

Appendix 4:

ID 1385 – Newspaper articles accompanying response form

Earthquake 'could hit N-waste bid'

WEST Cumbria's potential for burying highly radioactive nuclear waste could have taken a step back as a result of Tuesday night's earthquake, say campaigners.

Seismic tremors have to be seriously considered as part of a watertight safety review if a site is eventually found which appears to have the right geology.

With large areas of Cumbria already unsuitable, Copeland is seen by many as a favoured site.

But yesterday campaigner Martin Forwood of Cumbrians Opposed to a Radioactive Environment said it would be "dangerous folly" to consider anywhere in West Cumbria for a repository.

He told *The Whitehaven News*: "Our own house (at Broughton Mills) shook with the explosion. It was a real tremor and as soon as we heard it our first thought was: 'This has put paid to the nuclear waste dump.'

"It would be stupidity to bury high levels of radioactive material underground in areas which can be affected by earthquakes.

"[Tuesday] night's was felt to a depth of eight-and-a-half miles. A tremor this far underground where nuclear waste happened to be buried would allow water into the dump and then consequences would be dangerous."

But Coun Tim Knowles, who chairs the West Cumbria Managing Radioactive Waste Safely Partnership, said: "If the public

BY ALAN IRVING

are eventually in favour of moving things forward then it would be a question of a new body being formed to look at the safety case, taking into account all geological risks including seismic. In fact, all the regulators would be involved and would have to be satisfied about safety, but this is many years away - we are not even at the starting gate yet."

David Moore, chairman of the West Cumbria Stakeholders emergency planning sub committee, said: "It's always been part of the plans to look at the potential impact of seismic activity. Tremors can occur anywhere at any time, so, in terms of a repository it is something which will have to be looked at very closely and very seriously."

Sellafield's own sophisticated seismic monitoring equipment registered the tremor but not high enough to trigger the alarm. As a precautionary measure full safety inspections were carried out in key installations and no effects or damage discovered. The site has continued to operate normally.

Across Cumbria homes shook as the tremor, which had a magnitude of 3.5 on the Richter scale, hit at around 11pm on Tuesday.

Officers at Workington police station were inundated by calls after the shake - but no damage or injuries have yet been reported.

The British Geological Survey

(BGS) this morning carried a record of the quake, which had an epicentre in Coniston. It was also felt as far away as Lancashire, south-west Scotland, Northumberland and the Isle of Man.

The British Geological Survey's head of seismology Dr Brian Baple said: "We get an earthquake of this size somewhere in the UK roughly every 12-18 months. Damage is very unlikely."

Derek Eastwood, of Seascale, was watching TV when he felt the tremors. "We thought there had been an explosion, we heard about two or three murmurs," he said.

Mandy Regan, of Cleator Moor, said: "We heard a rumble, like a thunder sound, we thought there might have been a crash."

Tracey Kendall, of Gosforth, said: "I heard a rumbling sound - it sounded like a train passing. My partner thought it was an explosion, and it woke up my 12-year-old son. However, I realised it was an earthquake because I experienced one when I lived in Leicestershire."

Eskdale hotelier, Alan Robertson, said: "The entire building shook. I ran out of the front door, only to be confronted by my guests running out of their part of the hotel. We couldn't believe it."

Mike Ormond, from Rother-syke, near Egremont, thought that his "house was coming down".

"I was sitting in the corner of the sofa and it threw me from one side to the other."

Protect agriculture and tourism

By Marianne Birkby, founder of Radiation Free Lakeland, an anti-nuclear group set up in 2008

THE last government set up a quango called Managing Radioactive Waste Safely.

MRWS aims to give lucrative contracts, courtesy of the taxpayer, to private companies for a mine 3,280ft deep by 269 sq ft.

Put in perspective, Scafell Pike is 3,208ft. Imagine that size mine filled with high-level radioactive waste by 2026, setting a world first.

MRWS has said further investigation of Cumbria's geology is needed.

Really? Cumbria is one of the most investigated geological areas in the UK with a long history of mining.

Mines were abandoned - not because the resource failed, but because of the energy needed for de-watering. An area of "high rainfall, permeable rocks and hills and mountains to drive the water flow" would guarantee migration to the surface (1999 UK Government sponsored video, Pangea).

A public inquiry and appeal agreed with Cumbria County Council 15 years ago that the risk of radioactive



JUST SAY NO: Marianne Birkby, of Radiation Free Lakeland

waste migrating to the surface was too great for geological disposal of intermediate level waste.

