

Note:

This is a translation of the letter entitled “Notfallkonzept für die Schachtanlage Asse II Beratungsergebnisse und Empfehlungen der Ad-hoc-Arbeitsgruppe ASSE der ESK und der SSK”.

In case of discrepancies between the English translation and the German original, the original shall prevail.

Emergency concept for the Asse II mine

Consultation results and recommendations of the ASSE ad hoc working group of the Nuclear Waste Management Commission (Entsorgungskommission, ESK) and the Commission on Radiological Protection (Strahlenschutzkommission, SSK)

At the 6th meeting of the ESK/SSK ad hoc working group ASSE on 21.09.2009, the Federal Office for Radiation Protection (BfS) presented its planning for an integrated emergency concept for the Asse II mine.

The ad hoc working group ASSE of the ESK and the SSK consulted on the ideas and plans of the BfS at the 6th meeting on 21.09.2009 and at its 7th meeting on 26.10.2009 and arrives at the following conclusion:

The ad hoc working group ASSE is of the opinion that emergency planning – injection of protective fluid or application of compressed air are regarded as potential emergency measures – is to be considered separately from preventive measures for the reduction of occurrence probability (e.g. catching of the intruding brine), for the minimisation of the radiological consequences (e.g. preparatory measures for sealing of the safety and backfilling of emplacement chambers with Sorel concrete) or for saving time for further actions (enhancement of the brine management). In case of an emergency, possibilities of actions, technical installations and facilities as well as a graded management concept with recommendations for actions according to the extent of the incident and condition of the plant must be available that can be used immediately. The costs to be expected for such provisions should play a subordinate role. Since the occurrence probability is estimated to be high for beyond-design-basis brine intrusion, the ESK/SSK ad hoc working group recommends to perform the necessary planning for dealing with the beyond-design-basis brine intrusion, e.g. provision, production and injection of protective fluid, as soon as possible and initiate the licensing procedure required for it as a precaution for beyond-design-basis brine intrusion so that immediate action can be taken in case of an emergency.

Apart from the beyond-design-basis intrusion of brine solutions from the overburden, the emergency concept should ensure for current operation that after anomalies during the operating phase the facility can be restored as fast as possible to a condition in which it is accessible and further remedial measures can be taken. At least for occurrences of smaller and medium extent it should be possible to achieve this objective and instruction for actions should be available. In this connection, increased brine intrusion, outbreak of fire, loss of power, loss of ventilation and roof fall should be considered and preventive measures taken as fast as possible.

In this connection, the ad hoc working group points out that application documents, as far as available to the ad hoc working group, do not show which of these emergency measures have already been implemented and which have not. In this respect, it is therefore required to promptly perform a review so that it can be decided which further measures have to be implemented prior to the licence notice by way of precaution, particularly

since it is obvious that it will take many months until issuance of the notification in the application procedure of the BfS on the handling of radioactive substances pursuant to § 7 of the Radiation Protection Ordinance (Strahlenschutzverordnung, StrlSchV).