

# Hinkley Mud Campaign – June update

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# Introduction to the Cardiff Bay Mud Dump Campaign

- **In 2012** EdF applied for a license to dump up to 300,000 tonnes of radioactive mud from the offshore zone at Hinkley C (Somerset coast)
- This area had been the receiving area of over 50 years worth of liquid radioactive wastes discharged from the 4 reactors of the Hinkley A & B stations
- All the available evidence strongly implied that the mud contained high "aggregated" levels of man-made radioactivity
- The proposal was that the mud should be dumped into the "Cardiff Grounds" dispersal/disposal site within 2 miles of the Cardiff sea front
- The mud was to be dredged from Bridgwater Bay in order to sink pipelines for the proposed HINKLEY C new cooling water intakes and radioactive waste effluent discharges
- The application was passed/signed off in **2013** by the then Environment Minister... an ex-employee of the UKAEA

## Intro to Cardiff Radioactive Mud Dump

- The "sign off" occurred in the inter-regnum between the closure of the Welsh division of the EA and the inauguration of the current Welsh environment regulator ... Natural Resources Wales (NRW)
- None of this was "picked up" or made public
- The 2013 stipulated that the dump should take place before **2016**
- However, EdF did not comply and were forced to ask for an update/renewal of the existing licence in **2017**
- **This time.. the re-application was noticed and a campaign was initiated through a Petition to the Senedd Petitions Committee**
- **Within a few months of it's initiation this Campaign had received the support of over 150,000 signatories to 3 petitions**

# The Senedd Petition Committee Campaign

The Campaign's original intention was to seek answers to basic questions about impact of the dump of radioactive mud so close to major Welsh coastal communities:

**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**

First phase initiated Nov 2017 with submission of evidence from Campaign & responses from EdF, CEFAS and NRW

Evidence sessions demonstrated that:

**NRW Had no relevant "in house" expertise and reliant in pro nuclear Government agencies (CEFAS and MMO)**

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

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

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

# Ist Phase of Campaign

- Campaign characterised by the pro dumpers use of fake news and falsely characterised "independent expert" comment
- 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**
- **Concerns that if this application was granted more of the same would follow (HPC?/Oldbury?)**
- **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)**

# 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 only 1 of 9 speakers "spoke" against the Campaign request that the "dump" should be postponed until the "questions" had been fully answered**
- **Environment Minister Griffiths, in opposition to the apparent views of the National Assembly, announced her intention to issue the permit to EdF.**
- **A basis of WG and NRW position was that the licence had already been granted, issues had been concluded in 2012 and the current application was merely a "re-newal"**
- **EdF carried out the disposal of the Hinkley/Bridgwater Bay sediments into the Cardiff Grounds "dispersal" site over the late summer of 2018**
  
- In the absence of any post dump research: in 2019: T D-J researched post dredge impacts along Bridgwater Bay/Hinkley coast (relative change in shoreline radioactivity concentrations and total dose: 2016 to end of 2018)
- **Research showed NO CHANGE in station discharges over the period**
- **Research showed that re-suspension (dredge plume) of Bridgwater Bay sediments was followed by...**
- **17% to 98% increase in beta emitting Cobalt 60 across 7 sampling stations**
- **24% to 158% increase in alpha emitting Americium 241 across 7 sampling stations**
- **215% increase in " total dose" to public over 3 years**

## 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 2020/21 (confirmed Feb 2020)
- Proposed second tranche of dumping = **up to 600,000 tonnes** (twice as big as 2012 application)
- This will require a totally NEW APPLICATION to be submitted
- As a NEW application this is 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 consultation process completed in mid March 2020

## NFLA/CND CYMRU/Stop Hinkley coalition consultation submission

- On behalf of the coalition T.D-J constructed a 56 page, 25,000 word, fully scientifically referenced Submission to the NRW critiquing EdF proposals for their proposed sediment monitoring programme for the 2021 action.
- This Submission was deeply critical of the EdF analysis proposals on many aspects
- Major concerns were that :
  - 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 of sediment dumped at the Cardiff Grounds dispersal site**
  - **No baseline study of South Wales coast & coastal zone radioactivity (following first dump)**
  - **No indication that NRW will make use of independent radiological expertise**
- **Only 35 sample points over several thousands of sq metres of dredge area**
- **Major limitation of chosen gamma spectrometry only across the samples ( undetectable betas and alphas)**
- **Only 2 of 35 sediment samples scheduled for alpha analysis (Plutonium, Americium etc)**
- **No intention to abandon "short counting times"**



# NRW Timeline of new Proposal

- **June 2020** – NRW provides its pre-application advice to EDF on the content of the sampling plan and its compliance with the international guidelines.
- **June 2020** – expected submission of EDF's environmental impact assessment opinion request.
- **2020** – submission of EDF's marine licence application to NRW for the disposal of the sediment at Cardiff Grounds
- **2020** – public "engagement"! and consultation on the marine licence application.
- **Winter 2020/21** – possibly date for the decision on the marine licence application by NRW.

next steps?

- **Overwhelming need for an EIA (scoped by variety of interests)**
- **independent representation on Welsh Gov "expert panel"**
- **legal challenges (JR's etc) .....**