Today, that same authority is a partner in the plan

which now includes high-level waste.

A nuclear dump would blight Cumbria's major industries of agriculture and tourism.

Even before the placement of waste, the mining operation would rival the biggest in the world.

It would disrupt Cumbria's fragile water table and add to earthquake risk.

Cumbria should be assured of essential infrastructure from central government such as schools, roads and hospitals without being bribed by a community benefits package.

MRWS said a facility would not be built unless it would be safe during its operations and for future generations.

Its advice contradicts Dr Adrian Bath, who said: "Geological disposal safety plans do not assume that total containment by engineered barrier systems for ever is possible."

The MRWS inventory of waste to go in the dump is meaningless, as the plan includes existing waste and new build waste from untried high burn nuclear power plants.

The Gosforth/Eskdale area was ruled out by the Nirex Inquiry. New criteria have been written to rule Longlands Farm back in.

MRWS is now sinking taxpayers' millions into a timetable process too big to fall.

There would already be a geological nuclear dump in the Gosforth/Eskdale area if the county council had not opposed it 15 years ago.

YOUR VIEWS

Lessons to be learned from Fukushima blast

It is still too early to take all the lessons from the Fukushima nuclear incident, which is still in progress.

But there is one lesson on contingency planning that we in Cumbria, in particular, should note.

The Japanese power companies were warned that it would be dangerous to build nuclear power stations on an earthquake fault line.

In response, they gave assurances that all possible contingencies had been taken into account and the design and safety systems of the plants would ensure a safe shut-down if the worst happened.

The Fukushima reactors have been in operation, at the longest, for 40 years.

The Nuclear Decommissioning Authority (as Nirex) was warned by the conclusions of a public planning inquiry that West Cumbria was geologically unsuitable for the underground disposal of UK's 'legacy' nuclear waste.

These conclusions have not been challenged.

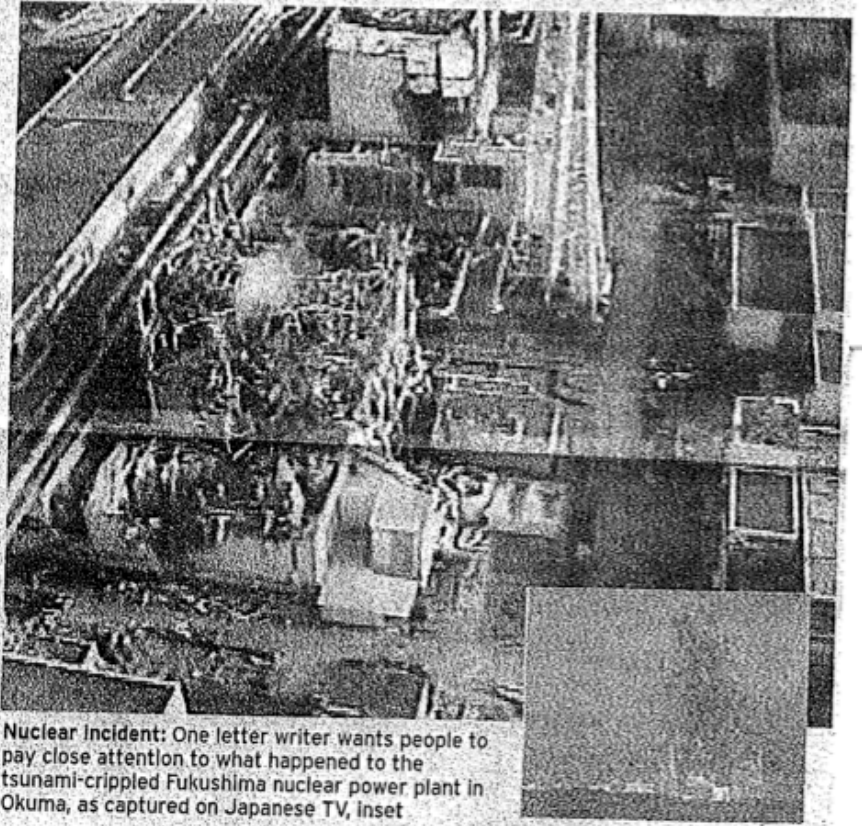
Instead, in response, it is giving assurances to the councils of Cumbria that all possible contingencies would be taken into account and the design and safety systems of the disposal facilities would ensure safe containment if the worst happened.

