

# Petition: Suspend Marine Licence 12/45/ML ML to dump radioactive marine sediments from the Hinkley Point nuclear site into Wales coastal waters off Cardiff

Y Pwyllgor Deisebau | 21 Tachwedd 2017  
Petitions Committee | 21 November 2017

## Research Briefing:

---

Petition number: [P-05-785](#)

Petition title: **Suspend Marine Licence 12/45/ML to dump radioactive marine sediments from the Hinkley Point nuclear site into Wales coastal waters off Cardiff**

Text of petition:

We call on the National Assembly for Wales to urge the Welsh Government to direct Natural Resources Wales to suspend the licence it has granted to NNB Genco, which permits up to 300,000 tonnes of radioactively contaminated material, dredged from the seabed at the Hinkley Point Nuclear power station site, to be dumped into Welsh inshore waters.

We further request that the suspension of the licence is used to ensure that a full Environmental Impact Assessment, complete radiological analysis and core sampling are carried out under the auspices of Natural Resources Wales, and that a Public Inquiry, a full hearing of independent evidence and a Public Consultation take place before any dump of the Hinkley sediments is permitted.

Marine Licence 12/45/ML, granted by the Welsh Government, permits the disposal of up to 300,000 tonnes of radioactively contaminated marine sediment, dredged from the seabed at the Hinkley Point nuclear site, into the Cardiff Grounds marine dump site close to the South Wales coast. This will allow work to begin on the 2 new Hinkley C nuclear reactor pipelines.

The sediments to be dredged are adjacent to the waste pipes used for the discharges from Hinkley's 4 existing reactors. Analysis, commissioned by UK Government agencies, shows that the sediment is contaminated by radioactive waste discharged to sea over 50+ years of

operations at the Hinkley site. Calculations derived from the official data indicate that the proposed dredge sediments may hold at least 7 billion Bqs of aggregated radioactivity, yet reports state that doses to humans would be very low.

Hinkley's radioactive discharges to sea contain over 50 radio-nuclides, but the analysis has only investigated 3 of them. Thus, the actual aggregated radioactivity content of the sediments will be much higher than indicated by the available analysis. The available evidence also implies that only surface samples (0 to 5cms deep) of the sediment have been analysed, despite the fact that core sample research from elsewhere in the Irish Sea demonstrates that, at depths below 5cms, radioactivity concentrations may be up to 5 times higher.

While sedimentary radioactive material is initially likely to disperse, studies prove that it later re-concentrates in coastal and estuarine mudflats and saltmarshes, and is also available for sea-to-land transfer during onshore winds and coastal flooding. We note the absence of research on the fate of such radioactivity in South Wales inshore waters. In this context we are concerned that the environmental and human health (dose) risks from the proposed disposal have not been adequately researched and that any conclusions based on the current incomplete data, are unreliable.

## Background

### Marine disposal and dumping at sea

The UK is a contracting party of the [\*Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972\*](#) (the London Convention). This requires contracting parties to take effective measures to protect and preserve the marine environment from all sources of pollution, including dumping at sea. This is reinforced by Article 4 of the [\*OSPAR Convention\*](#) that aims to protect and conserve the North-East Atlantic and its resources. The Convention combines and updates the 1972 Oslo Convention on dumping waste at sea and the 1974 Paris Convention on land-based sources of marine pollution. The Convention, which has been signed and ratified by the United Kingdom, entered into force on 25 March 1998.

Under the [\*Waste \(England and Wales\) Regulations 2011\*](#) a waste hierarchy exists, with disposal being the last option to be considered. Applicants seeking to dispose of waste at sea must, therefore, demonstrate that appropriate consideration has been given to the beneficial re-use of dredged material. As such no waste should be disposed at sea if there is a safe and practicable alternative.

According to the [\*UK Marine Policy Statement\*](#) (2011):

3.6.1 Most marine dredging and disposal is for the purposes of navigation and existing and future port development, though other works can take place to facilitate the construction of pipelines, outfalls and tunnels. Since 1998, in compliance with international obligations, the UK Administrations have – with some minor exceptions – only licensed the disposal at sea of capital and maintenance dredgings and small amounts of fish waste.

[...]

