

OUR SERVICES FOR TRADE & INDUSTRY

AIR QUALITY MODELLING

In the context of licensing procedures for new production plants as well as the modification or extension of existing facilities an air pollution forecast (e. g. for fine dust, odor and pollutants like sulfur dioxide, nitrogen oxides, heavy metals or hydrocarbons) is needed. Both immissions from the regular operation of the plant as well as possible accidental releases need to be considered.

Whereas the emissions of a plant can be determined relatively easy from the technical specifications (e. g. fuel gas data measurements), the prediction of the concentration of pollutants in the vicinity of the plant requires the exact knowledge of:

ATMOSPHERIC DISPERSION

- the building induced initial dilution
- wind field
- terrain profiles
- dispersion processes

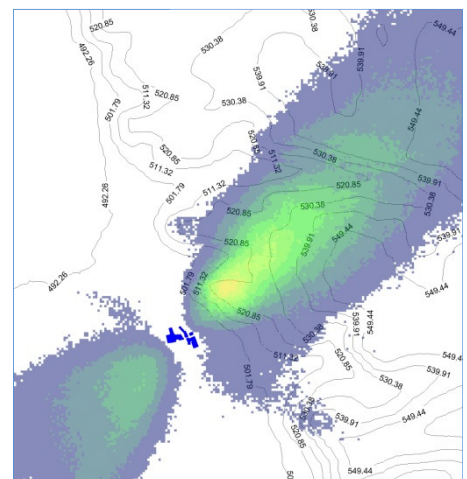
METEOROLOGICAL CONDITIONS

- wind statistics (dispersion class statistics)
- meteorological time series



ACCON has the expertise and a wide range of tools to model dispersion and to predict the concentration of pollutants or odorants in the surroundings of industrial operations. Depending on the task we choose to work with one or more of the following tools:

- **LASAT:** The dispersion model computes the transport of trace substances in the atmosphere. It simulates dispersion and transport of a representative sample of tracer particles utilizing a random walk process (Lagrangian simulation).
- **LASPORT:** The program system allows the calculation of emissions and atmospheric dispersion of trace substances originating from airport-related sources.
- **AUSTAL:** Controls the dispersion model AUSTAL2000 of the Technical Instruction on Air Quality Control. It is the official dispersion model for licensing procedures for technical plants in Germany and was developed on behalf of the Federal Environmental Agency.
- **AUSTAL ODOR:** Calculates the dispersion of odorous compounds based on the model AUSTAL.



Based on computational results we provide expert reports and support operators and authorities in all aspects of air pollution control.

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