



STATUS OF GROUNDWATER BODIES – Elbe River Basin District

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Parameters and limits of good chemical status

CAS-No.	Name of substance/parameter	Units	Czech limit of good status
79-01-6	1,1,2-trichlorethen	µg/l	10
15972-60-8	alachlor	µg/l	0,1
309-00-2	aldrin	µg/l	0,03
7440-38-2	arsenic and its compounds	mg/l	0,01
1912-24-9	atrazine	µg/l	0,1
71-43-2	benzen	µg/l	1
50-32-8	benzo(a)pyren	µg/l	0,01
205-99-2	benzo(b)fluoranthen	µg/l	0,1
191-24-2	benzo(g,h,i)perylene	µg/l	0,1
207-08-9	benzo(k)fluoranthen	µg/l	0,1
6190-65-4	desethylatrazine	µg/l	0,1
60-57-1	dieldrin	µg/l	0,03
72-20-8	endrin	µg/l	0,1



Parameters and limits of good chemical status

206-44-0	fluoranten	µg/l	0,1
118-74-1	hexachlorbenzen	µg/l	0,1
7429-90-5	aluminium and its compounds	mg/l	0,2
2921-88-2	chlorpyrifos	µg/l	0,1
193-39-5	indeno(1,2,3-cd)pyren	µg/l	0,1
465-73-6	isodrin	µg/l	0,1
34123-59-6	isoproturon	µg/l	0,1
7440-43-9	cadmium and its compounds	mg/l	0,0005
74-90-8	cyanides	mg/l	0,05



Parameters and limits of good chemical status

91-20-3	naftalen	µg/l	0,1
7439-92-1	Lead and its compounds	mg/l	0,005
50-29-3	p,p-DDT	µg/l	0,1
608-93-5	pentachlorbenzen	µg/l	0,1
7439-97-6	mercury and its compounds	mg/l	0,0002
122-34-9	simazine	µg/l	0,1
127-18-4	tetrachlorethylene	µg/l	10
1582-09-8	trifluraline	µg/l	0,1
	kyselinová neutralizační kapacita do pH 4.5	mmol/l	0,2
	ammonium	mg/l	0,5
	nitrate	mg/l	50
	nitrite	mg/l	0,5
	chloride	mg/l	200
	sulphite	mg/l	400



Assessment of status

Quantitative status

- ✓ Water balance in hydrogeological zones
- ✓ Ratio sum of abstraction to natural sources (base flow)
- ✓ Mining, influence to terrestrial ecosysteme



Assessment of status

Chemical status

- ✓ Comparision of average concentration with treshold values
- ✓ Risk assessment results
- ✓ Assessment of working units
- ✓ Synthesis for the level of groundwater bodies



Results of status assessment

Quantitative status

quantitative status	good	potencially poor	poor
No of GW bodies	13	3	0
% RBD area	94	6	0

quantitative status	good	potencially poor	poor
No of GW bodies	11	1	1
% RBD area	98	1	1

quantitative status	good	potencially poor	poor
No of GW bodies	19	8	2
% RBD area	74	11	15

quantitative status	good	potencially poor	poor
No of GW bodies	19	27	0
% RBD area	48	52	0



Results of status assessment

Chemical status

Chemical status	good	potencially poor	poor
No of GW bodies	4	0	12
% RBD area	29	0	71

Chemical status	good	potencially poor	poor
No of GW bodies	0	0	3
% RBD area	0	0	100

Chemical status	good	potencially poor	poor
No of GW bodies	2	1	10
% RBD area	10	40	50

Chemical status	good	potencially poor	poor
No of GW bodies	7	1	21
% RBD area	30	1	69

Chemical status	good	potencially poor	poor
No of GW bodies	7	6	33



Main problems – significant pressures



Quantity

- ❖ Mining
- ❖ Abstractions



Quality

- ❖ Nitrates
- ❖ Old contaminated sites
- ❖ Pesticides
- ❖ Other diffuse sources
- ❖ Mining



Thank you for your atention