The containment facilities in west Cumbria will be in operation, at the shortest, for forty thousand years.

As Cumbria is the wrong place we urge Cumbrians to refuse any further 'consultation' being conducted by the Managing Radioactive Waste Safely Partnership.

We remind them that it is the councillors and politicians in power that have the final say.

DON SANDERSON
Secretary North Cumbria
Campaign for Nuclear
Disarmament



Nuclear Incident: One letter writer wants people to pay close attention to what happened to the tsunami-crippled Fukushima nuclear power plant in Okuma, as captured on Japanese TV, inset

westcumbria:mrws

West Cumbria Managing Radioactive Waste Safely Partnership

Nuke waste plea

MANY thanks to all the 1,530 people who signed the No Nuke Dump petition which calls on Cumbria County Council and Copeland and Allerdale borough councils to halt the cleverly named Managing Radioactive Waste Safely process.

The MRWS process has one agenda - "steps towards geological disposal" - which means a newly mined area (or two or three) stuffed with high level radioactive wastes in a hole(s) bigger than Windermere and as

deep as the Eiffel Tower.

The mines would be cut by giant earth boring machines and explosives of the kind used to smash the seven mile tunnel through the now abandoned Yucca Mountain nuke dump project carried out by URS Washington - see DECC website http://mrws.decc.gov.uk/en/mrws/cms/Disposal/Geological_dis/Construction_a/Construction_a.aspx

Radiation Free Lakeland have been accused by the MRWS Partnership of "scaremongering."

This is the kind of tactical advice provided by a PR company that has been given a lucrative government contract with the remit of ensuring a positive message about "geological disposal".

The Government is keen to avoid "scaring the horses".

It is crucial to the plan for new nuclear build and ever more hazardous waste that Cumbria accepts the unacceptable.

The British government produced a video in 1999 which made a far stronger case against geological disposal in Cumbria than any petitioner such as Radiation Free Lakeland could hope to. The video, called The Omega Project, was pushing for nuke dump in Australia and advised that areas of "high rainfall, permeable rocks and hills and mountains to drive the water flow" would guarantee high level radioactive wastes migrating to the surface.

In other words, geological disposal of high level nuclear wastes in an area such as Cumbria would make that land too severely radioactive to sustain life.

We were due this week to present the petition and address Cumbria County Council's cabinet urging withdrawal from the Managing Radioactive Waste Safely process as soon as possible.

MARIANNE BIRKBY
Radiation Free Lakeland
Milnthorpe

No to dump

ANYONE, which means everyone living in West Cumbria, will have read with great interest the issues around the geological disposal of nuclear waste.

But few will know that most of the facts about rock disposal from the geological disposal facility for high level nuclear waste in our midst are derived from a letter dated October 21 from the NDA to the MRWS Partnership of the three local authorities. Fewer still will know that the NDA were responding to a lengthy analysis of issues around rock excavation from expert geologist Prof David Smythe and fewer still will know what a good impersonation the partnership is giving of doing its best to deceive the public about the scale of the destruction which may be wrought in neighbourhoods by a £10bn-plus construction project of Channel Tunnel size and complexity.

It is clear that the scale of the project has been considered and estimated by the NDA for over a year. Only now detail is emerging, grudgingly, into daylight. And even there, the narrative is incomplete.

One must wonder whether the NDA, Copeland, the county and Allerdale councils can be relied upon to tell the whole truth, and act responsibly in the public interest.

It will be a physical calamity for parishes and communities over and under whose land it will be sited, whatever the long-term implications for employment and business.

Even the NDA is on record that there are likely to be better places for GDFs in England than West Cumbria. The process was flawed from the beginning. Don't dump Cumbria.

MICHAEL BARON
South Street
Cockermouth

Cumbria not suitable for underground nuclear storage

I AM concerned to read that both Allerdale and Copeland councils have expressed an interest in hosting an underground repository for the storage of radioactive material in West Cumbria, which is clearly just based on our Government's cash-for-community projects bribe.

Without a new high-level waste dump, the Government's plan for a new atomic power station would be hard to achieve, but disposing of this highly dangerous material in a heavily faulted area is not a good idea.

Geologically, this region is not safe and we have a duty to ensure that future generations are protected from any possible radioactive leakage.

