## **Sellafield dump** plans 'flawed'

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**Environment Editor** 

ONE OF the country's leading geologists is to issue a public warning that plans to build an underground repository for Britain's nuclear waste at Sellafield are dangerously flawed. The warning will have added weight because the scientist is a supporter of the principle of underground dumping.

Professor David Smythe of Glasgow University is to give evidence this week at the final session of the public inquiry into plans by Nirex (the Nuclear Industry Radioactive Waste Executive) to build a test underground repository at the Cumbrian nuclear site. Professor Smythe has conducted a three-dimensional seismic survey of the site and believes that the test repository could trigger geological instabilities that would cause fatal weaknesses in any future nuclear dump.

Nirex had originally intended to submit a single planning application to carry out test excavations and build a full nuclear underground repository. The latter would be used to store the 100,000 cubic metres of low and intermediate nuclear power waste currently stored on the surface.

But officials changed their minds after fears were raised that radioactivity could leak through ground water movements. Instead, they have proposed a test repository to study local geology and under-

ground containment techniques. If successful, a second application will be made, after five years, to convert it into a full-scale repository.

And it is this two-stage process which alarms Professor Smythe, a former British Nuclear Fuels adviser. 'In other countries, engineers have perfected their techniques away from their favoured store site. It is a precious place, after all.

'A test dump's shafts and galleries will obliterate vital hydrological and seismic evidence which we might need later to determine the safety of a full-scale repository. Without it, we might build a nuclear dump that leaks in a few decades.

'In addition, those shafts might cause instabilities that will accelerate the slow passage of ground water through the repository. It is not supposed to leak until all its waste's radioactivity has died away. A test dump might fatally accelerate this process.'

Professor Smythe, and several other academics, who are giving evidence for objectors Friends of the Earth, believe Nirex is moving too quickly.

This view is rejected by Nirex. A spokesman said: 'This argument is based on a highly selective use of facts. If we get permission for the RCF, we will still have to come back next century for permission for a full repository. If we have wiped out our own evidence we would look bloody stupid. That won't happen.'

