

# Hinkley Mud Campaign – October update

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# The Original (2017) Senedd Petition Committee Campaign Questions

Where would the radioactivity end up after being dumped at the "dispersal" site?

What radio nuclides were present in the mud : how MUCH radioactivity was in the mud?

What was the baseline data for man-made radioactivity in south Wales coastal waters and beaches, salt marshes and coastal zone?

What was the baseline data for radioactivity doses to "critical group"/"representative person" of South Wales

None of the above questions have been asked or answered to date

BUT we did learn that

NRW Had no relevant "in house" *expertise* and reliant in pro nuclear Government agencies (CEFAS, Env' Agency, English MMO and EdF scientists)

NRW was under influence of Westminster Gov' Agencies and pro nuclear Ministers of Welsh Gov'

EdF claim that the mud was "NOT RADIOACTIVE" is false

Even EdF agree that the mud contains Plutonium, Cobalt 60, Americium and Caesium

EdF claim that their monitoring/sampling methods had identified "ALL OF THE RADIOACTIVITY PRESENT" was false

# Ist Phase of Campaign

- During the course of evidence sessions and documentary evidence submissions a range of additional concerns were uncovered:
- **EdF monitoring techniques incapable of identifying ALL of the man-made radio nuclides present in the mud despite their claim to the contrary:**
- **EdF monitoring techniques incapable of quantifying the complete concentrations of all nuclides present in the mud despite their claim to the contrary**
- **There was no baseline data about fate of material dumped at Cardiff Grounds dispersal site**
- **There was no baseline data about distribution and concentrations of man-made radioactivity in Welsh coastal environments**
- **Despite claims from EdF and NRW that these issues had already been covered by the original HPC Environmental Impact Assessment this was not the case (Confirmed by a Judge after a legal case)**
- **Concerns that if this application was granted more of the same would follow**
- **The Campaign called for an Environment Impact Assessment before any dumping was permitted collection of baseline data before any dumping was permitted (in order to answer the "questions" before any dump)**
- **The basis of WG and EdF position was that the licence had already been granted, issues had been concluded in 2012 and the current application was merely a "re-newal"**

## Completion of first phase of the Campaign

- The Senedd Petition Committee found enough merit in the Campaign's concerns to recommend a National Assembly Plenary Debate:
- **At Plenary Debate 8 of 9 speakers "spoke" in support of the Campaign request that the "dump" should be postponed until the "questions" had been fully answered**
- **Environment Minister Griffiths, in opposition to the expressed views of the National Assembly, announced her intention to issue the permit to EdF without any EIA.** (later disclosed that this decision had been taken some time before the Plenary Debate but not made public)
- **EdF carried out the disposal of the Hinkley/Bridgwater Bay sediments into the Cardiff Grounds "dispersal" site over the late summer of 2018**

## Following completion of 2018 dump at Cardiff grounds

- As suspected and warned by the Campaign
- EdF announced their intention to carry out more dredging ..probably in 2020 or 2021 (confirmed Feb 2020)
- Proposed second tranche of dumping = **up to 600,000 tonnes** (twice as big as 2012 application)
  
- This means that a totally NEW APPLICATION must be submitted
- As a NEW application this is theoretically more "contestable" than the first
  
- In February 2020 EdF submitted a "pre application" proposal for their intended radiological analysis of the Hinkley Bridgwater Bay sediments and announced that they would be applying to dredge and dump in 2021
- NRW initiated a sediment consultation process completed in mid March 2020

## NFLA/CND CYMRU/Stop Hinkley/Geiger Bay coalition consultation submissions

Proposed monitoring programme was still incapable of providing the necessary detailed description and quantification of the radioactivity present in the sediments to be dredged and dumped and of the impact of the dumping .... because

- **No baseline studies of behaviour & end fate of sediment dumped at the Cardiff Grounds dispersal site following first dump**
- **No baseline study of South Wales coast & coastal zone radioactivity (*Glamorgan coast? Newport/Usk estuary? Gwent Levels to Chepstow?*)**
- **No indication that NRW will make use of truly independent radiological expertise**
  
