

**QUESTIONNAIRE**  
**for identification of water sources at risk concerning the presence of oocyst/cyst of parasites**

<b>1. SURFACE WATER SOURCE</b>			
	<b>risk factor</b>	<b>data required</b>	<b>answer/ remark *</b>
1.1	River/stream – direct water abstraction	yes/no (if „yes” – name of the source/s) **	
1.2	River/stream – reservoir (dam)	yes/no (if „yes” – name of the source/s)	
		average storage duration of the water in the reservoir (days)	
1.3	Lake	yes/no (if „yes” – name of the source/s)	
1.4	Other	describe	
1.5	Supplied settlement/s	name	
1.6	Water catchment area		
1.7	Availability of WPZ (water protecting zone)	yes/no describe if some infringements/ presence of objects in contradiction to the sanitary regime in the WPZ were detected during the last two (e.g. animal breeding or free entrance of animals)	
1.8	Point of discharge of treated waste waters from settlements (with WWTP) before the water abstraction point	number of population served by WWTP	
		distance (km) between the point of discharge and the water abstraction point	
1.9	Point of discharge of untreated waste waters from settlements (without WWTP) before the water abstraction point	name of the settlement; distance (km) between the point of discharge and the water abstraction point	
<p>* where necessary additional data have to be given in the same column as remarks</p> <p>** notice has to be given also in case of usage of more than one water source with a common storage reservoir</p>			

1.10	Settlements without municipality sewer system, located along the river/stream	yes/no (name of the settlement)	
1.11	Cattle farming close to the water body	yes/no (if „yes” – number of farms, total number of animals)	
1.12	Sheep farming close to the water body	yes/no (if „yes” – number of farms, total number of animals)	
1.13	Pig farming close to the water body	yes/no (if „yes” – number of farms, total number of animals)	
1.14	Poultry farming close to the water body	yes/no (if „yes” – number of farms, total number of animals)	
1.15	Breeding of ducks, geese close to the water body	yes/no (if „yes” – number of farms, total number of animals)	
1.16	Hunting farm close to the water body	yes/no (if „yes” – number, total number of animals)	
1.17	Game breeding close to the water body	yes/no (if „yes” – number, total number of animals)	
1.18	Livestock grazing along the river/stream or close to the reservoir	yes/no (if „yes” describe – intensive or limited)	
1.19	Slurry spreading close to the water body	yes/no (if „yes” describe – location; intensive or limited)	
1.20	Sewage sludge from WWTP application on arable land or meadows close to the water body	yes/no (if „yes” describe – location; intensive or limited)	
1.21	Dung spreading close to the water body	yes/no (if „yes” describe – location; intensive or limited)	
1.22	Dung or slurry storage close to the water body	number and location	

1.23	Livestock markets non connected to the sewage system of the	number and location	
1.24	Presence of monitoring point according to Regulation 12/2002 on surface waters used for drinking water abstraction	location/ describe	
1.25	Raw water samples analyzed in 2006 and 2007 on parameter suspended solids	year - number	
1.26	Values of the parameter suspended solids for 2006 and 2007	year – mg/l	
1.27	Raw water samples analyzed in 2006 and 2007 on parameter ammonia	year - number	
1.28	Values of the parameter ammonia for 2006 and 2007	year – mg/l	
1.29	Raw water samples analyzed in 2006 and 2007 on total coliforms	year - number	
1.30	Values of the parameter total coliforms for 2006 and 2007	year - number / 100 ml	
1.31	Raw water samples analyzed in 2006 and 2007 on fecal coliforms	year - number	
1.32	Values of the parameter fecal coliforms for 2006 and 2007	year - number / 100 ml	
1.33	Raw water samples analyzed in 2006 and 2007 on fecal streptococci	year - number	
1.34	Values of the parameter fecal streptococci for 2006 and 2007	year - number / 100 ml	
1.35	Drinking water samples from the relevant raw water source, analyzed in 2006 and 2007 r. On the parameter <i>Cl.perfringens</i> (according to Regulation 9/2001 on the drinking water quality)	year - number / number of the positive samples	
1.36	Values of the parameter <i>Cl.perfringens</i> for 2006 and 2007	year - number / 100 ml	
1.37	Variations in the raw water quality on turbidity and microbiological parameters	describe in general permanent/ episodic	

1.38	Data on source water quality worsening during the last years, consequence of infiltration, intensive rainfalls and snow melting	describe and quantify	
1.39	Water usage disruption of water during the last years because of considerable water quality problems	yes/no (if „yes” describe the reason)	
<b>2.</b>	<b>GROUNDWATER SOURCE</b>		
	<b>risk factor</b>	<b>data required</b>	<b>answer/ remark *</b>
2.1	Non-confined groundwater sources (shallow wells, boreholes etc.)	describe – geological conditions and soil type	
2.2	Water sources located in river banks	describe	
2.3	Other groundwater sources at risk Други ризикови подземни водоизточници (karst springs, drainages, other risky water abstraction constructions))	describe – geological conditions and soil type	
2.4	Settlement supplied	name	
2.5	Data on connection with non-confined groundwater aquifer or surface waters	describe	
2.6	Availability of water protection zone (WPZ)	yes/no describe if some infringements/ presence of objects in contradiction to the sanitary regime in the WPZ were detected during the last two (e.g. animal breeding or free entrance of animals)	
2.7	Well or borehole subject of flooding during the last two years	yes/no (if "yes" describe details)	
2.8	Poor casing integrity of the water abstraction construction	yes/no (if "yes" describe details)	
2.9	Presence of system of sewer/ septic tank/ slurry pits or sewage effluent to ground close to the groundwater abstraction point (area B of the WPZ)	yes/no (if "yes" describe details)	
2.10	Livestock housed or grazed close to the wellhead (area B of the WPZ)	yes/no (if "yes" describe details)	

