

# Position paper on water resources protection

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Groundwater, spring water and surface water are major elements of the natural water cycle, valuable resources and subjects of protection per se.

An adequate quantity of natural sources is the indispensable basis for water supply.

The goal is to protect water resources everywhere against anthropogenic entries and to exclude or minimise measurably present contamination as well as potential hazards. Essential principles to achieve this goal are:

- Precautionary principle
- Prohibition of all actions which impair water resource quality
- Mandatory determination of restoration targets
- Requirement to halt and reverse negative trends in quality and quantity coupled with binding targets
- Minimisation requirement, which obliges any party responsible for entries to cause the least possible harm
- Polluter-pays principle
- Undivided water resources protection
- Requirement to prioritise protection in catchment areas of water abstraction.

## **Precautionary principle**

- Keep anthropogenic and persistent substances away from waters
- Prevent emissions at the origin
- Do more than rely on “mending” poor quality via “end-of-pipe” measures by drinking water utilities
- Assess emissions according to possible hazardous effects using state-of-the-art knowledge and techniques
- Require assessment of all chemical substances which are released into the environment in terms of their potential to cause harm to water resources
- Tolerate no contamination of water which could endanger its good qualitative and quantitative status under the Water Framework Directive, such that drinking water resources can be utilised without treatment or with only simple natural processes
- Establish a quality assurance system which takes account of all relevant substances in the water catchment area.

## **Prohibition of water resources impairment**

- Consistently apply the principle of minimisation regarding concentrations of substances regulated in the Drinking Water Ordinance as well as other substances not yet assigned limit values
- Avoid pollution which causes regulatory limit values to be attained.

**Mandatory determination of restoration targets**

- Stop increasing contamination and return to a level of maximum 50 % of the limit value
- Return the concentration of substances without limit values, but for which local geogenic background concentrations are known to a maximum of threefold this concentration in water catchment areas.

**Trend reversal requirement**

- Identify “negative” trends early
- Undertake efficient and consistent measures to stop contamination.

**Minimisation requirement**

- Cease avoidable contamination
- Take measures to minimise contamination also for concentrations below limit values.

**Polluter-pays principle**

- Whoever causes water pollution has to pay both immediate costs and follow-up costs (e. g. costs for treatment). In case of diffuse pollution or multiple polluters an appropriate payment approach has to be found.

**Requirement to prioritise protection in catchment areas of water abstraction**

- Extend the basic principle of area-wide protection of water with additional measures in water catchment areas
- Apply no substances on the ground if this causes contamination in groundwater and soil
- All emission sources in water catchment areas must prove their harmlessness to drinking water abstraction in consideration of the aim to use natural processes for treatment and the minimisation requirement according to the Drinking Water Ordinance (Reversal of burden of proof!)
- Maintain closed cycle of substances within these areas, preferably at a low turnover level
- Do not apply substances in case of the assumption that a risk exists
- Minimise existing hazards and risks.