



2002

Germany's radioactive waste management program

Low-level radioactive waste

Low-level radioactive waste from nuclear power plants, research, medicine, and industry was put into the Morselben Repository for Radioactive Waste, an abandoned potash and salt rock mine located in the former German Democratic Republic, from 1981-1998. In 1997, Germany's Federal Office for Radiation Protection (BfS) announced its intention to close down the Morselben Repository. Germany now stores radioactive waste in nearly 50 locations, including 18 power plants, two off-site power plant waste storage facilities, collecting depots for medicine, industry, and universities, and at its larger research centers.

Spent nuclear fuel and high-level radioactive waste

Spent nuclear fuel is stored in reactor pools for 3-10 years. Some reactors also have on-site dry storage.

Reprocessing spent nuclear fuel

Germany had reprocessing contracts with other countries until 1989. Vitrified (solidified) high-level radioactive waste from France and Britain are temporarily stored at facilities in Gorleben and Ahaus. High-level radioactive wastes from reprocessing are stored at the facilities where they were created.

Transporting radioactive waste

Most spent nuclear fuel transportation is by rail in casks that are also used for storage. Transportation is by private carriers under government-issued permits.

Deep geologic disposal plans

Underground exploration of a salt dome at Gorleben began in 1986. The Gorleben site had been studied since 1979 as a potential permanent radioactive waste repository. After the 1999 parliamentary election, study of the Gorleben salt dome was temporarily stopped, pending further study of other types of geologic environments and to clarify conceptual and safety issues. A new site will be selected based on comparison with Gorleben, which may yet be an interim storage site. Steel canisters are being considered for radioactive waste containment.

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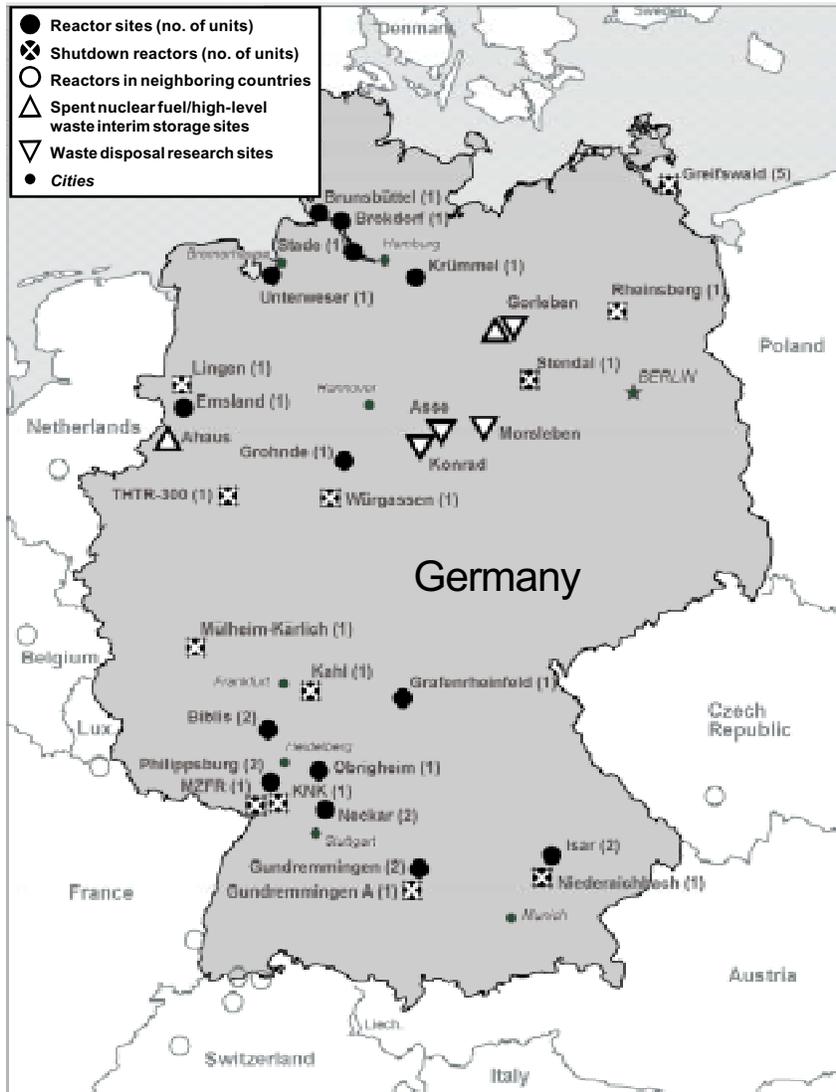
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A planned repository for low-level radioactive waste at the abandoned Konrad iron ore mine is awaiting licensure by the Lower Saxony Ministry for the Environment. The former mine may eventually hold low-heat-producing radioactive wastes, which account for more than 95 percent of Germany's radioactive waste. Preliminary investigations began in 1976, followed by six years of underground exploration and long-term safety assessments.

If the Konrad site is not selected, another option would be to store both low- and possibly high-level radioactive wastes in the Asse salt mine. Since 1965, this mine has been an area of intense research and development of the characteristics of a salt repository. Low-level radioactive wastes have been disposed of in the salt mine since 1967 as a demonstration of underground disposal.

1998





U.S. Department of Energy
Office of Civilian Radioactive Waste Management

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