

**Fuck CAPSOL**

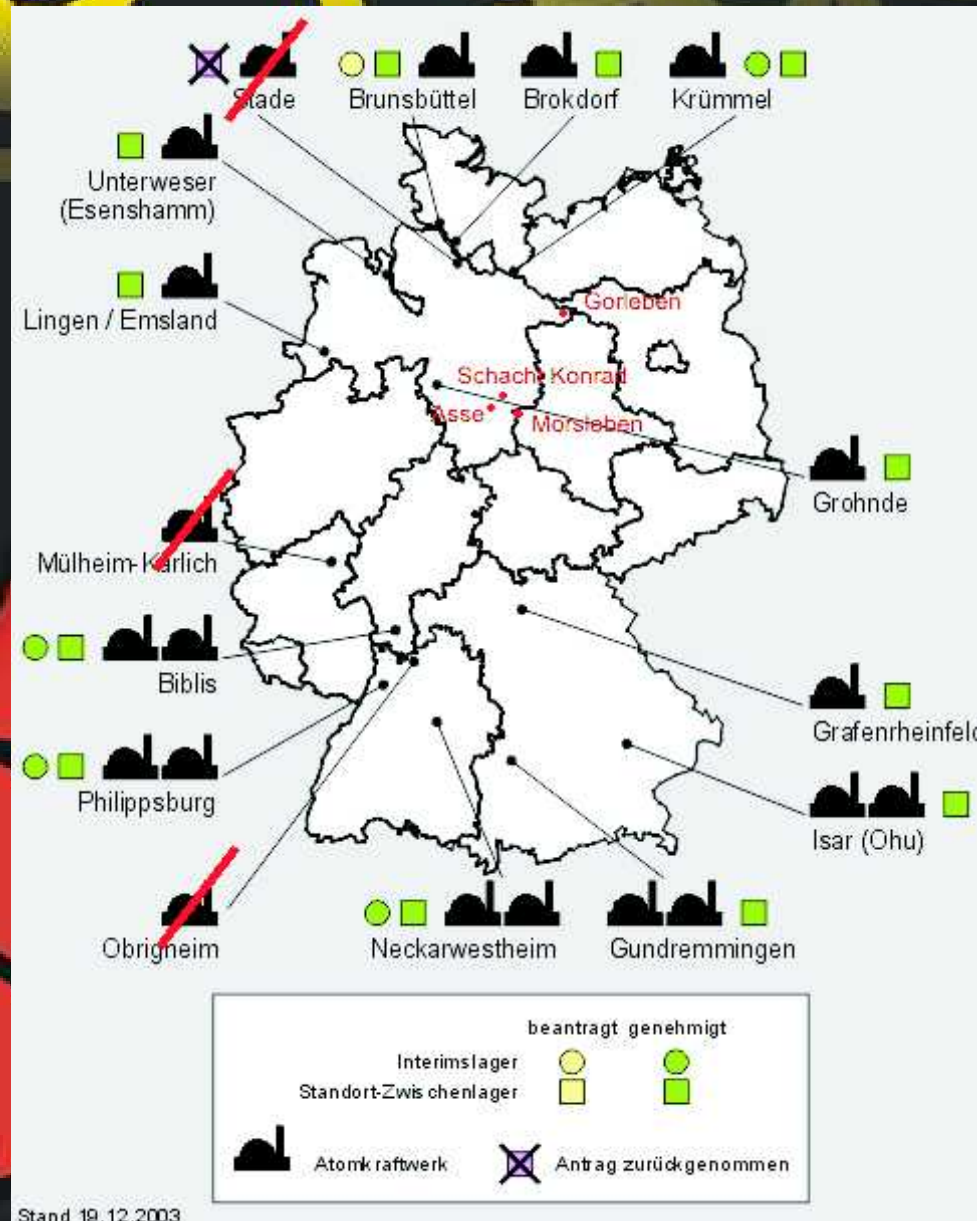
presentation of the

# **Nuclear Situation in Germany**

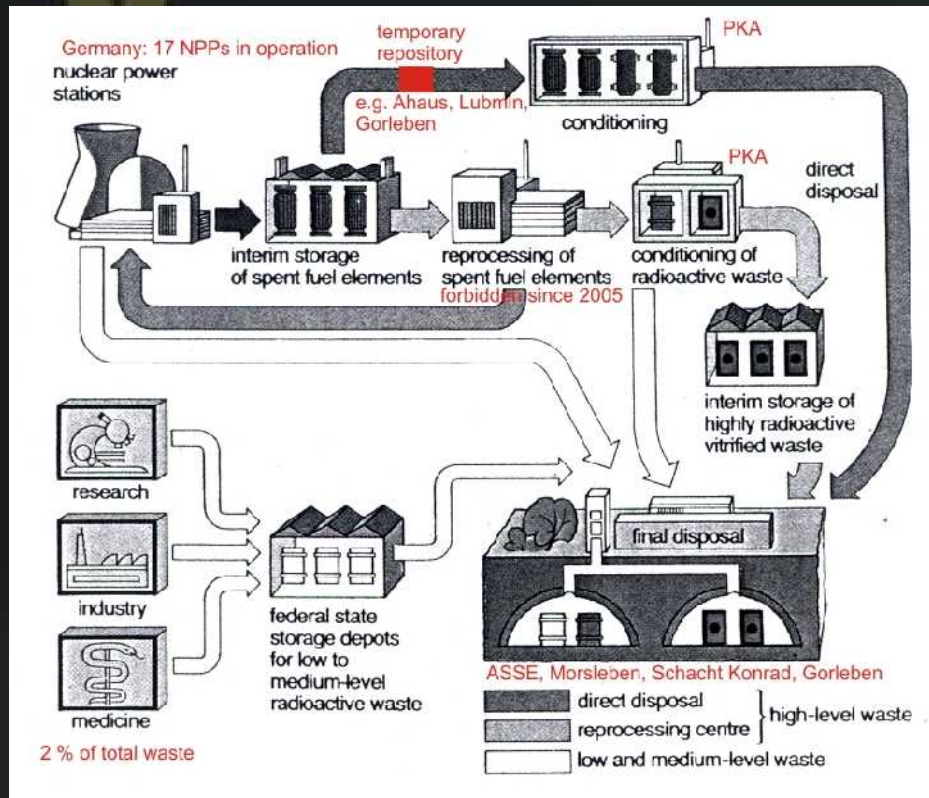


*as of March, 2010*

# NPPs and final disposal sites



# General Situation in Germany



- 17 NPPs in operation (only 10 online)

- by 2005 most HAW to La Hague & Sellafield
  - return transports from La Hague 1996, from Sellafield 2011 expected

- later „reprocessing“ prohibited (only new contracts concerned)
  - waste for ~15 years

# General Situation in Germany (II)



- since 2005: direct final disposal required

- but: NO final repository exists

- only ~2 % of total radioactive waste comes from medicine, research + other industries

# General Situation in Germany (III)

- waste facilities:

- temporary repositories at several NPPs & nuclear factories

- PKA Gorleben (not in operation)

- temporary HAW repositories, e.g. Ahaus, Gorleben, Lubmin

- final disposal sites: Asse II, Morsleben, Schacht Konrad, Gorleben



# General Situation in Germany (IV)

- final disposal concepts:
  - salt rock + other geological formations
  - deep mine (more difficult: access, attacks, natural catastrophes, pristine=safety)
  - geological barrier provides safety
  - non-retrievable final disposal (costs, proliferation, safety)



# Further Nuclear Facilities

- Uranium enrichment facility in Gronau
- Fuel elements factory in Lingen
- Small nuclear companies in many other cities



# Current Nuclear Policy

1. „Nuclear Phaseout“ - parties fighting about the way to deal with it
  - a) no one dares to propose a new reactor
  - b) renewable energy sources are indisputable the future basis of electricity generation in Germany
  - c) discussions only about the remaining lifetime of existing nuclear reactors
  - d) even the former pro-nuclear parties have problems to argue about nuclear power
2. final disposal – government wants to establish Gorleben for the final repository

