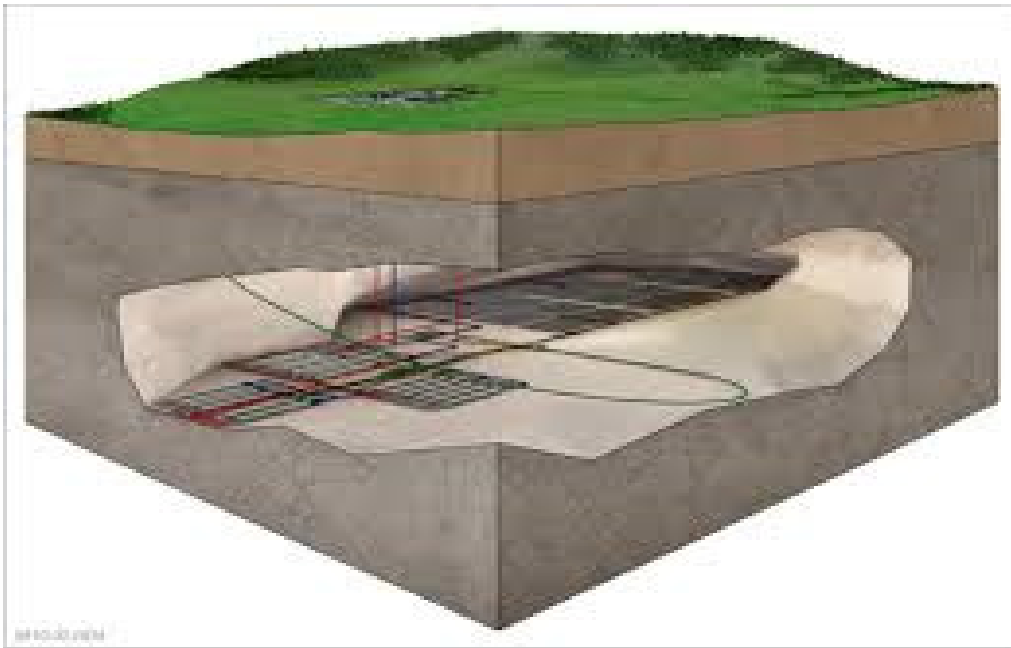




UK radioactive waste policy – will Council(s) volunteer to host a repository?



Sean Morris
NFLA Secretary
NFLA English Forum seminar, October 2018



Agenda

- **The UK's radioactive waste legacy**
- **Failed attempts x 5**
- **Current policy to develop a GDF**
- **Scottish Government policy / NFLA policy**
- **The new GDF process**
- **Nuclear waste transports increase?**
- **Conclusions**





What has been the most intractable?



- FIRST CONSIDERED 1802
- STARTED BUILDING 1988
- BUILT 1994



- TOOK 20 YEARS TO JOIN
- EU MEMBER FOR 46 YEARS
- 2 – 6 YEARS TO LEAVE

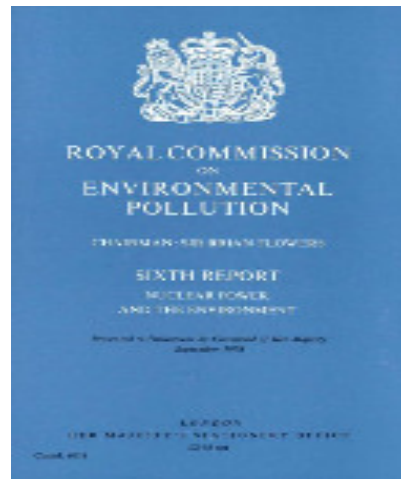


- 70+ YEARS OF NUCLEAR AGE
- TALK ABOUT WASTE 50 YRS
- STILL TALKING!
- TO STORE FOR 300K+ YEARS!



