/2001 Coll. - Wastes Catalogue***

***Order of MoE 283/2001 Coll. Implementing Directive  
1999/31/EC on landfills of wastes***

determines maximal available filtration index of geological insulation and its minimal thickness, in contrary with the previous legislation, for new landfill classes:

- **landfills for inert wastes**
- **landfills for non-hazardous wastes**
- **landfills for hazardous wastes**

and determines compulsory thickness and type of plastic foil (HDPE)

**Number of operated landfills in 2002 – 2006 and estimation in 2009 according available sources**

	2002	2003	2004	2005	2006	estimation 2007	estimation 01.01. 2009
Landfills for hazardous wastes	16	15	13	12	13	13	10
Landfills for non-hazardous wastes	119	124	131	130	131	122	72
Landfills for inert wastes	19	21	21	19	17	14	9
<b>Number of operated landfills in SR</b>	<b>154</b>	<b>160</b>	<b>165</b>	<b>161</b>	<b>161</b>	<b>149</b>	<b>91</b>

## Municipal Waste

In 2005 in SR municipal waste was landfilled into **121 landfills**.

**Till 2008 app. 50 of them will be closed.**

Operating – 71 – one per district

**For majority of municipal landfills the small amount of landfilled wastes are characteristic :**

Amount of landfilled wastes in tons per year	Less than 10 000 t/y	10 000 - 50 000 t/y	50 000 - 100 000 t/y	100 000 - 200 000 t/y
Number of landfills with municipal waste	65	48	4	4

**Free (built and planned) capacities of landfills in Slovakia on 01.01. 2006  
(expert estimation):**

Landfills for inert wastes in m <sup>3</sup>	Landfills for non-hazardous wastes in m <sup>3</sup>	Landfills for hazardous waste in m <sup>3</sup>	Total free capacities of landfills in m <sup>3</sup>
11 784 366	25 015 103	3 540 020	40 339 489

According data shown in evidence letters filled in by operators of landfills, in 2005 **3 635 504 t wastes**, of it **145 396 t hazardous** were totally landfilled.

According data of Statistical Office of the Slovak Republic in 2005 **1 226 570 t of municipal wastes** were landfilled.

Municipal wastes form app. one third of all landfilled wastes in SR. If the amount of landfilled wastes were not lowered the capacities for non-hazardous wastes were sufficient only for ten years.



SLOVENSKÁ AGENTÚRA ŽIVOTNÉHO PROSTREDIA

# Thank you for your attention.

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