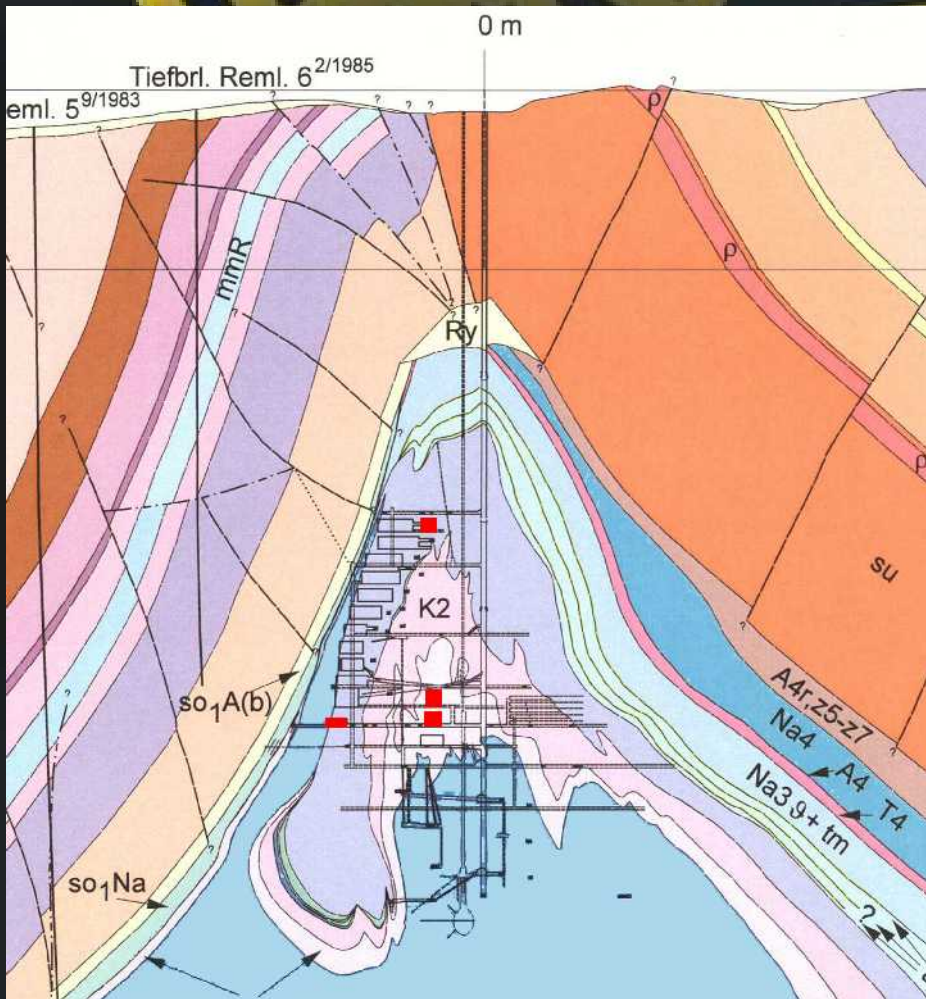


# German Final Disposal Sites: Asse II



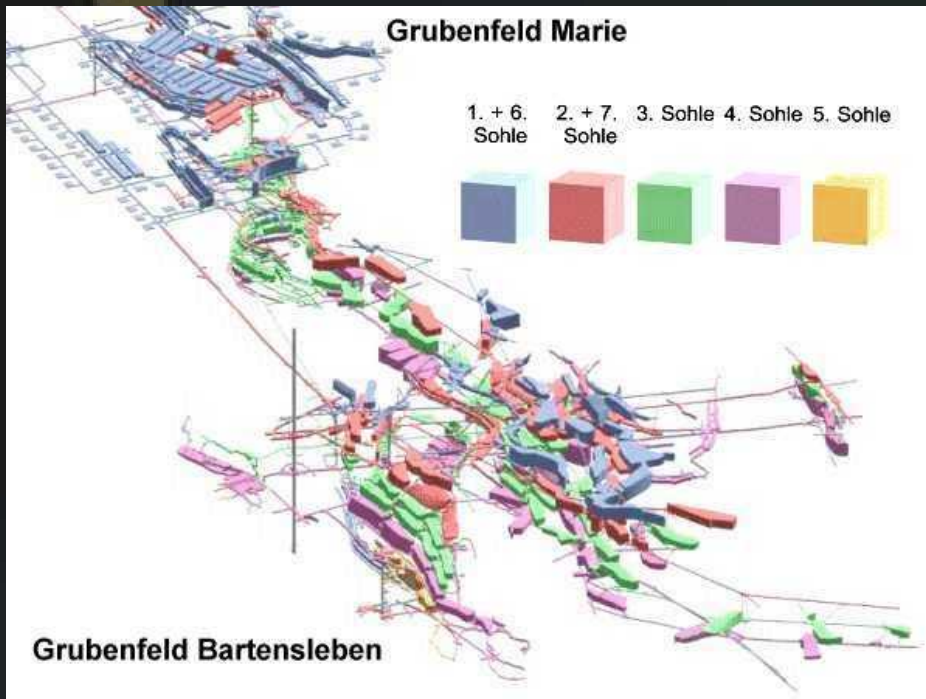
- near Wolfenbüttel / Braunschweig (Lower Saxony)
- operation started 1965; stopped 1978/1995
- old salt mine; used for L/MAW + research
- barrels dumped into reposition cavities (many damaged)

# Asse II (II)



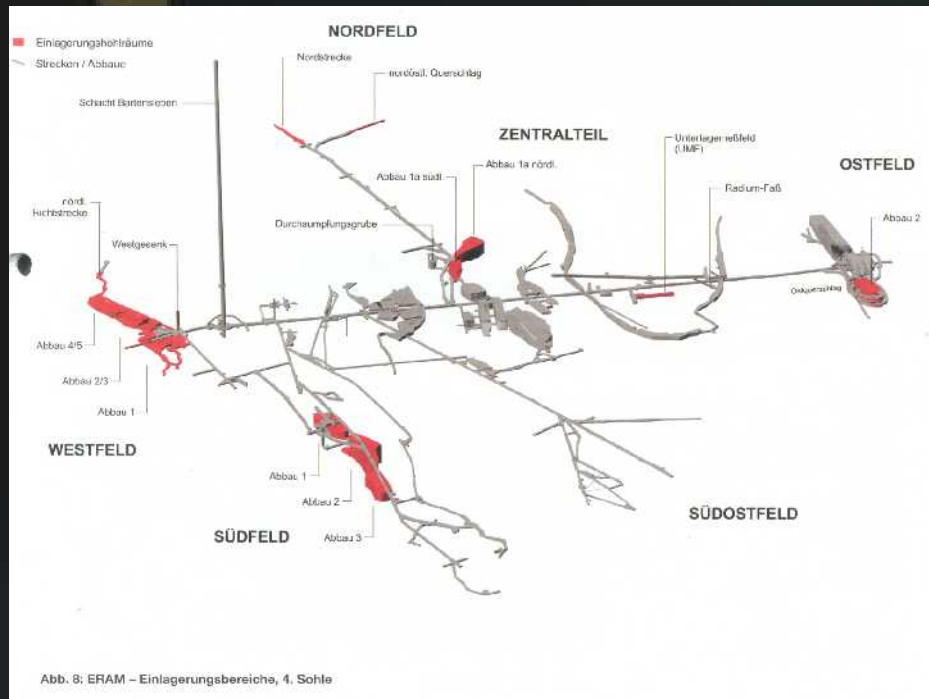
- safety issues: water influx (~11,500 litres/day), collapse
  - acute danger of complete flooding
- doesn't meet requirements of nuclear law / no public consultation
- nearly each week a new scandal becomes public

# Morsleben



- between Braunschweig and Magdeburg (Sachsen-Anhalt)
- formerly GDR's central final repository for L/MAW + planned HAW final repository
- operation started 1971; stopped 1998
- old salt mine

# Morsleben (II)



- solid waste in barrels stacked or dumped in barrels or loosely into reposition cavities
- liquids sprayed onto layer of lignite ashes (assuming mixture would solidify)
- total amount L/MAW: ~36,000 m<sup>3</sup>

