R&D:
Studies on the occurrence, sources and elimination possibilities of certain contaminants in municipal and industrial waste water treatment plants in Saxony

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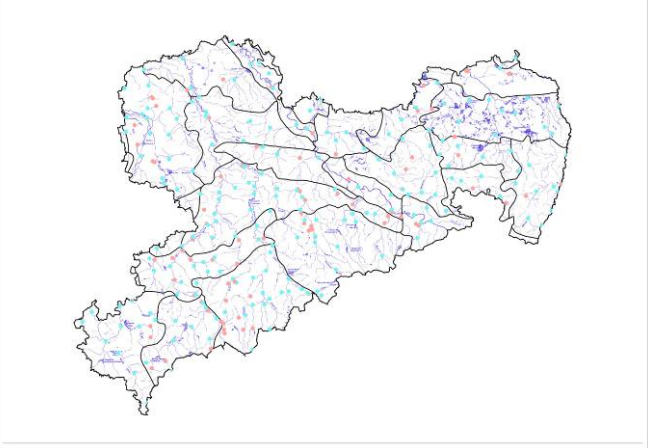
Project Objective: Development of methods for the assessment of the elimination rate of certain contaminants in Saxon waste water treatment plants. Evaluation of certain contaminants within the EC Water Framework Directive.

Client: Saxon State Office of Environment and Geology

Beneficiary: State of Saxony

Year: 2005-2006

Budget: 50,000 €



Initial situation:

- During the investigations, in order to implement the Saxon regulations for the reduction of water pollution and the water framework directive contaminants (organic industrial chemicals and tin compounds, plant protection products, biogenic, geogenic and anthropogenic organic combustion products, pharmaceutical products, hormone), which occurre in the operation of municipal and industrial waste water treatment plants in Saxony and which have potential effects on the water quality, are determined. For the evaluation of further actions regarding the water quality protection it is necessary to know the origin and reduction potentials for those contaminants.The possible sources of the contaminants had to be evaluated as well as their hazardous components. The elimination rate in conventional waste water treatment plants had to be determined. From these results we can derive the influence of a further reduction.

Services provided:

- Origin and elimination study for 43 contaminants: literature and data research as well as editing the information
- Methodical-practical part: method development, determination of elimination rates
- Exemplary elimination tests for nonylphenol in the laboratory waste water treatment plants