



MINISTRY OF THE ENVIRONMENT OF THE SLOVAK REPUBLIC



**STATE OF THE ENVIRONMENT REPORT
SLOVAK REPUBLIC 2006**





Fire is every undesirable burning, by which damages of property or environment emerge, or which results in death or injured person or killed animal; fire is also undesirable burning, which endangers lives or health of people, animals, property or environment.

§ 2 par. 1 letter a/ of the Act No. 314/2001 Coll. on Prevention from Fires

• NATURAL AND TECHNOLOGICAL HAZARDS

Accidental deterioration of water quality

In 2006, there was an increased number of occurrences that deteriorated the quality of surface and ground water. SEI alone registered 151 of emergency deteriorations or threats to water quality (EDW).

Special declination or quality menace of water of the SR in the years 1993-2006

Year	EDW recorded by SEI	Special deterioration of water					
		Surface			Ground		
		Total number	Watercourses and basins	Water courses	Total number	Pollution	Endangerment
1993	142	95	3	12	47	10	37
1994	121	82	5	7	39	10	29
1995	129	73	5	11	56	8	48
1996	117	71	1	10	46	7	39
1997	109	63	0	6	46	14	32
1998	117	66	2	1	51	10	41
1999	98	61	2	9	37	3	34
2000	82	55	2	9	27	3	24
2001	71	46	1	4	25	1	24
2002	127	87	1	6	40	5	35
2003	176	134	2	3	42	0	42
2004	137	89	1	10	48	11	37
2005	119	66	2	5	53	2	51
2006	151	94	0	3	57	6	51

Source: SEI

In 2006 again, in terms of hazardous compounds (HC), deterioration of water quality was caused mainly by crude oil compounds in 69 cases (45.7 %), waste water in 28 cases (18.5 %), and in 22 cases (14.6 %) no contaminant was detected. Livestock excrements in 14 cases (9.3 %), insoluble substances, caustic alkali, pesticides, and other toxic substances have smaller impact on EDW.

Progress in number of EDW according to the sort of HC in the years 1994-2006

Sorts of water deteriorative substances	1994	1996	1998	1999	2000	2001	2002	2003	2004	2005	2006
Oil substances	63	69	61	54	33	40	64	59	70	63	69
Alkalis	3	5	3	5	2	2	5	3	1	0	3
Pesticides	1	1	3	1	0	0	1	0	3	0	2
Excrements of farm animals	9	14	3	7	5	4	9	21	15	14	14
Silage fluids	0	1	0	2	4	0	2	1	1	0	0
Industrial fertilisers	0	0	0	0	0	0	0	1	0	0	0
Other toxic substances	5	1	0	6	12	5	3	3	0	4	4
Insoluble substances	4	4	7	1	5	2	6	11	3	4	3
Waste water	6	6	17	6	10	10	17	35	20	10	28
Other substances	13	9	6	4	2	1	3	7	10	8	6
Water detrimental substances impossible to determine	17	7	17	12	9	7	17	35	14	10	22

Source: SEI

In 2006, there was 1 EDW outside the Slovak territory, in Austria. Foreign nationals caused 13 EDW in Slovakia. Two EDW were caused by ship transport. Other EDW were caused by vehicle transport subjects.

Just like in the previous years, in 2006, human factor and poor technical condition of equipment or facilities for hazardous substances were the most frequent causes for EDW. High number of EDW was caused by transport (38) and transfer of hazardous substances (6).

Accidental deterioration of air quality

In 2006, Air Protection Inspectorate Division of SEI, recorded eight events that caused deterioration in air quality. Causes for EDW included insufficient tightness on supply pipes (2), extremely low ambient air temperature (2), malfunction of electro-engine of the suction devise, fire, and faulty manipulation at HCL compaction. Only one incident is still under investigation.

Fire risk

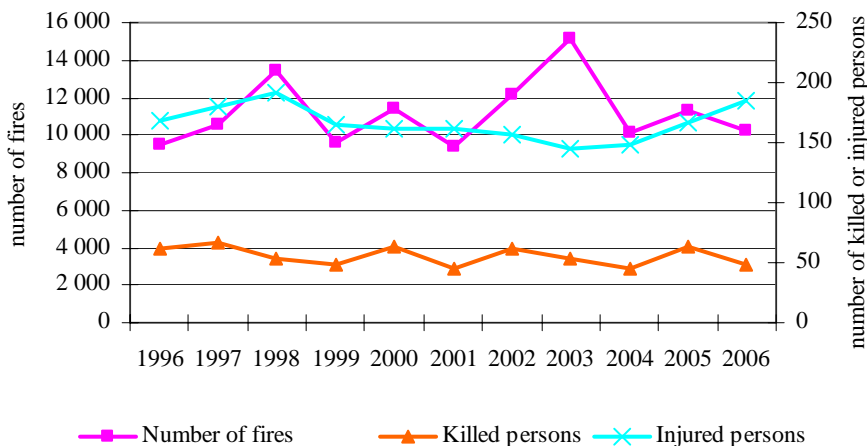
In 2006 were documented in the SR **10 260** fires, causing 49 casualties and 185 injured. Direct material damage reached 817 053.5 thous. SKK, while the volume of preserved values was calculated at 3 231 641 thous. SKK.