Flowers report, 1976

- Royal Commission looked at radioactive waste management
- Key quote: “There should be no commitment to a large programme of nuclear fission until it has been demonstrated beyond reasonable doubt that a method exists to ensure the safe containment of long-lived, highly radioactive waste for the indefinite future”





Long-term storage – 5 failed attempts



1976 search begins –
huge public opposition
Gov't abandons Dec 81

NIREX

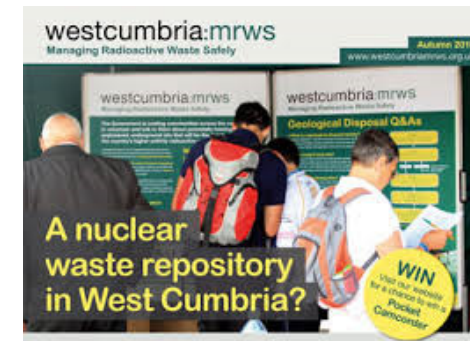
1982 NIREX formed –
suggests Billingham ILW /
Elstow LLW
86 – Billingham abandoned
87 – Elstow + 3 new sites
May 87 – policy abandoned
after huge public opposition



1987 / 89 Nirex focuses on Sellafield & Dounreay
March 1997 – UK Government rejects Sellafield
application (last decision of Major government)



2002 CORWM set up
2008 CORWM recommends GDF with caveats
2009 Volunteers asked for, Cumbrian
Councils only offer
2012 MRWS report published
2013 Cumbria County Council withdraws





The radioactive waste conundrum

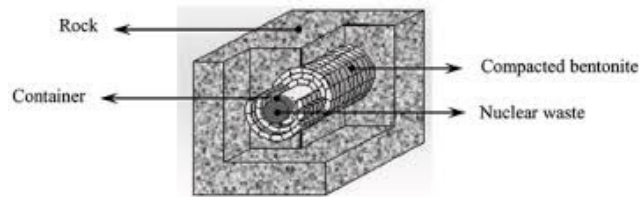
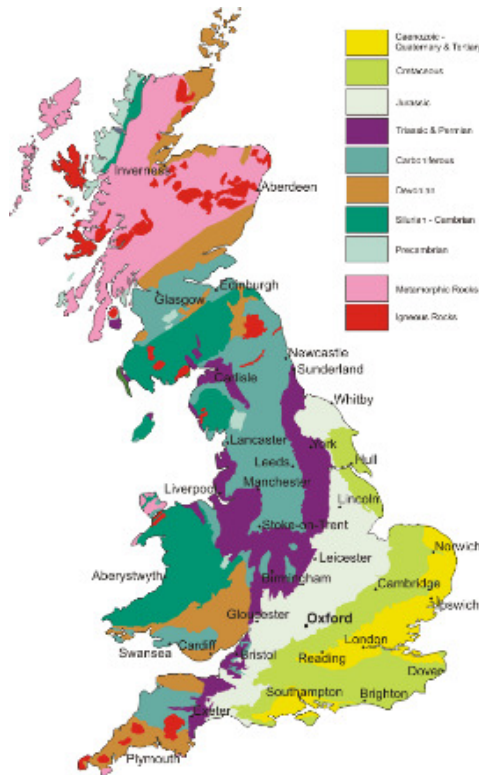


Fig. 1 - Scheme of the engineered barrier.



OR CAN BARRIERS BE PUT IN PLACE?

MOST OF THE WASTE WILL BE IN SELLAFIELD, CUMBRIA



HOW DO YOU CONVINC THE PUBLIC?

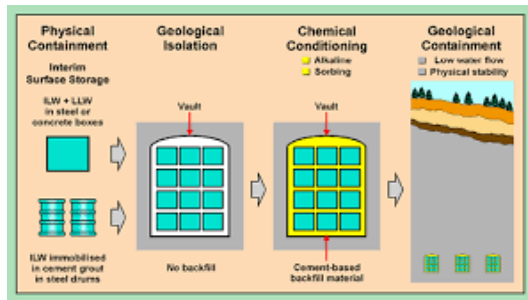


BUT SO IS THE LAKE DISTRICT WITH TOURISM £'s

IS IT ABOUT THE RIGHT GEOLOGY?