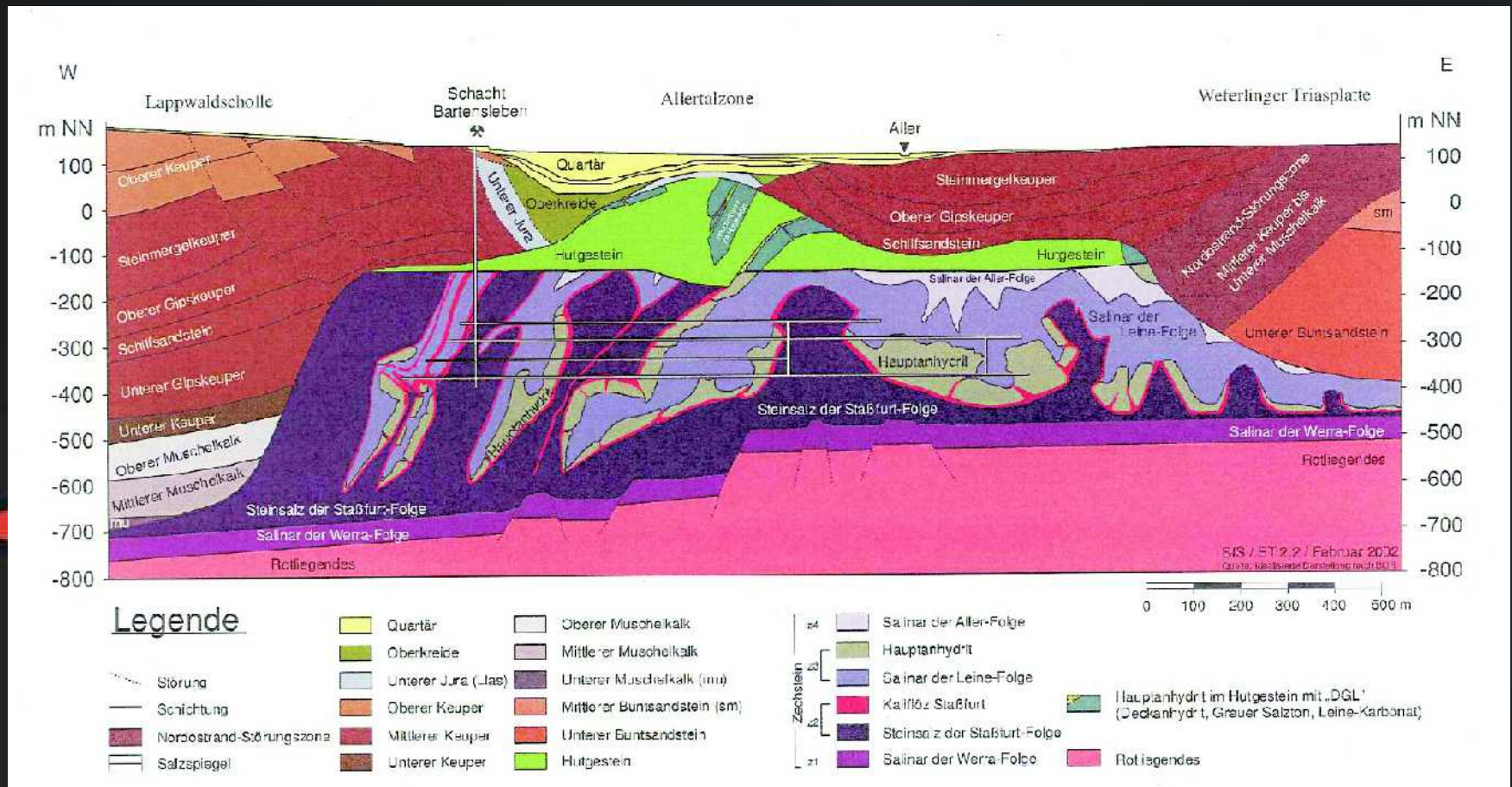
# Morsleben (III)



