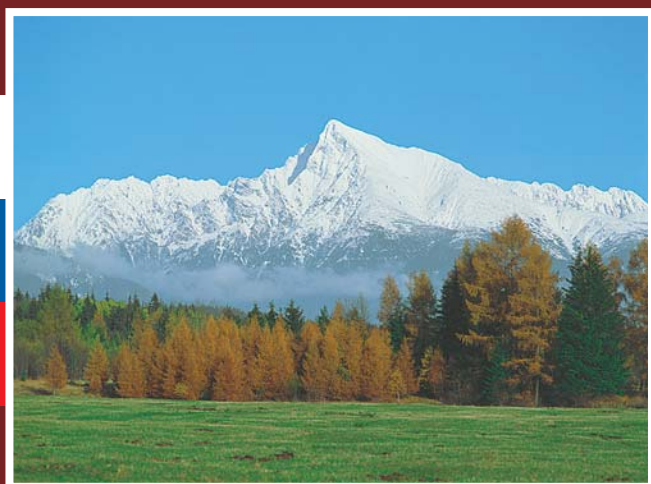


***Ministry of the Environment
of the Slovak Republic***



***STATE OF THE ENVIRONMENT
REPORT
SLOVAK REPUBLIC 2007***



***Slovak Environmental
Agency***





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 2007, there was an increased number of occurrences that deteriorated the quality of surface and ground water. SEI alone registered 157 of emergency deteriorations or threats to water quality (EDW).

Special deterioration or quality menace of water of the SR in the years 1994-2007

Year	EDW recorded by SEI	Special deterioration of water					
		Surface			Ground		
		Total number	Watercourses and basins	Water courses	Total number	Pollution	Endangerment
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
2007	157	97	1	4	60	4	56

Source: SEI

In 2007 again, in terms of hazardous compounds, deterioration of water quality was caused mainly by crude oil compounds in 76 cases (48.7 %), waste water in 24 cases (15.2 %), and in 26 cases (16.5 %) no contaminant was detected. Livestock excrements in 12 cases (7.6 %), 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 1994-2007

Sorts of water deteriorative substances	1994	1996	1999	2000	2001	2002	2003	2004	2005	2006	2007
Oil substances	63	69	54	33	40	64	59	70	63	69	76
Alkalis	3	5	5	2	2	5	3	1	0	3	4
Pesticides	1	1	1	0	0	1	0	3	0	2	0
Excrements of farm animals	9	14	7	5	4	9	21	15	14	14	12
Silage fluids	0	1	2	4	0	2	1	1	0	0	0
Industrial fertilisers	0	0	0	0	0	0	1	0	0	0	0
Other toxic substances	5	1	6	12	5	3	3	0	4	4	5
Insoluble substances	4	4	1	5	2	6	11	3	4	3	3
Waste water	6	6	6	10	10	17	35	20	10	28	24
Other substances	13	9	4	2	1	3	7	10	8	6	7
Water detrimental substances impossible to determine	17	7	12	9	7	17	35	14	10	22	26

Source: SEI

In 2007, no emergency deterioration of water quality outside the Slovak territory was recorded. Unknown originators (30.6 %) and so-called foreign organisations (10.8 %) represent stable contributors to emergency deterioration of water quality.

Just like in the previous years, in 2007, 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 (50) and transfer of hazardous substances (4).

Accidental deterioration of air quality

In 2007, Air Protection Inspectorate Division of SEI, recorded only one event that caused deterioration in air quality.

Summary of the major events (accidents) leading to exceptional deterioration or threatening of air quality in 2007

Year	Date	Place of occurrence, object	Cause of accident	Aftermath of accident
2007	24.03.07	SLOVALCO, Ltd. Žiar nad Hronom Anódka – AN operation	Fire caused as consequence of increased temperature of flues in the pipeline of the kiln	Excessive escape of emissions into the atmosphere SO ₂ , NO _x , PM, CO, F, HF, tar

Source: SEI

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.