3.6.5 The primary environmental considerations include the potential risk to fish and other marine life from the release of sediments, chemical pollution and morphological changes including burial of seabed flora and fauna; hydrological effects; interference with other marine activities; increases in turbidity; increases in marine noise; possible adverse effects for designated nature conservation areas and potential destruction or destabilisation of known or unknown heritage assets. Removal of dredged material can also cause adverse impacts to the natural sedimentary systems.

3.6.6 When sediments are contaminated, dredging has the potential to cause significant environmental and health effects through exposure to contaminants in the dredging plume. These contaminants arise from diverse sources such as the legacy of industrial pollution, for example metals and poly chlorinated biphenyls, or historical and current use of antifoulants including tributyltin and heavy metals and new contaminants which are now finding their way into the marine environment, such as flame retardants including poly brominated diphenyl ethers.

There are a number of open licenced disposal grounds in Welsh waters, for example, in the Bristol Channel, Swansea Bay and waters around Pembrokeshire and Ynys Mon. These can be viewed on the Welsh Government's [marine planning portal](#). The Cardiff Grounds site can be seen in Figure 1, located off the coast of Cardiff.

Dredging and disposal occurs in a number of marine [Special Areas of Conservation \(SACs\)](#) designated under [the Habitats Directive](#). This includes capital dredging for new development such as the construction or expansion of ports. Maintenance dredging is regularly undertaken to maintain navigational safety in areas such as docks and waterways. According to the [UK Marine SACs Project website](#), 3,460,000 m<sup>3</sup> per year of material is dredged in or near to the [Severn Estuary SAC](#). This SAC is part of the [Severn Estuary European Marine Site](#) overseen by the [Association of Severn Estuary Relevant Authorities \(ASERA\)](#). A [draft \(ASERA\) Management scheme and draft Relevant Authority Action Plans](#) were produced in 2011.

