



Fact sheet: Opalinus clay project

In 1988, the Federal Council rejected the demonstration of feasibility for the disposal of high-level waste included in the "Gewahr" Project. It instructed the holders of the operating licences for the existing nuclear power plants to pursue research activities and extend their studies to include non-crystalline host rock (sediment). As a consequence, in 1984 Nagra submitted an application for a licence to carry out exploratory drilling within the municipality of Benken.

In accordance with the instructions of the Federal Council, in 1988 the National Co-operative for the Disposal of Radioactive Waste (Nagra) also began studying sediment formations in the Mittelland region (central plateau). With the aid of geological studies, seismic recordings and test drillings it set out to identify suitable rock layers for the storage of radioactive waste.

Following these studies, Nagra focused its attention on the option of opalinus clay, and in view of its research findings, in 1994 applied for a permit to carry out exploratory drilling on land in the municipality of Benken (Zurich Weinland region). The Federal Council approved this application in 1996. In 1997, detailed seismic studies were carried out in the Zurich Weinland region over an area measuring more than 50 square kilometres. The method chosen permitted an uninterrupted three-dimensional depiction of the rock layers, as well as the identification of minor irregularities in the geology of the area concerned.

After obtaining the necessary additional cantonal licences, in 1998 and 1999 Nagra went on to drill an exploration shaft to a depth of around 1,000 metres, and has since carried out the necessary long-term hydraulic measurements. In view of the findings, in 2002 Nagra decided to submit a demonstration of feasibility for the disposal of high-level waste. On 28 June 2006, the Federal Council now accepted that the demonstration of feasibility for the disposal of high-level waste had been provided based on the findings of the **Opalinus clay project in Zurich Weinland** (today northeast Zurich).