- **Only 35 sample points over several thousands of sq metres of dredge area**
- **Major limitation of chosen gamma spectrometry for sample analysis (*incapable of detecting alpha and beta emitters Plutonium, Strontium 90 and Tritium*)**
- **No intention to abandon "short counting times" (*CEFAS and EdF use 15 hour counts.....academics and scientists advise best results from 72 hour counts*)**
- **Only 2 of 35 sediment samples scheduled for alpha analysis (*Plutonium, Americium etc*)**

# CONCLUSION

- Rejection of 99% of any sedimentary or radiological technical issues raised by 147 objectors including eminent academics, consultants and researchers with decades of experience, and concerned members of the public
- Rejection of requests for independent/public access to, or participation in, “expert committee” deliberation on way forward.....
- or EIA declarations or scoping,
- or deliberations on any other issues relevant to the latest EdF application to dredge and dump up to 600,000 cubic metres of radioactive waste contaminated sediment
- All radiological issues will be totally under the control of agencies of pro nuclear Westminster and Welsh Gov
- 99% acceptance of all EdF/nuclear industry proposals
- Campaign conclusions:
  - Welsh Government intend to maintain full control over the ongoing process of all and any future applications for licensing EdF/Nuclear industry dumping of Radioactive Sediments at the Cardiff Grounds site**
  - Will seek to suppress any opposition to such proposals by avoiding public participation**
  - By engaging in sham public engagement and transparency exercises**
- **And likely to continue to promote and facilitate nuclear industry operations and initiatives throughout Wales**

## New Evidence

- Intensive research (*Prof Keith Barnham*) has uncovered new evidence of heavy discharges of Plutonium (*to sea and sediment*) from HPA during its time as a Pu factory for the UK and US Nuclear bomb programme
- ***Evidence strongly implies that much of that discharge was in the form of “micro particles” which had escaped from the site due to failed filters on the liquid effluent discharge line***
- Evidence that majority of such micro particles are small enough to transfer from the sea to the land in marine aerosols..... (***Attendant risk of inhalation and dietary doses***)
- ***Additional data also indicates the presence of uranium particles of similar size***
- None of this had been previously reported and adds additional impetus and relevance to the Campaigners call for an Environmental Impact Assessment

# New Evidence

- In the absence of any post dump sediment research: a Review of official data (RIFE) showed that following construction etc work in the Hinkley Marine sub-tidal and inter tidal environment
- **showed that re-suspension (dredge plume) of Bridgwater Bay sediments was followed by...**
- **A probable 17% to 98% increase in beta emitting Cobalt 60 cross 7 sampling stations**
- **A probable 24% to 158% increase in alpha emitting Americium 241 across 7 sampling stations**
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- **A PROVED similar rise for 2 forms of beta emitting Tritium**
- **A PROVED 215% increase in total dose to “representative persons” over 3 years**
- **N:B The RIFE reports did NOT report any change in actual Hinkley discharges for those years**
  
- **Review concluded that ONLY the disturbance of the seabed sediments could account for these outcomes**
- **EdF and the Env' Agency have offered 3 different and mutually contradictory explanations for these results**
  
- **In the absence of any relevant data for Welsh coast (post dump) this material is the closest we have to any idea of what the dumped sediments may have done to Welsh coastal environments**

## Update 1 : Welsh Gov' "Expert Committee" announcement

- In Feb 2020 Welsh Gov FM Drakeford announced the intended appointment of an "Expert Committee" to advise on all issues arising from the mud dump
- Campaigners lobbied for and submitted a list of nominees including campaigners and eminent and relevantly qualified academics and scientists who could represent the Campaign's scientific evidence to the Welsh Gov'
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- On June 10 ..a letter from Welsh Government Marine Licensing Division announced that the Chair and members of an Expert Group had been chosen and appointed.... *none of the above were included*
- Welsh Government's letter stated that members had been chosen for their expertise in "relevant" fields
- **Campaigners stunned that THE most contentious issue (*marine radioactivity and doses to public*) was not listed as a relevant field...**