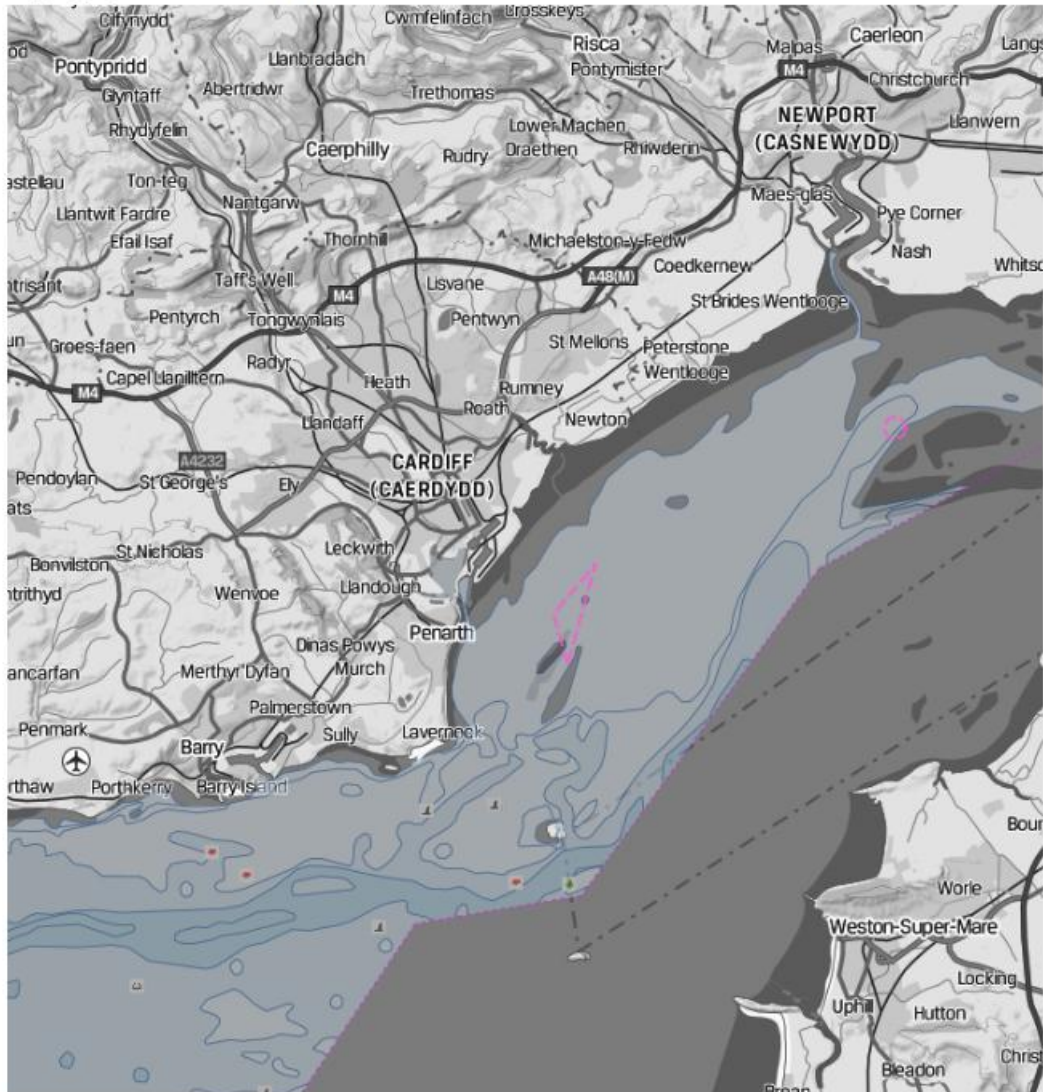


Figure: 1 Marine dumping grounds (disposal sites) in the Bristol Channel  
(Source: Welsh Government, [Marine Planning Portal](#))

## Marine Licensing Legislation

The key legislation covering the marine licensing regime is contained within Part 4 – Marine Licensing – of the [Marine and Coastal Access Act 2009](#) (“the Marine Act”). Under Section 66 of the Marine Act, licensable marine activities include:

- Depositing any substance or object, in the sea or on or under the sea bed, from:
  - Any vehicle, vessel, aircraft or marine structure;
  - Any container floating in the sea; or
  - Any structure on land constructed or adapted wholly or mainly for the purpose of depositing solids in the sea.
- Construct, alter or improve any works either in or over the sea or on or under the sea bed;
- Use a vehicle, vessel, aircraft, marine structure or floating container to remove any substance or object from the sea bed; and
- Carry out any form of dredging, whether or not involving the removal of any material from the sea or sea bed.

Commonly licensed activities include grab sampling, seawall or embankment repairs, pontoon installations and slipway repairs. There are a number of exemptions set out in [The Marine Licensing \(Exempted Activities\) \(Wales\) Order 2011 \(PDF 244KB\)](#).

Welsh Ministers are the licensing authority for Welsh waters out to 12 nautical miles – the Welsh inshore region. The [Wales Act 2017](#) will devolve marine licensing powers to include the Welsh offshore region (12 nautical miles out the median line with Ireland, England and the Isle of Man). At present marine licensing in the Welsh offshore region is administered by the Marine Management Organisation (“the MMO”).

The operation of marine licensing in the inshore region was delegated to Natural Resources Wales (NRW) in April 2013, via the [Marine Licensing \(Delegation of Functions\) \(Wales\) Order 2013](#). This is administered by NRW’s Marine Licensing Team (MLT). NRW publish a list of [marine licence applications received and determined](#) on their website. Prior to the creation of NRW, marine licensing was handled by the Welsh Government’s Marine Consents Unit.

## Determining an application

When determining an application, Section 69 of the Marine Act sets out that the licensing authority must have regard to:

- (1a) The need to protect the environment;
- (1b) The need to protect human health; and
- (1c) The need to prevent interference with legitimate uses of the sea, and such other matters the authority things relevant.

With respect to the 1c, the licensing authority will carry out an Environmental Impact Assessment under the [Marine Works \(Environmental Impact Assessment\) Regulations 2007](#)

(as amended) and Habitat Regulations Assessment under [\*the Conservation of Habitats and Species Regulations 2010\*](#). In the absence of a marine plan for Wales, which is currently being prepared by the Welsh Government, regard must be given to the [UK Marine Policy Statement](#). Activities must also be compliant with, *inter alia*, the European [Marine Strategy Framework Directive](#) and the European [Water Framework Directive](#).

### Decision making (right of appeal, call in, suspending a marine licence and stop notices)

Under the Marine Act there are no statutory timeframes associated with determining a marine licence. Applicants have a [right of appeal to the Welsh Ministers against a decision made by the licensing authority](#) under Section 71 of the Marine Act. Appeals must be made in accordance with the [Marine Licensing \(Appeals Against Licensing Decisions\) \(Wales\) Regulations 2011](#).