- >6,000 radiation sources (partly HAW) sunk in drill holes
- safety issues:
  - water influx: >20 known locations: at least one has connection to biosphere
  - collapse: >4,000 t cave-in 2001; 500 t cave-in early 2009; 20,000 t cave-in expected soon by operator

# Morsleben (IV)

unsuitable geological conditions (potassium salt layers, main anhydrite)



# Asse II & Morsleben: Operator's Failures

Both Asse II and Morsleben are affected by problems caused by the operator of the repositories:

- inventory unknown
- public cheated about inventory & safety issues
- safety issues wellknown from the very beginning
- no public consultations in site selection
- old mines (over 100 years) not suitable for final disposal of nuclear waste
- extension & situation of cavities not completely and not in detail known

# Asse II & Morsleben: Operator's Failures (II)

- Morsleben: operator increased threat of collapse by backfilling higher levels with  $\sim 800,000 \text{ m}^3$  of „salt-concrete“ onto deposition cavities of deeper levels
- Asse II: to prevent complete collapse operator wanted to flood with  $1.200.000 \text{ m}^3 \text{ MgCl}_2$ -solution  
-> radioactivity would quickly escape the repository



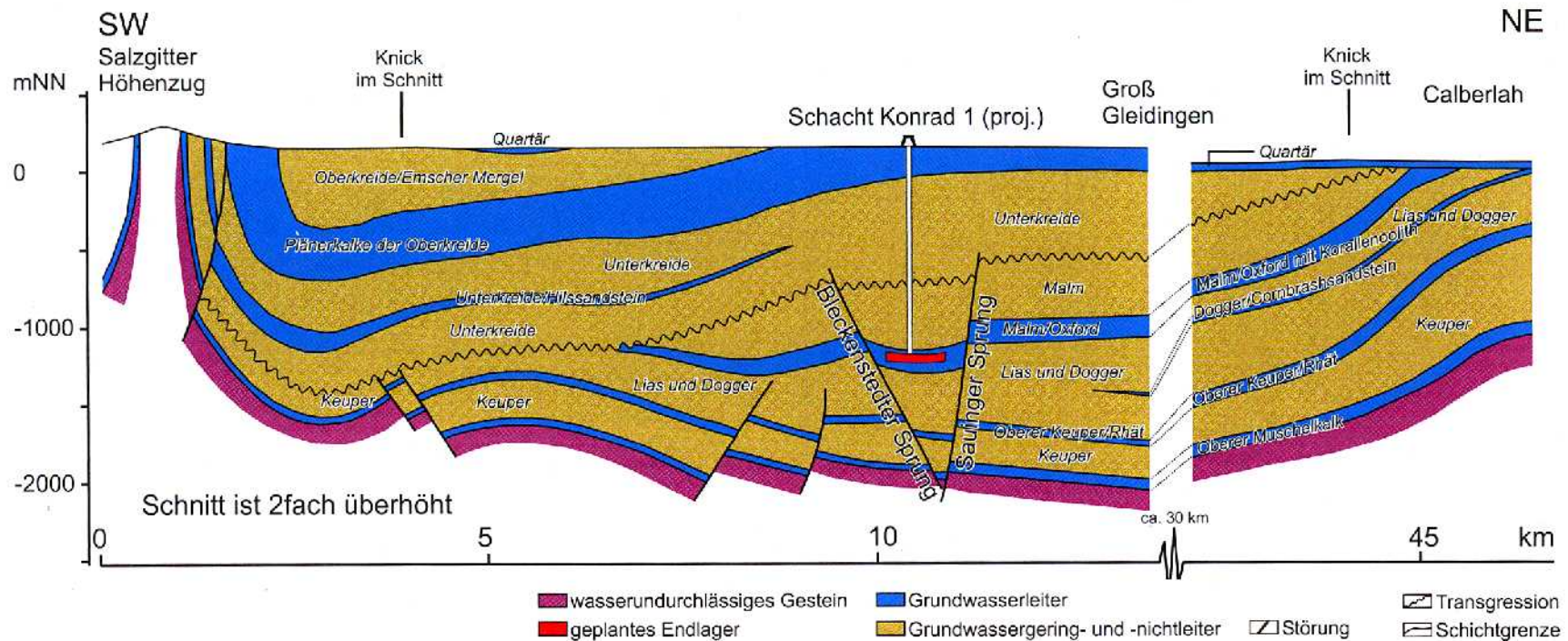
# Schacht Konrad



- near Salzgitter / Braunschweig (Lower Saxony)
- operation approval: 2002 (still offline)
- old iron ore mine; L/MAW disposal
- known safety issues: water-carrying layers with connection to biosphere

