P-05-1003 Demand an EIA now on the dumping of radioactively contaminated mud in Welsh waters, Correspondence – Petitioner to Committee, 24.11.20

In the debate the general (though not uniform) tenor of MSs' comments was about reassuring the public. The subtext is "we'll reassure them that everything's ok and their concerns are groundless". The EIA is required for complying with regulations and considering alternatives.

The Environment (Wales) Act has high-level requirements about consultation in light of uncertainties.

Our main interest is in;
1) the huge uncertainty over whether the average official radiation risk model takes adequate account of inhalable alpha-emitting particles,
2) the certainty that such particles are in the mud but are not detectable by the tests CEFAS proposes to use,
3) the official silence that surrounds both of those issues.

We ask that the committee acknowledge that there are serious science-backed concerns about nuclear microparticles - requires proper tests for the alpha emissions on the mm-scale, on top of the planned gamma and alpha spectrometry.

That there are serious science-backed concerns about the radiation risk models, especially in regard to internal alpha and beta emitters, NRW needs to consider both the ICRP and ECRR models, not confine their assessment to the IAEA dose model for gamma radiation.

NRW should have considered radon-type alpha detectors, not accepted CEFAS's dismisson of these long-used techniques. NRW rejects the use of CR39 arguing that it can't tell the difference between plutonium and uranium. This is irrelevant and misleading for three reasons:

1) 0.1micron diameter particles of Plutonium-239 oxide give the same frequency of alpha tracks as Uranium oxide particles 100 times bigger.
2) hotter particles are more likely to kill cells than less radioactive ones. Cell killing doesn't cause mutation; cells with survivable genetic damage can pass mutations to an increasing number of cells so, contrary to conventional dogma, dose is NOT everything and
3) the testing techniques used by CEFAS cannot detect particles of alpha emitting oxides at all.

The decision by NRW that the mud dredging and dumping project is an amendment to the Hinkley Power Station development means the full range of alternatives has to be considered.

They are not simply the first proposed dumping outside the Severn "Marine Protection Area" and using the dredgings on EDF's building site, but also using land-based cooling towers instead of the whole seawater extraction plan and its fish/wildlife harm.

Obvious concerns include;

- Impacts on Welsh beaches and people,
- No monitoring of impacts of the 2018 dumping,
- Test for nuclear tracers like americium-241, and that requirement on baseline and post-dumping monitoring be included this time.
- The unsatisfactory outcome of the Titan dumping study (NRW denial that the mounds could be linked to Hinkley)
- Contradiction between CEFAS
- modelling of the dispersing mud (upstream they say) with the Severn SMP (anti-clockwise circulation - takes the mud to Barry Island)
- the EIA needs to cover/summarise the Fish-kill evidence to the Planning Inquiry, including the breach in the Habitats-Species law.

Another complicated issue that calls for a second Appendix is baseline monitoring in Wales and modelling of the fate of dumped mud.

We ask that the Petitions Cttee consider sending these "scoping" propositions to NRW and the Davidson group and ask for responses?

In order to be of assistance to the Committee, we could write a self-contained paper that they could readily pass on to NRW from the 1 Dec. meeting.

Thanks in advance,