In England, under the [Marine Licensing \(Delegation of Functions\) \(Amendment\) Order 2015](#), a licensing application can be called-in by the Secretary of State. Such a call-in (recovery) process does not exist within the Welsh Delegation Order.

Section 72 of the Marine Act provides a procedure for ‘varying, suspending or revoking’ a licence. There are numerous grounds for suspension of a licence to include where there has been a change in circumstances relating to the environment or human health (3a), or because of an increase in scientific knowledge relating to either of those two matters (3b). Section 102 of the Marine Act allows the enforcement authority (Welsh Ministers) to issue a notice to stop activity, subject to satisfying a number of criteria.

Section 100 of the Marine Act gives a specific direction making power to Welsh Ministers as the licensing authority with regards to performance of delegated functions under the Act. Furthermore, Article 11 of the [Natural Resources Body for Wales \(Establishment\) Order 2012](#) gives the Welsh Ministers a general power to direct NRW as to the exercise of its functions.

### Marine licence: 12/45/ML

Marine licence 12/45/ML was issued on 11 July 2014 by NRW acting on behalf of the Licensing Authority (Welsh Ministers) to the licensee – NNB Genco<sup>1</sup>.

The description of the substances or articles for deposit in Cardiff Grounds (LU110) disposal site are as follows:

Arisings from the capital dredge (and secondary dredge during construction) associated with the preparation of the offshore site for the cooling water infrastructure for the proposed new nuclear power station at Hinkley Point. These arisings as described in Marine License Application dated 06 August 2012.

Arisings from the capital dredge of the berthing pocket for the Hinkley Point C Project Temporary Jetty. These arisings as described in Marine Licence Application dated 13 September 2012.

---

<sup>1</sup> NNB GenCo Limited is a wholly owned subsidiary of EDF Energy.

Section 9 of the licence set out project specific conditions, which includes:

9.1 The Licence Holder must submit a proposal for a monitoring programme of the disposal site and immediate environs to Natural Resources Wales acting on behalf of the Licensing Authority for written approval at least **12 weeks** before any disposal operation. The scheme will include details of pre, during and post disposal operation surveys, and any actions to be taken as a consequence of the survey findings. The purpose of the scheme will be to enable the avoidance of significant build up of material and any consequent shallowing.

[...]

9.3 The Licence Holder must submit a proposal for a sediment sampling scheme of the source sites and immediate environs to Natural Resources Wales acting on behalf of the Licensing Authority for written approval at least 6 months before any disposal operation to occur after 4th March 2016. The scheme will include details of sampling grid, analyses suites (including any appropriate radiological assessment) and proposed format of a report determining the suitability of the material for disposal at site LU110 along with timescales for carrying out these actions.

9.4. The Licence holder must ensure the sediment sampling must be undertaken in line with the agreed scheme, as referenced in paragraph 9.3. Sampling scheme reports must be submitted to Natural Resources Wales acting on behalf of the Licensing Authority within the timescales agreed within the scheme.

9.5. The Licence Holder must ensure that no material is deposited after 4th March 2016 without written confirmation from NRW, acting on behalf of the Licensing Authority, that they are satisfied the material is suitable for deposit at site LU110.

## Hinkley Point C

The dredged sediment being disposed at sea under marine licence 12/45/ML is associated with the construction of a cooling water system for [Hinkley Point C](#) in Somerset, south-west England. EDF Energy is building two new nuclear reactors at the Hinkley Point C, capable of generating a total of up to 3,260MW of electricity. The site is located beside the currently operational Hinkley Point B and Hinkley Point A that is being decommissioned. The project was [awarded planning permission](#) March 2013 in the form of a Development Consent Order (DCO) under the *Planning Act 2008*. The material, estimated to be at most 200,000m<sup>3</sup>, will be placed into barges and transported to the Cardiff Grounds to be deposited.

## National Assembly for Wales action

This matter has been discussed in Plenary on a number of occasions, for example, as a [question to the Cabinet Secretary for Environment and Rural Affairs from Neil McEvoy, AM on 20 September 2017](#) and a [question to the First Minister from Leanne Wood, AM on 26 September 2017](#).