## Openness & Transparency ?

### “Expert Group” is morphed into “Stakeholder Reference Group”

- **Articles of the SRG state that it is non statutory:** must function as an "informal group": & “offer " **stakeholder** views (*not expert advice or evidence*<sup>1</sup>)
- *Has no direct interface between the SRG and the Ministers and everything modulated/manipulated by the pro nuclear un-elected and non-representative civil servants of an internal “Cross Government Officials Group” (CGOG)*
- the CGOG will "service the SRG" (provide secretarial and management services including the following tasks)
- 1: **"A brief note of the group's proceedings will be published"..**
- 2: ensuring that **"the discussions of the group should remain confidential to the participants"**
- 3: although **"Members should feel free to brief wider stakeholder groups on the work of the group"** such communications **"should focus on meeting notes and other published material"** (*which has passed through, been approved and/or composed by the CGOG*)
- Welsh Gov' Legal Services "have advised that it is important that consideration should be given to the purpose of such a group and how this would fit with the lawful exercise by the Welsh Ministers, of their functions (particularly in relation to marine licensing, as well as other regulatory regimes..... eg planning)
- ***SRG must have no power to exert influence on the Ministers who are going to licence the next dump***
- **As with earlier examples the Welsh Gov has ensured that it has maintained full control over all aspects of this process**

## Oct 21, 2020: Assembly /Senedd Debate

Speakers from the floor of the Senedd were supportive of the Campaign's demand for an open and transparent EIA to answer the burning questions :

**how much radioactivity is there ALREADY in the Welsh marine environment?**

**How much radioactivity is there in the dredged sediment?**

**what dose of radioactivity are welsh coastal communities ALREAdy receiving?**

**where will the dumped sediment end up after dispersal?**

**what are expected post dump levels of radioactivity in welsh marine and coastal environment?**

**what are expected post dump radioactivity doses to coastal communities?**

## Senedd Debate Oct 21, 2020

- One of the speakers from the floor commented ***“we are not talking about the disposal of nuclear waste, potentially, in the Cardiff sound. So, we really need to be clear about that, because there is a completely different set of regulations for the disposal of nuclear waste”***.....this comment is representative of
  - 1: the lack of understanding (even at MS level) of the issues.....
  - 2: the success of EdF’s PR efforts: *since 2017 EdF have been forcefully lobbying this definition of the sediments which is a product of the International Atomic Energy Agency guidelines, it is not a product of a consensus among independent academics or scientists*
- The same speaker also stated that ***“NRW ..... will make the decision, and also they will be informed by the expert group”***, which had met four times to discuss this matter, and ***“it is a pity ..... that we're discussing this today without having had a report from that expert group to advise us on whether or not there is any indication whatsoever that the disposal of this waste is not appropriate”*** .....
- ***But unfortunately not so (see slides 9 & 10)***

## Senedd Debate :21 Oct 2020

- In her response Minister Griffiths noted that EdF had pre-empted the debate by agreeing to an EIA & “assured” the Senedd that the EIA process would be subjected to consultation with:
  - 1: NRW's "technical experts"
  - ***already defined by NRW as the Westminster Agencies CEFAS (engaged in contract work for EdF), Env' Agency, English MMO (none of which are independent of pro nuclear Westminster Government)***
  - 2: “Expert Stakeholder Reference Group”
  - ***(non statutory, no direct interface with licensing ministers, modulated by the internal “Cross Government Officials Group” (CGOG) ..... slides 9 & 10)***
  - 3: “Members of the Public” : ***another public Consultation exercise like that of Feb/March 2020 (notable for no take up of Consultation inputs)***
  - **NRW appears to have permitted EdF to “scope” the EIA exercise without input from any of the above so no independent input or oversight and no transparency**
- **Thus maintaining the Welsh Government’s adherence to the pro nuclear policies of the Westminster Government and the International Atomic Energy Agency and bowing in to EdF’s demands**