# Schacht Konrad (II)

- Known safety issues:
  - water-carrying layers with connection to biosphere
  - unsuitable rock formations



Quelle: BfS-Bericht „Endlagerung radioaktiver Abfälle als Nationale Aufgabe“, 2005

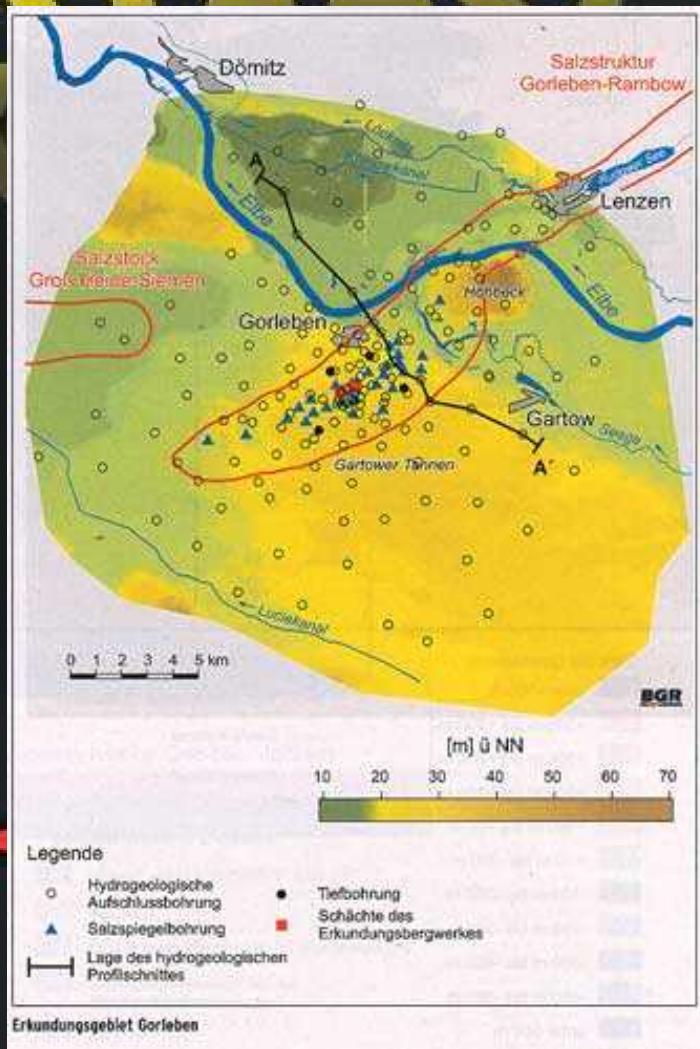
# Gorleben



- in Wendland (Lower Saxony)
- „research mine“
- no public consultation yet
- salt rock formation



# Gorleben (II)



Known safety issues:

- water-carrying layers
- no mighty & gapless layer of clay
- saltdome not at rest and still rises
- running salt-dissolution

# Outlook 2010

- Huge actions planned for Chernobyl Day at four locations with several tenths of thousands of people
- Blockading the CASTOR transports in November with approximately 10,000 activists or more
- Camps, local actions, several campaigns...



# Basic Positions of the Anti-nuclear Movement in Germany

*Nowhere in the world a safe solution for the longterm radioactive waste has been found for certain reasons.*

*And it is not possible to do safe final disposal as well for general reasons.*

***Nuclear waste must not be produced – all NPPs have to be shut down immetiatly and worldwide.***

*No participation in discussions about nuclear waste repositories as long as some nuclear facilities are still in operation!*