## Welsh Government action

The Cabinet Secretary for Environment and Rural Affairs' [Energy statement](#) on 6 December 2016, included the following:

To deliver secure and affordable low-carbon energy, we need a mix of different technologies and sizes, from community scale to major projects. In the medium term, this means transitioning to low-carbon generation, which includes nuclear.

In response to a [question in Plenary](#) (26 September 2017), from Leanne Wood, AM, on the dumping of material from Hinkley Point C in Welsh waters, the First Minister responded:

Well, she's telling half the story. First of all, she knows full well that licensing is not done by Ministers; it's done by an outside body—that's the whole point—so that the politics is taken out of it. What I've seen so far is one person has said there may be an issue here. Well, of course, that issue needs to be addressed, but we've got to be careful here because the waste from Wylfa goes to England, and if it wasn't for Sellafield's reprocessing plant it would shut immediately.

She has views on nuclear power that perhaps I wouldn't share, but it's too crude simply to say, 'Well, this is nuclear waste being exported from England to Wales.' We export a lot more out towards Sellafield. So, I don't accept that this is an import-export issue. Where we have nuclear power, it's important that there are adequate disposal facilities, but simply to present it in terms of an England-Wales battle ignores the fact we have our own nuclear power station, and we don't have our own disposal facilities; we rely on England to deal with the waste that comes from Wylfa.

On 29 September 2017 the Cabinet Secretary made a [statement](#) entitled 'Marine licence for the disposal of dredged material, arising from construction of Hinkley Point C'. It states:

To clarify, it is important to note, **the licence is not for the disposal of nuclear waste**. The material licenced for disposal is sediment dredged from the Severn Estuary. **To date, no disposal activity has taken place**. Any dredged material to be disposed of will be sampled, tested and the licence holder is subject to further written approval by NRW before any disposal activity can take place under the licence. I can reassure members a sound assessment process is in place to protect the marine environment and human health for present and future generations.

In relation to the associated Environmental Impact Assessment:

Applications for the disposal of dredged material were received by the MCU and were processed in line with the requirements under the MCAA and the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) (MWR). Two separate applications were received (due to the dredged material arising from two sites – the temporary jetty area and other offshore works) but one licence was issued. Records show the applications for the disposal of material in Welsh waters took into account the overall EIA for the Hinkley Point C project.

The marine licensing determination process provides for a thorough and robust assessment of projects against the following key criteria:

- Protection of the marine environment
- Protection of human health



- Prevention of interference with other legitimate uses of the sea.

Given the location of the source site, at Hinkley Point C, a radiological assessment was undertaken by the Centre for Environment, Fisheries and Aquaculture Science (Cefas) as part of the determination process for the marine licence, and following consultation with experts (including the lead nuclear regulator at the Environment Agency), **no concerns were raised regarding the level of radiological contamination.**

The Cabinet Secretary for Environment and Rural Affairs's response to this petition, received 24 October 2017, notes that she is "concerned by the public perception around this matter" and signposts to her written statement on the matter. Her letter sets out that NRW as the marine licensing authority in Wales, acting on behalf of the Welsh Ministers, issued the licence and will be responsible for it, including ensuring compliance with the conditions imposed on the licence. She then draws attention to conditions 9.3 and 9.5 of the licence (set out above in section Marine Licence: 12/45/ML). In its consideration of the petition, the Cabinet Secretary asks the Chair of the Committee to consider a number of points, which include:

The marine licence has a number of conditions requiring the sampling and testing of material to be disposed of and NRW must still provide an approval before any disposal can happen. [...]

No material has been disposed of under the terms of the licence to date and material will be only be disposed of if the result of sampling show the material is considered safe and suitable for disposal at sea.

Also, in light of the Welsh Ministers role in relation to appeals under the marine licensing system, she states that it is not appropriate for Ministers to comment on the specifics of a marine licensing decision. She advises that representations relating to the decision must be made directly to NRW, not the Welsh Ministers.

Lastly, given the concerns that remain, she indicates:

I will ask my official to consider with NRW how they can communicate information on this licence as clearly and openly as possible to alleviate concerns further.

Every effort is made to ensure that the information contained in this briefing is correct at the time of publication. Readers should be aware that these briefings are not necessarily updated or otherwise amended to reflect subsequent changes.

