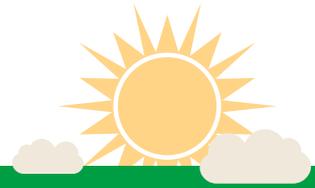


Regulating geological disposal



Joint working between regulators

Issue 1, 2019

The Environment Agency and the Office for Nuclear Regulation will jointly regulate any geological disposal facility for radioactive waste in England.

We are working together to make sure that any geological disposal facility will meet our requirements for protecting people and the environment when it is being developed, while it is operating and after it has closed.

Geological disposal

Geological disposal means permanently placing radioactive waste in a specially designed facility between 200 metres and 1,000 metres underground. The design of the facility and its contents, combined with the properties of the surrounding rock, provide multiple barriers that contain the radioactivity and prevent harmful quantities from reaching the human environment. The depth of the facility protects the waste from effects at the surface, such as future climate change, surface erosion, and human activities.

Responsibility for implementing geological disposal

The UK government is responsible for setting the policy for managing radioactive wastes. The UK government has decided that the best available approach for managing higher activity radioactive waste in the long-term is geological disposal.

Radioactive Waste Management Ltd (RWM) is responsible for implementing geological disposal.

Environment Agency

The Environment Agency (EA) is responsible for implementing and enforcing environmental protection legislation in England. Its areas of responsibility include environmental pollution, waste management, flood risk management, water resources, fisheries and conservation.

The EA also regulates disposals of radioactive waste from nuclear licensed sites as well as from other premises that use radioactive substances. Disposals of radioactive waste include radioactive discharges to air and water and disposal of solid waste to land including disposals at landfills, at the Low Level Waste Repository as well as geological disposal.

Office for Nuclear Regulation

The Office for Nuclear Regulation (ONR) licenses nuclear sites and is responsible for regulating safety and security on licensed nuclear sites in Great Britain.

The ONR also regulates the safety of transporting radioactive materials and works closely with the International Atomic Energy Agency and the European Commission to ensure that the UK's safeguarding obligations are met. The intention is that the GDF will be licensed by the ONR prior to any underground excavation commencing.



Working together

We work together to build a common understanding of the regulatory issues involved in geological disposal. This helps us to be proportionate, consistent and targeted in regulating the development and operation of any geological disposal facility.

Regulation of the development, operation and eventual closure of a geological disposal facility will take place in a staged manner. Approval is required from the regulators for surface-based investigations, and in due course for underground investigations, construction, operation and closure. The developer is not able to progress from one stage to the next without first securing the relevant permissions it needs. The purpose of this staged approach to regulation is to ensure that at all times the development is undertaken safely and securely, and in ways that ensure proper protection of people and

the environment – without inadvertently undermining the long-term performance of the facility.

The regulatory process will start when the developer decides there is a need for surface-based investigations such as drilling boreholes. At this stage, the developer will need to apply to the EA for an environmental permit prior to undertaking any such works.

Joint regulation by the EA and the ONR will begin after a preferred site for a geological disposal facility has been identified. The developer will need to apply for both a nuclear site licence and the appropriate environmental permit before starting excavations to enable underground investigations.

It is anticipated that regulatory control may be required for many decades and possibly more than a hundred years. After the facility has closed and when the requirements to protect people and the environment in the long-term are met, the site will no longer need to be regulated and regulatory control will end.



Selection of a site for a geological disposal facility

We will support the site selection process by explaining how our regulatory roles and processes will help ensure protection of people and the environment now and in the future. We will also provide advice and comment on environmental, safety, security and transport matters within our regulatory remits. As regulators, we do not have a decision-making role in the process for identifying and selecting sites for investigation. We do not regulate the site selection process.

Pre-application advice

We currently provide regulatory scrutiny and advice to RWM. We do not regulate RWM at present because the site selection process for a geological disposal facility is outside our regulatory remit.

More information about our joint scrutiny of RWM's current work on geological disposal is available at:

www.gov.uk/government/collections/scrutiny-of-radioactive-waste-management-directorates-rwmd-work

Getting involved

During the site selection process, we will participate in public events and, if these are near you, you can come and speak to us.

You can also contact us by e-mail:

nuclear@environment-agency.gov.uk
contact@onr.gov.uk

Further information

Further information on regulating geological disposal.

Environment Agency

www.gov.uk/guidance/regulating-the-geological-disposal-of-radioactive-waste-environmental-protection

Office for Nuclear Regulation

www.onr.org.uk/geodisposal.htm