

NFLA publishes detailed assessment of prospects for a deep underground, partially under the Irish Sea radioactive waste repository and links with the current proposed coal mine development in West Cumbria

The UK & Ireland Nuclear Free Local Authorities (NFLA) publishes today its assessment of two possible developments being considered at the moment in West Cumbria – a deep underground and partially undersea repository to store the UK's higher activity radioactive waste legacy; and a controversial development to build a deep underground and undersea coalmine being currently considered by Cumbria County Council (1).

In the past few months Copeland and Allerdale Councils in West Cumbria have set up Working Groups (in conjunction with Radioactive Waste Management or RWM) which may see them actively consider hosting a deep underground radioactive waste repository (often called by the nuclear industry and the UK Government as a Geological Disposal Facility or GDF). Both Councils had supported plans in 2013 to move forward with considering such a development, but that process was curtailed as Cumbria County Council opposed moving forward on it, and the support of all three Councils had been required. This time the County Council will have no such veto power.

At the same time, a local, national and international debate has taken place over a proposal by West Cumbria Mining Ltd (WCML) to build a deep underground coalmine on the West Cumbrian coast. This development has twice been approved by Cumbria County Council despite a huge chorus of concern by climate change groups, but it is now being considered for a third time following comments made to the Council by the independent Committee on Climate Change. A dramatic turn in this issue took place yesterday, when the UK Government decided to 'call in' the development for national consideration – giving in somewhat to the concerns of the climate change movement.

In considering both proposed developments, the NFLA have also looked at possible links between them, and it raises important environmental and climate concerns with both.

The core conclusions of the NFLA report are:

- Two Working Groups have now been formed in Cumbria to begin early discussions about the
 potential for hosting a deep geological radioactive waste 'disposal' facility. At present no other
 communities in England or Wales have put themselves forward for considering such a
 development.
- A 'Geological Disposal Facility' is not expected to be available to receive its first waste until the 2040s at the earliest. It will then take around 90 years to emplace all existing waste before any spent fuel from new reactors can be emplaced. Given these timescales there is no need to hurry towards a disposal solution. The focus should be on managing existing waste where it is rather than a premature search for new places and possibly new communities for deep disposal.
- The problems the country already has with radioactive waste are difficult enough and will only be compounded if new nuclear reactors are built extending the timescales for implementation for very long, unknowable periods in the future. In the year 2200 spent fuel from Hinkley Point C alone will contain about 80% of the radioactivity contained in waste that exists today.
- Both the Allerdale and Copeland Working Groups will be looking at the potential for development
 of the underground facilities of a GDF off the coast, accessed from land, as well as sites under the
 land. An offshore site could be as much as 22km off the coast. This would make it of interest



to the likes of the Isle of Man Government, the Irish Government, the Northern Ireland Executive and the Scottish Government.

- Going offshore is likely to make retrieving packages once emplaced more difficult. Leaks from the repository downwards, and through faults, during the construction and emplacement phase, and potentially later on by the outward leaks from the repository, once filled would all remain a potential concern. Centuries of coal mining in parts of the region have left a legacy of surface collapse and instability. Old mine working appears to be poorly mapped so there may be a risk of running into, or close to, old workings of the West Cumbria coalfield which has a high density of faulting. Where new mining activity occurs close to old workings, the risk of subsidence and fault re-activation is increased.
- Apart from climate considerations the connections between the proposed coal mine and the search
 for a nuclear dump site raise several concerns. Connections between West Cumbria Mining and
 both CoRWM and RWM will inevitably raise suspicions that the mine proposal is being used to
 speed up the search for a dump site in an anti-democratic fashion.
- Both the coal mine and a potential under seabed repository have the potential to remobilise anthropogenic radionuclides currently immobilised in seabed sediments that originate from the Sellafield plant.

The dangers that remain in Cumbria from its mining past were shown visibly a week ago when a farmer in Stank, South Cumbria had to be rescued after falling through a 60ft sinkhole. It is thought that there were many 19th century iron ore mines in the area, but as the NFLA report notes, they are poorly mapped. (2)

NFLA Steering Committee and English Forum Chair, Councillor David Blackburn said:

"This detailed NFLA report outlines our consistent concern with the process to developing a deep underground radioactive waste repository and its many technical and scientific uncertainties. A new policy process adds another issue with the possibility of putting a dump off the Cumbrian coast and potentially partially going under the Irish Sea, which could raise wider international concerns. The separate discussion on a deep underground, partially undersea coal mine raises additional issues over climate change and its actual need. We urge careful consideration of both plans and are concerned with either being actively developed. We are sharing this report with councillors, RWM, CORWM and the nations that could be affected by it. With the urgent need to reduce carbon emissions, the coal mine is not required, and we welcome the Government calling in the development at long last. We also continue to remain sceptical over the deep geological repository process."

Ends. For more information please contact Sean Morris, NFLA Secretary, on 00 44 (0)7771 930196.

Notes to Editors:

- (1) NFLA Radioactive Waste Policy Briefing 86 on the West Cumbrian Councils interest in a deep underground radioactive waste repository and the Cumbria County Council consider of a deep underground coalmine, March 2021 is attached with this media release.
- (2) BBC News Online, 5th March 2021 https://www.bbc.co.uk/news/uk-england-cumbria-56290236