General Certificate of Education

Geography
Decision Making Exercise

Resource Booklet

Nuclear Waste – what to do with it?

Deep Space Disposal

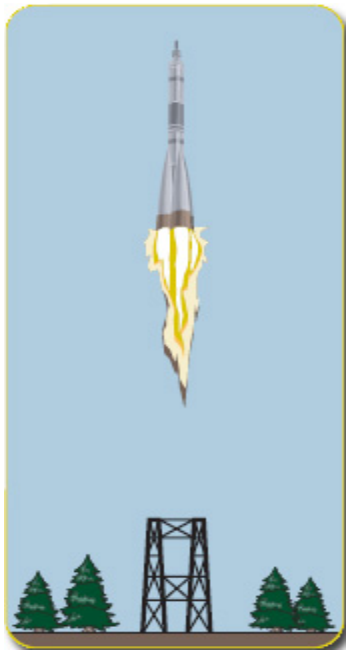

Figure 2

Deep Geological Disposal

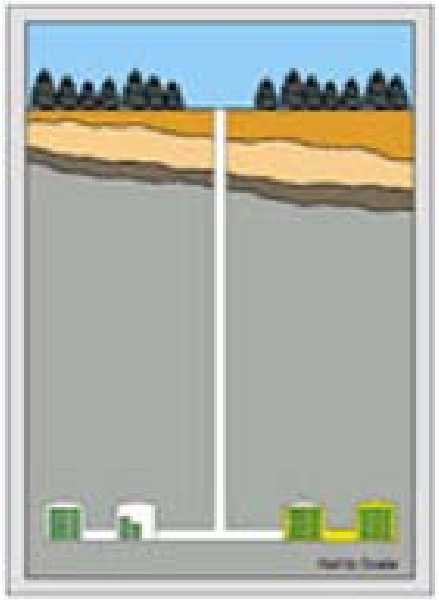

Figure 3

All images: Nirex

Government using 'spin' on radioactive waste issue!

The government has been accused of using public relations tactics and 'amateurish' methods in deciding the fate of Britain's nuclear waste.

Certain scientists have stated that discussing the idea of 'putting tonnes of the most deadly wastes known to man in a rocket' is a waste of public time and money.

Claims were made that the eventual decision to bury nuclear waste in deep geological disposal was the only practical option from the start of the consultation process and valuable time could have been saved.

Figure 4

Consultation group reaches decision after long process of discussion

The Committee on Radioactive Waste Management (CoRWM) has advised the government of its decision in relation to the best method of disposing of our nuclear waste.

After wide public consultation where the different options were outlined the committee has recommended a deep geological disposal solution.

Other options such as launching the waste into space, deep sea disposal or placing the waste in geological subduction zones were dismissed as technically too difficult or unsafe.

Figure 5

The battle starts here!

Nuclear waste is going to be buried in the ground near you!

There are 5 'location factors' that will help the government decide where to develop the disposal site. They are:

Suitable Geology	Accessibility	Population Distribution	Technology knowledge base	Political Cost
The geology is stable and suitable down to 2000m	A reasonable transport system (motorways or railways) is needed in order to move the waste to the site.	Locality needs to be isolated from large centres of population	High levels of technical expertise is needed	There could be a strong local opposition to the site and that may be translated into votes.

Figure 6

Location Factor	Site A	Site B
Suitable Geology	**The geology is stable and suitable down to 2000m**	**The geology is stable and suitable down to 2000m**
Population Distribution	**1200 people per square kilometre**	**4500 people per square kilometre**
Accessibility	**The location is near a significant motorway hub that connects routes west, east and north and is near an established large scale port. Rail network is good**	**The location is near a significant motorway hub that connects routes to the north, south, east and west. There is a small inland port with access to open sea through a main city. Rail network is good**
Technology knowledge base	**The area has a history of heavy engineering and has 3 universities within 20 kilometres**	**The area has numerous universities and is a centre for research and development**
Political Cost	**There are 100000 votes in this area and in the last election the seat was held comfortably by the present government**	**300000 voters live in this area and the area is represented by all 3 political parties**