Compared to previous years, greatest number of fires originated surprisingly in the **household sector** – 1 830, with direct material damage amounting to approximately 134 713 400 SKK. In total, they resulted in 38 deadly casualties and 120 injured people. In terms of fire statistics, **agriculture** shows the second greatest



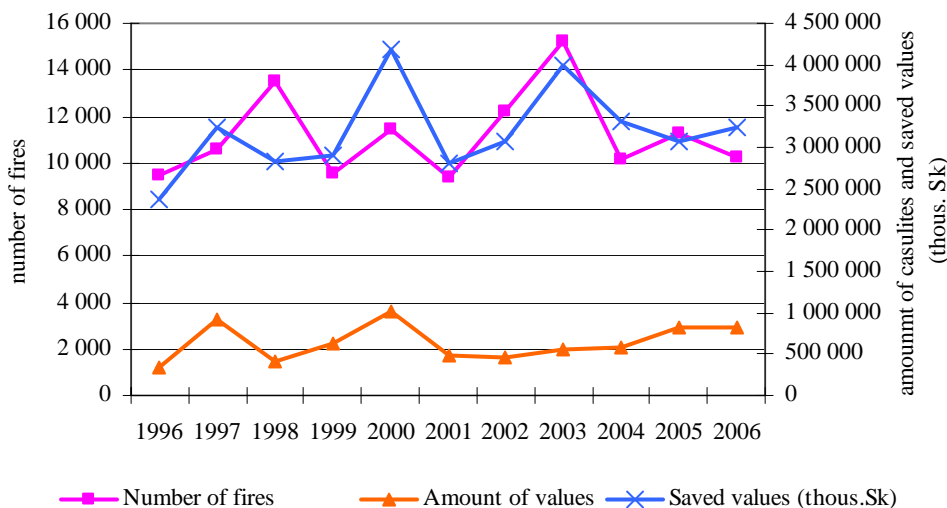
number of fires – 1 552, occasioning direct material damage at 47 100 200 SKK, killing 2 persons, and injuring 3. Least number of fires was recorded in the **commercial** sector, with 138 direct material damage events, totalling 91 011 900 SKK. Overall situation in fires in Slovakia in 2006 shows **lower** numbers **by 1 034**, compared to 2005. Material damage; however, was **greater by 3 558 600 SKK**.

Relationship between number of fires and number of killed or injured persons in 1995-2006



Source: FPRS MoI SR

Relationship between number of fires and number of casualties or amount of saved values in 1995-2006



Source: FPRS MoI SR

Floods

In 2006, there were 512 municipalities affected by floods. 11 420 inhabitants felt the aftermath of the floods, including 915 persons who had to be evacuated. 75 inhabitants temporarily lost their houses. 97 persons were rescued by rescue activities, 1 person died.

Total cost and damages by floods in the SR in 2006 amounted to 2 799.644 thous. SKK, including the rescue costs of 180.348 mil. SKK, and safety works of 193 398 thous. SKK.

Material damage amounted to 1 442 988 thous. SKK, including the damage to the State property at 236 550 thous. SKK, and damage to private citizens' property was 123 203 thous. SKK, and damage to municipal property was 324 506 thous. SKK, damage to higher territorial governing units was 250 990 thous. SKK, and damage to other subjects was 507 739 thous. SKK. Flood prevention construction measures at water courses were damaged, resulting in damages at 982 910 thous. SKK.

Floods aftermath over the period of 1999-2006

Year	Number of flood stricken residential areas	Flooded Territories (ha)	Damages by floods (mil. SKK)	Costs (mil. SKK)		Total costs and damages (mil. SKK)
				Rescue activities	Maintenance and safety activities	
1999	682	181 433	4 460.90	58.30	65.10	4 584.30
2001	379	22 993	1 960.60	57.10	32.10	2 049.80
2002	156	8 678	1 525.70	58.10	50.10	1 639.90*
2003	41	744	43.90	5.69	4.20	53.79
2004	333	13 717	1 051.80	37.23	102.93	1 191.96
2005	237	9 237	800.46	67.82	80.64	948.92
2006	512	30 730	2 425.90	180.35	193.4	2 799.64

* including also the sum of 6.0 mil. SKK – cost of anti-mosquito chemical spray treatment

Source: MoA SR, MoE SR