

In response to Michael Evans' letter for NRW of 3rd August.

Introduction.

Environmental Impact Assessment is part of planning legislation. For marine applications, NRW combines the licensing and planning functions within the one Marine Consents Unit, which appears to have no expertise in planning law, nor in waste planning law as relevant in this case. NRW has moreover failed since its creation to review the 1980s permit for the Cardiff Grounds disposal site, contrary to IMO's basic guidance of 2014 for review at regular intervals *Waste Assessment Guidelines under the London Convention and Protocol, 2014*.

para.2 :

'...applications that do not require an EIA are still subject to a robust assessment...'

- Untrue in practice
 - a) the number of deep samples was previously below OSPAR's minimum (now to be increased to 30 instead of 5
 - b) the Habitats Regs Assmt was a travesty, dismissing impact on protected (fish) species as "no pathway" from mud to fish
 - c) the requirement to consider Radiological impacts on marine life (under IAEA) was based on an Env.Agency informal assurance with no report issued.

- NRW lacks in-house marine radiological expertise, admitted to the Petitions committee in 2018.

- EIA includes (Sch.3)
 - a) indirect effects
 - b) secondary socioeconomic effects on eg. tourism and fishing.

- EIA requires public consultation; there was none in 2014; that in 2017-18 was entirely due to the publicity of opposition to the project, lacked necessary documents and used outdated IAEA and OSPAR documents (which had been updated in 2014-15)

- an EIA would have covered the slaughter of fish in the Cooling Water intake, basic to the dredging-dumping project and an 'indirect' effect of it. As responsibility for wildlife in the Severn conservation area is shared between England and Wales, the EIA could have supported a Welsh refusal on planning grounds.

para.4 :

EIA Screening and Scoping Opinion

- The terminology is incorrect. EDF have to submit *Screening and Scoping requests*, which must contain a lot of specified material; NRW have to consider if the information is sufficient. It has to cover "possible environmental effects" which are wider than "likely significant environmental effects", reducing the scope for NRW confirmation bias.

- These are planning decisions, requiring NRW to follow planning procedures and norms. This means publishing EDFs requests on the NRW website when received (as do LPAs and WG/Planning Inspectorate) and taking into account public comment. Publishing only after the decision does not comply with their openness policy.

- NRW have to consult a defined range of *consultation bodies* (Annex C to the *Marine Works EIA Regs.*) on both Screening and Scoping.

para.5 :

Detailed baseline data is 'beyond scope'

- A baseline description of the aspects of the environment likely to be significantly affected is fundamental to an Environmental Statement (EIA Regs. Schedule 3 s.2)

'Cardiff Grounds is a sustainable disposal site that has been in operation since the 1980's.'

- The 1980s permit, which may allow only Port dredgings, is lost or hidden by NRW. Under IMO 2014, all licences have to be reviewed at regular intervals:

taking into account the results of monitoring and the objectives ... and contribute to informed decisions regarding the continuance, modification or revocation of permits. This provides an important feedback mechanism for the protection of human health and the marine environment.

- CCW began a review in about 2011, NRW took over in 2013 and never completed it.
- English sites are subject to a monitoring programme, to see if the licence objectives are still satisfied, but NRW have done no such monitoring.
- The WG's new CEFAS report is the first since NRW started in 2013 and repeats the assumption that *Cardiff Grounds* is a *dispersal* site.
- The 2019 post-dump monitoring (published July 2020) shows accumulations of solid Hinkley materials on the seabed, contrary to the dispersal intention and the dumping being "*sustainable*".

para.7 :

'Full radiological analysis including detection of alpha-emitting particles'

- The draft pre-application advice requires only alpha-spectrometry, not the adequate detection we seek. NRW have agreed to CR-39 detectors for alpha-particles, but EDF's response and revision of the pre-application advice is still pending.
- The pre-application advice specifies physical, chemical but not biological characterisation. All three are required under IMO's "Dredged material assessment guidelines" in *Waste Assessment Guidelines under the London Convention and Protocol, 2014*. It specifically includes bio-accumulation which simple IAEA procedures ignore.
- NRW refused to acknowledge this international guidance in 2018 and is still doing so.

para.8 :

A detailed and up-to-date assessment of potential radiological impacts on the population of south Wales *'...is beyond the remit of NRW and is out of scope...'*

- Last time NRW accepted use of the CEFAS assessment appropriate to radionuclides discharged from Sellafield to the Irish Sea. CEFAS failed to admit the technical deficiencies and lack of knowledge, as EIA Sch. 3, s.8 requires.
- The Severn Estuary is hugely different from the Irish Sea, due to our very high suspended sediment and the many tidal cycles before being flushed to sea. Our exposed population is also far higher with different habitats to the Cumbrian coastal population.
- Including forecasting methods, technical deficiencies and resultant uncertainties is fundamental to EIA (Sch. 3, s.4, 8)

paras. 9-10 :

"Containing nuclear pollutants on land rather than dispersing them at Sea"
"Respecting international agreements on marine dumping"

- Government policy is that there is *no safe level* of artificial radionuclides
- Marine biology processes can concentrate nuclides – as in the infamous Sellafield lobsters and seagulls.
- OSPAR/London Treaty requires minimisation of sea dumping and reduction of artificial nuclides in the North Sea to historic levels by 2020.
- OSPAR specifies (10.3) solid waste contained within the dredged material should be separated and managed on land, but NRW ignored this for the 2014 licence and review.
- IMO 2015 Guidelines for the application of the de minimis concept... qualifies the IAEA guidance in *Dose Methodology* - the reference dose for humans is not a limit – if of the order of 10µSv or more

in a year, there is no exemption (Cefas wrongly stated their calculated 5.8µSv/yr made the Hinkley mud “exempt”).

