



The AAV model – brownfield redevelopment and remediation of contaminated sites in North Rhine Westphalia as a joint task for state and economy

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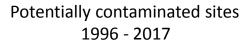
Redevelopment Assistance to Brownfields Communities in the U.S. and Germany

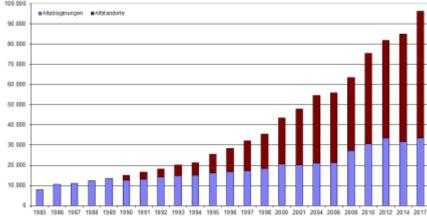


North Rhine Westphalia

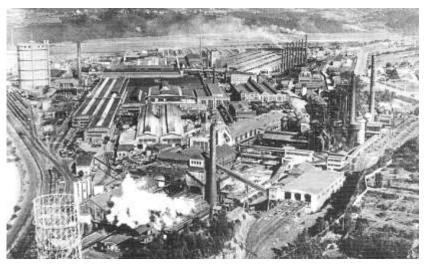








- Area larger than 34.000 km²
- About 18 million inhabitants
- 396 municipalities
- By history (200 years) and actual the main industrial region of Germany





The AAV model

- Organization as a "public/private partnership"
 - Representatives of the Land (federal state), municipalities and business companies cooperate in a self-governing body
 - Aims, task planning and financing of the respective projects are coordinated and decided by the partners
- Members contribute, besides financial participation, their expert knowledge to the work of the AAV on a voluntary basis
 - Creation of mutual understanding for different points of view and approaches
 - Proportionate, innovative and pragmatic remediation solutions
 - Joint responsibilities for the area of land development in NRW



Tasks of the AAV

The main task of the AAV is project management and execution (and 80% financing) for the following measures (quote the text of the AAV act in abridged form):

- Remediation investigations, planning and remediation of contaminated sites.
- Redevelopment of brownfields and contaminated sites for re-use and to reduce the consumption of areas of land used for agricultural purposes.
- Development and testing of new technologies and innovative methods for the remediation of contaminated sites and brownfield redevelopment.

Additionally advice and support for the AAV members, e.g.

- Concerning the remediation of contaminated sites and brownfield redevelopment
- By moderation and mediation in the case of particular technical or legal difficulties

Contaminated site risk fund



Project process

- Request of the municipalities, informal discussion, additional information
- Formal application of the municipalities for a project
- Check of the legal and technical conditions of the project, e.g.
 - Ownership of the brownfields
 - No responsible person can be hold liable
 - Remediation responsibility of the municipality
 - Prevention of hazards
- Presentation and decision making in the AAV committees
- Contract under public law between municipality and AAV
- Project execution, e.g. tendering procedure, contracting, management and control, approval and accounting via AAV

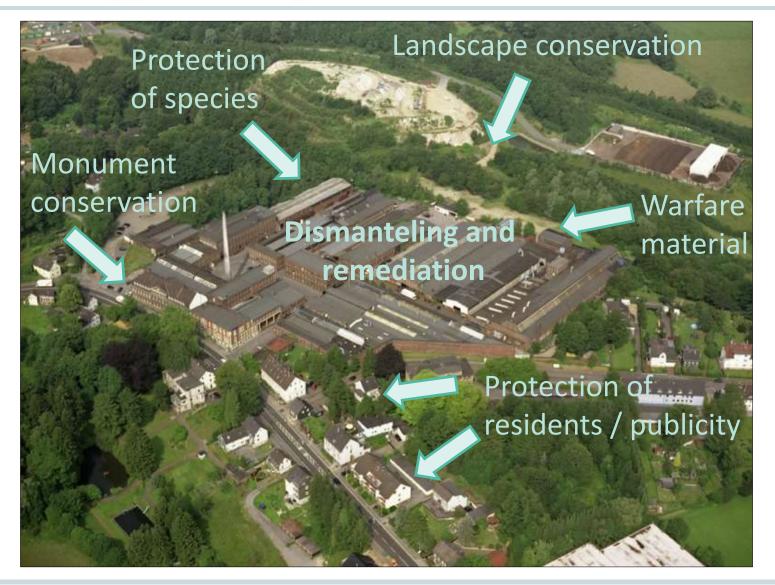
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Locations of the AAV projects



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From a chemical plant to a new industrial estate

- Size 45,000 m²
- 1922 to 1986: production of protein adhesive from tanned leather waste
- Insolvency of the company, soil and groundwater contamination with Chromium and PCP
- 2004 to 2005: remediation of soil and tips, excavation and external disposal of 150,000 to hazardous waste
- 2006 to 2012: groundwater remediation







From a municipal gasworks to a new high level quarter

- Size 11,000 m²
- 1858 1918: gasworks
- Further use after demolition for a municipal swimming bath and an electric power station (till 1990s)
- 1994 to 2009: investigations and risk assessment, remediation investigation and planning
- 2010 to 2011: dismantling, demolition and soil remediation







From a tar factory to a citizens' park

- Size 39,000 m²
- 1887 1972: tar distillation and production of roofing paper
- Large-area and deep contamination with PAHs, BTEX, HCs, phenols
- 2008 to 2011: dismantling of crude tar tanks and buildings, terrain profiling, application of seal and of a recultivation layer, production of drainage trench and sewer renovation
- Citizens' park which improves city climate







Thank you very much!

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