2.11	Slurry spreading close to the wellhead (area B of the WPZ)	yes/no (describe - intensive/limited; location)	
2.12	Sewage sludge from WWTP application on arable land or meadows close to the wellhead (area B of the WPZ)	yes/no (describe - intensive/limited; location)	
2.13	Dung spreading close to the wellhead (area B of the WPZ)	yes/no (describe - intensive/limited; location)	
2.14	Dung or slurry stores	yes/no (describe – number and location)	
2.15	Presence, close to the wellhead (area B of the WPZ), of settlements without sewer system	describe	
2.16	Presence of livestock markets, close to the wellhead (area B of the WPZ), without connection to the sewer system of settlements	yes/no (describe – number and location)	
2.17	Risk on groundwater influence as a consequence of pick pollution or waste waters infiltration	comments	
2.18	Quick changes of the raw water quality after rainfalls (turbidity and microbiological parameters)	yes/no (describe – duration, parameter)	
2.19	Raw water data on parameter turbidity for 2006 and 2007	number of samples analyzed / number of samples with abnormal changes; year – value (mg/l)	
2.20	Raw water samples analyzed on parameter <i>E.coli</i> during 2006 and 2007	year – number/ number of samples with values above the drinking water limit	
2.21	Values of the parameter <i>E.coli</i> in the raw water for 2006 and 2007	year – number / ml	
2.22	Raw water samples analyzed on parameter enterococci during 2006 and	year – number/ number of samples with values above the drinking water limit	
2.23	Values of the parameter enterococci in the raw water for 2006 and 2007	year – number / ml	

2.24	Drinking water samples from the relevant water source analyzed on parameter <i>E.coli</i> during 2006 and 2007	year – number/ number of samples with values above the drinking water limit	
2.25	Values of the parameter <i>E.coli</i> in the drinking water for 2006 and 2007	year – number / ml	
2.26	Drinking water samples from the relevant water source analyzed on parameter enterococci during 2006 and 2007	year – number/ number of samples with values above the drinking water limit	
2.27	Values of the parameter enterococci in the drinking water for 2006 and 2007	year – number / ml	
2.28	Drinking water samples from the relevant water source analyzed on parameter <i>Cl.perfringens</i> during 2006 and 2007	year - number / number of positive samples	
2.29	Values of the parameter <i>Cl.perfringens</i> in the drinking water for 2006 and 2007	year - number / 100 ml	
<b>3.</b>	<b>WATER TREATMENT AND DISINFECTION</b>		
	<i>(to be filled in where appropriate and in association with the water sources, described according to the questions above)</i>		
	<b>risk factor</b>	<b>data required</b>	<b>answer/ remark *</b>
3.1	Presence of DWPP (drinking water purification plant)	yes/no	
3.2	Name/location	describe	
3.3	Kind of water treated	surface, groundwater, mixed - describe	
3.4	Settlements served	describe	
3.5	Maximum design capacity of the DWPP		
3.6	Average volume, treated daily		
3.7	Treatment scheme	detailed description of the treatment steps	
3.8	Pattern of use: continuous, intermittent, by necessity, in emergency conditions)	describe	
3.9	Is they a practice to deliver water to the distribution system without passing through the DWPP	yes/no permanent/incidental	
3.10	Effective lapses in the work of the treatment facilities	describe and qualify	
3.11	Presence of cases with suddenly changes of the water quantity entering the DWPP	yes/no (if "yes" describe details)	

3.12	After backwash the filtering material does not run to waste, but is reused in the cycle	yes/no	
3.13	Filters backwash water is recycled and enters the treatment cycle at the very beginning	yes/no (if "yes" what is the rate considering the particular entire backwash volume)	
3.14	Filters backwash water is recycled and enters the treatment cycle at any other stage	yes/no (if "yes" what is the stage and the particular rate considering the entire backwash volume)	
3.15	Sludge supernatant is recycled and enters the treatment cycle at the very beginning	yes/no (if "yes" what is the rate considering the particular entire backwash volume)	
3.16	Sludge supernatant is recycled and enters the treatment cycle at any other stage	yes/no (if "yes" what is the stage and the particular rate considering the entire backwash volume)	
3.17	Disinfection method / effectiveness/ effective lapses	describe and qualify	
3.18	Monitoring of the water quality entering the DWPP on parameters turbidity, <i>E.coli</i> , <i>Cl.perfringens</i>	describe	
3.19	Raw water monitoring data on parameters: turbidity, <i>E.coli</i> , <i>Cl.perfringens</i>	values of the parameters for 2007	
3.20	Population supplied	number	

**Conclusion, comments:****Abbreviations**

DWPP – Drinking Water Purification Plant

WPZ – Water Protection Zone

WWTP – Waste Water Treatment Plant