- IMO 2015 points out (13.5) the dose limits are not defined in any international standard as “exemption criteria for protection of flora and fauna”, yet Cefas and NRW assumed limits for protection of humans would automatically protect wildlife.
- IMO’s “Dredged material assessment guidelines” in *Waste Assessment Guidelines under the London Convention and Protocol, 2014* is the main assessment which details risk assessment comparison of sea dumping against use or disposal on land.
- Cefas and NRW wrongly used 2004 IAEA in the 2017-18 review. NRW is still refusing to reference IMO 2014 and 2015 as the prime reference documents, and failing to follow the risk assessment procedures detailed in 2014 (first in LC 35/15, annex 2, 2013), which should have been used in the 2014 licensing.

NRW para. 11 :

“Protecting the Severn Estuary”

- While NRW has to comply with the MCAA, they forget much of the international legislation that this requires them to respect
 - a) appropriate arrangements for public participation based in the Aarhus Convention and EU law.
 - b) take account of all relevant evidence (EWA, 2016, Part 1, s.4(e)), not just “the evidence which supports an application”
 - c) appropriate regard to uncertainties as encoded in the precautionary principle of the UN 1992 Convention and the Lisbon Treaty.
 - d) the precautionary principle in respect of marine regulatory decisions under the OSPAR Treaty.
 - e) principles and policy on waste management, as in the Waste Framework Directive.
 - f) minimise dumping at sea via seeking alternatives and carrying out risk assessment (OSPAR, IMO)
 - g) issues clearly in the scope of the Marine Works EIA Regs. not be arbitrarily ruled *out-of-scope*

Fish-kill by the Hinkley Cooling Water project.

The fish and other marine life sucked in with the cooling water, killed or injured, is an indirect and/or secondary environmental effect of the dumping project. For EIA purposes, it cannot be ruled out-of-scope. It was given scant attention at the 2013 English Inquiry. It can and should be included under the new Welsh licence application whether or not the MMO does likewise in England. Assessments of the fish-kill have been made for the fish-deterrent condition in the EA licence, so can be used for EIA of the dumping. The EA plans public consultation in October.

Included with the slaughtered fish would be European Protected Species (certain species of shad, lampreys and eels), therefore NRW are obliged to seek alternatives that avoid (or substantially reduce) their deaths: *Conservation of Habitats and Species Regulations 2017*.

Dump-site seabed survey July 2020.

Titan Environmental Surveys Ltd conducted a bathymetric survey and collected some grab samples in April 2019. They show solid Hinkley materials mounded on the seabed, about a 1m high, 30m across, stretched with the dump-barge trails. Because of uncertainty in zeroing the bathymetry, it’s uncertain what fraction of Hinkley’s dumped 58 000 cu m remains on the seabed. It does prove the dumpsite is not dispersive for solid materials; NRW should have conditioned the licence to exclude them last time.

The finding of solid dredgings on the seabed, coming from the ‘capital’ dredging from Hinkley, requires a full review of the Cardiff Grounds dumping permit to assess whether capital dredging should be excluded in future, with dumping restricted to ‘maintenance’ dredgings for ports and shipping channels.

NRW did not require pre- and post-dumping radiological surveys, as requested. Nor did they ask for radiological tests of the grab-samples, but only size analysis which show the deposits are Hinkley’s.

Failure to respect Waste Planning legislation.

The Environment Agency accepted that dredged materials that are intended for disposal are “waste” and subject to waste and waste planning legislation. Planning Policy Wales edn.10, (2018) requires respect for the waste hierarchy (re-use, recycle, before disposal) and other principles of EU policy.

- Proximity principle: the Hinkley construction site is using much tunnelling waste for constructing bunds; the dredged waste could be used similarly, also processed for soil cover.
- Self-sufficiency: it's English waste, so England has to deal with it.
- NRW has a statutory role in relation to the management and regulation of waste (PPW 5.13.6)
- Waste planning statements are required for all developments in Wales involving waste.
- Licenses for waste disposal facilities have to be reviewed to bring up to modern standards.

Failure in Public Consultation

IMO 2014 recommends (s. 8.4) early and full involvement of the public in all stages of the project, which is far better than NRW general practice:

“a consultation process be established with all relevant stakeholders, ensuring opportunities for public review and participation beginning from the earliest stages of the project through to completion, including the permitting process. Such coordination activities stimulate joint fact finding, often identifying opportunities to improve the overall project, including through identification of alternative sediment management options and beneficial use opportunities”

The 2020 consultation on pre-application advice advanced towards this, but incompletely. The numerous issues ruled “out-of-scope” without reason plus the failure to place all relevant documents on the public website show further deficiencies.