Councillors should also take heed that a scientist has warned that recent studies have shown there is a link between atomic sites and incidents of cancer.

The dynamic processes affecting the geology of the earth's crust continue, and the rocks of West Cumbria are unstable.

They are heavily faulted and folded and have been subjected to considerable earth movement in the past.

Beneath Cumbria, gravitational surveys have proved that there is a large granite pluton that is slowly continuing to rise, placing increasing stress on our surface rocks. Additional stress is caused by the North Sea basin gradually sinking.

Undoubtedly, in time, this will lead to further folding and faulting of the strata, with the strong possibility of earthquakes when there is a sudden release of pressure.

In Britain we average about 200 earth tremors each year, although our country is much safer than some other parts of the world.

A number of sizeable earthquakes have been recorded in recent times. In Cumbria, there have been several; Kirkby Stephen on August 9, 1970, measured 4.9 on the Richter scale, with another near Carlisle on Boxing Day 1979 and even more recently on Boxing Day 2005, centred near Dumfries.

It is clear that careful thought and planning must be given for the long-term storage of this extremely dangerous material and it needs to be placed at a considerable depth within stable rocks, but Cumbria is not the right place and there are other areas of Britain which would be preferable.

TONY RIGBY
Cumbria Geological Society
Cockermouth

Nuclear waste: get it right

CUMBRIANS have been invited by a partnership of local councils to discuss the question of west Cumbria becoming a home for the deep burial of the country's higher activity nuclear waste, and to give their views at a series of drop-in sessions across the county.

People may be wondering what environmental groups have to say about this, given the reference to our views consists of just four websites in the material circulated.

The partnership has invited me to join it, and I wish to explain why I've declined. My reasons include the following:

(a) the partnership is dominated by the nuclear industry, so there could never be a properly balanced discussion;

(b) the fact that this process exists at all means that government can say it is working on a 'solution' to the problem of nuclear waste, and this is crucial for the credibility of the programme to build new plants, even though it only applies to EXISTING waste;

(c) the process puts too much weight on public acceptability when the science and geology of hosting a repository is the critical issue;

(d) the research on deep disposal is far from complete, and so it may not be the best option.

Finally, there is a perception that this will go ahead irrespective of what people really think. Otherwise why revisit an idea roundly



Concerns: Dr Ruth Balogh at a nuclear waste presentation

rejected when Nirex proposed it more than a decade ago and which didn't even include high level waste?

The main problem with this process is that there is no provision for full scientific scrutiny of proposals as in the Nirex Inquiry – and we know that we cannot rely on the nuclear industry to do this on our behalf.

If I were a team of several scientists with the right expertise to critique the industry's proposals, I might join in, because that's what's really needed.

This process runs the risk of making bad scientific and engineering decisions that nonetheless seem publicly acceptable.

Even worse, if we continue to court the deep disposal idea and it turns out to be flawed

and the geology remains unsuitable, then we will have wasted time better spent exploring other solutions, eg continued dry storage at the site of origin.

Nuclear waste policy has been consigned to the "too difficult" box both by successive governments and by the nuclear industry for too long.

This time, let's get it right: A well-informed debate is essential.

Cumbrians who want to understand some of the arguments and evidence not mentioned in the current discussions should go to www.nuclearwasteadvisory.co.uk and www.no2nuclearpower.org.uk

DR RUTH BALOGH
West Cumbria and North Lakes
Friends of the Earth

■ COUNCILLOR Jack Park has been dangerously misinformed about high level nuclear wastes.

Councillor Park is quoted as saying: "The safest way to store it is in a geological facility – they have done them in Sweden and Finland and they worked."

This is the misinformation councillors and the public are being fed by the so-called Managing Radioactive Waste Safely Partnership.

The truth is very different. No country has implemented geological disposal of high level nuclear wastes.

There are studies being carried out in Sweden and Finland which show that the copper canisters corrode much more quickly than expected – a combination of the intense heat from the waste and the water (inevitable in a deep hole in the ground) combined with microbes (rather like the mould in hot damp bathrooms).

Sweden and Finland have no operational geological disposal facilities. Nowhere in the world has solved the problem of safely looking after high level nuclear wastes and for the MRWS Partnership to pretend to councillors and the public that geological disposal in Cumbria is a viable option is pure propaganda.

Saying no is the only sane option.

MARIANNE BIRKBY
Radiation Free Lakeland
Chelsea Court
Milnthorpe