Attempt 6 begins (2015 onwards)



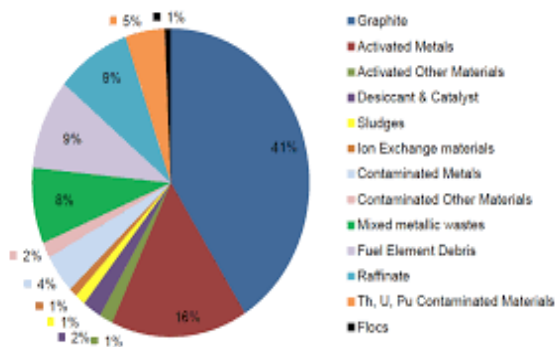
- **UK / Welsh Government see deep underground repository as the only alternative**
- **GDF made a National Infrastructure project**
- **But only if community ‘volunteers’ for it**
- **Tried to define a community**
- **NO veto for County Council, District Council makes decision**
- **RWM established to be national advocate for a GDF**
- **If show interest, locked in to a long process (15 – 20 years)**
- **Geological screening of England & Wales (screen out, not in)**
- **£45bn, 40 years construction, closed in 100 years**
- **To last a very long time (hundreds of thousands of years)**



Scottish Government policy



- **Scottish Government opposes new nuclear reactors**
- **Waste devolved matter – separate policy process**
- **Concluded ‘near site, near surface, retrievable’ was policy**
- **OK for large majority of waste**
- **Some issues to still resolve with Dounreay HAW**
- **Not rushing the policy**
- **NFLA a member of Project Board & broadly supports policy**
- **NDA / RWM has to work therefore to 2 different policies**





NFLA view on UK / Welsh GDF policy



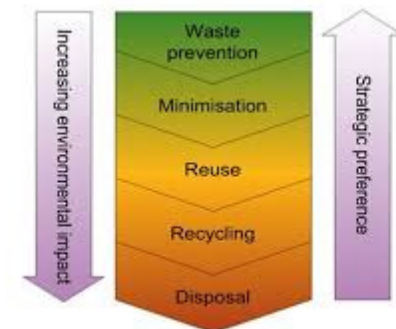
- GDF diverts attention from safe & secure waste management
- Most bulky waste not arise till after 2080
- Part of Govt support for new nuclear reactors
- New build waste is less volume but much more radioactive
- Remain unconvinced of science & technology for GDF will protect the environment for the longer-term (NWAA 100 issues)
- NO RETRIEVABILITY remains our major concern
- E.g. Swedish GDF court case – concern over copper corrosion
- Hydrogen gas produced in large volumes
- Geology is important and should not be downplayed

Retrievability



The new policy – ‘controlled volunteerism’

- Concern remains over which ‘community’ will be centre of a Community Partnership
- Could be locked in for 15 – 20 yrs and put under pressure to accept it (no early veto)
- Previous process several tests of public support
- Anyone can express an interest (MOD, FC, private)
- Diluted role for County Councils
- Easy to join process, very hard to leave
- Should be first national debate over best geology or engineered barriers first (ethical issues)





What is the offer to Councils / communities?

- A 'volunteer' receives £1m a yr in early stage of process
- Then £2.5m a yr as boreholes drilled
- Over 20 yrs around £42 million
- Yet ALL Councils have lost much more in 7 years of cuts!
- 'Additional' investment promised but NO detail
- Cllr Tim Knowles, former Cumbria MRWS Chair – promises of infrastructure funding never materialized and produced scepticism (main reason why Cumbria CC left last time)





Chances of success?

- **BEIS letters will go out to Councils shortly**
- **NuLEAF meetings suggest lot of scepticism remains**
- **Remains unlikely that there will be lots of interest**
- **Government has been talking a lot to Councils in private**
- **Possible 1 or 2 Councils may come forward**
- **Likely to be tension between County / District Councils**
- **RWM / Government will try hard to make it work**
- **Many (including NFLA) think same mistakes as in past have been made**



Nuclear transports increase?



- **HAW goes to Sellafield for packaging and storage**
- **Government will hope Cumbrian Councils express interest**
- **Political divisions in Cumbria over GDF still remain**
- **If not Cumbria where else?**
- **Potentially new site could be many miles away**
- **Inevitable increase of nuclear transports (road / rail / sea)**
- **Effects all Councils on a transport route**
- **NFLA will represent the voice of such Councils**



Conclusions

- **A long-term radwaste policy has been an intractable part of UK nuclear policy**
- **Has the UK / Welsh Government learnt from its previous mistakes?**
- **New nuclear reactors has politicised an already politicised debate**
- **What community(ies) gets the final say?**
- **Is it best geology or can barriers work?**
- **Retrievability remains a major issues for NFLA**
- **All English & Welsh Councils will be asked again to ‘volunteer’**
- **The splits and divisions are likely to begin again**

Conclusions?