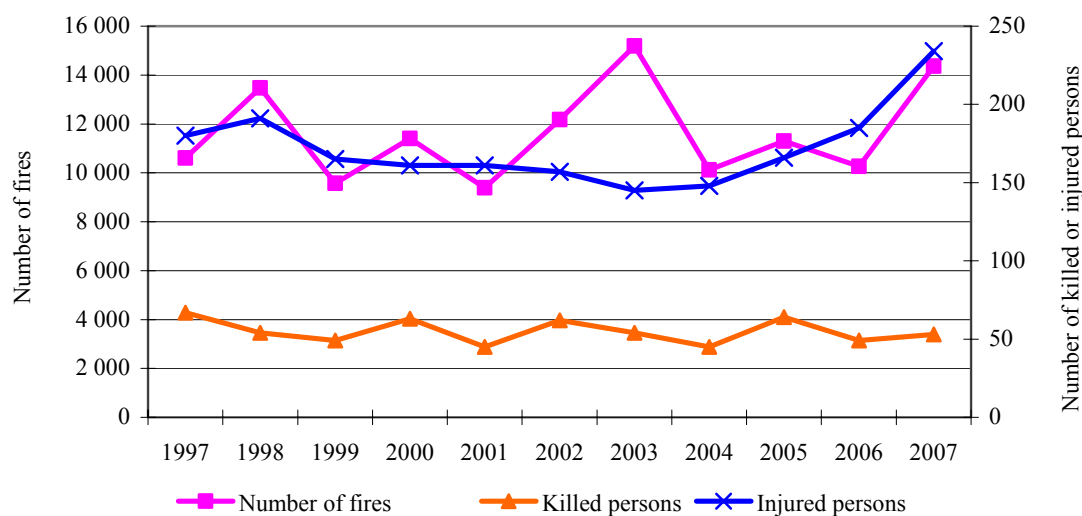
Fire risk

In **2007** were documented in the SR **14 366** fires, causing 53 casualties and 234 injured. Direct material damage reached 1 413 570.8 thous. SKK, while the volume of preserved values was calculated at 5 515 255 thous. SKK.

In terms of damage cause by fires in individual industrial sectors, **most fires occurred again in agriculture** - 3 018, with direct material damage of app. 53.3 mil. SKK, 2 deaths and 7 injured persons. **Households** occupy the second place in fire statistics by number of occurred fires, with 2 048 fires killing 37 people, and 169.2 mil. SKK in direct material damage. Least number of fires was recorded in the **trade** sector, with 133 fires, and 24.2 mil. SKK in direct material damage.

From the perspective of administrative distribution of territory, **most fires** occurred in 2007 in the Košice region (2 872), while **least** fires were recorded in the Trenčín region (1 079). **Greatest damage** due to the occurrence of fires was recorded in the Žilina region (45 715.4 thous. SKK) and the **least** in the Trenčín region (66 276.5 thous. SKK).

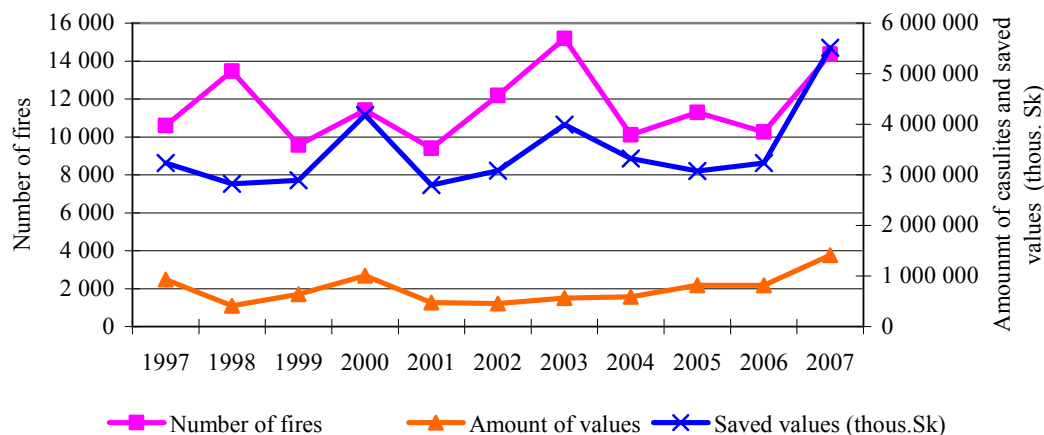
Relationship between number of fires and number of killed or injured persons in 1997-2007



Source: FPRS MoI SR



Relationship between number of fires and number of casualties or amount of saved values in 1997-2007



Source: FPRS MoI SR

Floods

In 2007, there were 60 municipalities affected by floods. 2 277 inhabitants felt the aftermath of the floods, including 37 persons who had to be evacuated.

Total cost and damages by floods in the SR in 2007 amounted to 125.107 mil. SKK, including the rescue costs of 9.137 mil. SKK, and safety works of 3.393 mil. SKK.

Material damage amounted to 74 912 thous. SKK, damage to private citizens' property was 6 792 thous. SKK, and damage to municipal property was 54 900 thous. SKK, damage to higher territorial governing units was 13 220 thous. SKK. Flood prevention construction measures at water courses were damaged, resulting in damages at 34 665 thous. SKK.

Floods aftermath over the period of 1999-2007

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	193.40	2 799.64
2007	60	339	109.58	9.14	6.39	125.11

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

Source: MoA SR, MoE SR