Legal framework Issues

The following document has been compiled for the Campaign by the Cardiff Law School Environmental Law Foundation Clinic. It addresses relevant legal issues relating to the EdF proposals and past and proposed future actions in respect of the dumping of Bridgwater Bay sediments at the Cardiff Grounds disposal/dispersal site.

CARDIFF ELF CLINIC
Basic legal framework in respect of consultation on EDF sampling plan in preparation for application for new license to dispose of dredged material from Hinkley C to Cardiff Grounds

1. COMPLEXITY

The dumping of 600,000m^3 of dredged material, to which the sampling plan currently under consultation is preparatory, raises extremely complex issues of law. This is because the subject

(a) Cuts across the boundaries of many otherwise discrete areas of regulatory law, spanning different types of regulated waste (including not only controlled waste but the possibility of nuclear waste), together with regulation of the water environment (governed inter alia by the Water Resources Act 1991 and the Marine and Coastal Access Act 2009).

(b) Concurrently engages both English and Welsh regulatory law, thus requiring compliance with the Environment (Wales) Act 2016 and the Well-Being of Future Generations (Wales) Act 2015 *and* English and wider UK counterparts.

(c) Raises various issues of international law.

(d) Raises issues of common law public nuisance.

(e) Raises human rights issues, as NRW are a public authority for purposes of the Human Rights Act 1998. They are thus under a duty to act compatibly with the right to a healthy environment under Article 8 of the European Convention on Human Rights.

(f) The regulatory regime is undergoing significant reform, notably the Environment Bill 2020, which is likely to change the regulatory landscape with a view to maintaining *and improving* environmental protection.

What follows is a broad overview of the legal framework.

2. OSPAR

The Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR) opens with the preamble stating that it has been recognised that "it may be **desirable to adopt, on the regional level, more stringent measures** with respect to the prevention and elimination of pollution of the marine environment or with respect to the protection of the marine environment against the adverse effects of human activities **than are provided for in international conventions or agreements with a global scope**".

The importance of this to the present case is that none of the parties can rule out adopting a higher standard than that contained in OSPAR. The UK and domestic regulators have a discretion to adopt a higher standard, which cannot be fettered.

A related issue is that it is unclear that OSPAR applies to the site. This is because it is not within the 'sea' of the North East Atlantic area to which the Convention applies.

Article 2 - General Obligations

Section 2 - The Contracting Parties shall apply:

a. the precautionary principle, by virtue of which **preventive measures are to be taken when there are reasonable grounds for concern** that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, **even when there is no conclusive evidence of a causal relationship between the inputs and the effects;**

This is self-evidently relevant to the dumping case.

Section 3 –

a. In implementing the Convention, Contracting Parties shall adopt programmes and measures which contain, where appropriate, time-limits for their completion and which take **full account of the use of the latest technological developments and practices designed to prevent and eliminate pollution fully.**

b. To this end they shall:

(i) taking into account the criteria set forth in Appendix 1, define with respect to programmes and measures the application of, inter alia,

- **best available techniques**
- **best environmental practice including, where appropriate, clean technology;**

(ii) in carrying out such programmes and measures, **ensure the application of best available techniques and best environmental practice as so defined (Appendix 1)**, including, where appropriate, clean technology.

Section 5 –

No provision of the Convention shall be interpreted as preventing the Contracting Parties from taking, individually or jointly, more stringent measures with respect to the prevention and elimination of pollution of the maritime area or with respect to the protection of the maritime area against the adverse effects of human activities.

This reinforces the point at the outset of the Convention, about NRW not ruling out a higher standard than the OSPAR guidelines.

3. HUMAN RIGHTS ACT AND RELEVANT RIGHT TO A HEALTHY ENVIRONMENT UNDER THE EUROPEAN CONVENTION ON HUMAN RIGHTS

The case of Tatar v Romania offers an argument to be used to convince NRW and EDF to do a full Environmental Impact Assessment [EIA]. The Strasbourg Court observed that the State had a duty to ensure the protection of its citizens by regulating the authorising, setting-up, operating, safety and monitoring of industrial activities that were dangerous for the environment and human health. **The Court found a violation of Article 8 of the ECHR in the case because Romanian authorities had failed in their duty to assess, to a satisfactory degree, the risks that the concerned activity might entail**, and to take suitable measures in order to protect the rights of those concerned to respect for their private lives and homes.

More generally, a number of cases are relevant to the dumping of the dredged material. It is important to focus on article 8 of the ECHR, as it is the main article used in claims concerning the environment. Article 8 (the right to respect for family, private life, home, and correspondence):
is a qualified right, meaning that the state can justify and interference of the right under certain conditions. The principles of proportionality and margin of appreciation are important in the decision-making process (giving more discretion to the state). The right to family and private life will usually be balanced against other rights or state interests (Art. 8(2) sets out the reasons why a state can interfere with the right to family and private life - Eg. the economic well-being of the country). Private life was widely defined, to include the environment – it implies a 'right to a health environment'. Moreover, Article 8 imposes a positive obligation for the state to secure the respect of these rights.

Lopez Ostra v. Spain (1994) 20 EHRR 277

In this case the Court found a **violation of article 8** of ECHR as "The government had **failed to strike a balance** between the interests of the town's economic wellbeing, and the applicant's rights under article 8" (§58). The Court added an environmental dimension by stating that "Naturally, severe environmental pollution may affect individuals' well- being and prevent them from enjoying their homes in a way as to affect their private and family life adversely, **without, however, seriously endangering their health.**" (§51)

Guerra v Italy (1998) 26 EHRR 357

The Court acknowledged once again that severe environmental pollution might affect individual's well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely. Thus the court concluded that Art 8 had been violated because the respondent State had not fulfilled its obligation to secure the applicant's right to respect for their private and family life (§60). The interpretation of Article 8 coincides with the Court's view in Lopez case. In summary, the ECtHR points out that **unhealthy environment conditions can restrict individual's rights to have their home respected, and thus their right to private and family life**. *§51 Lopez; §60 Guerra*. Both cases analysed in terms of a **positive duty on the State** to take reasonable and appropriate measures to secure the applicant's right under §1 of Article 8.

Kyrtatos v. Greece 22 May 2003

The Court in paragraph 52 applies the Lopez reasoning stating that:
severe environmental pollution may affect individuals' well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely, **without, however, seriously endangering their health**.

However, **environmental pollution must have adversely affected one of the rights safeguarded by paragraph 1 of Article 8**. There must exist a harmful effect on a person's private or family sphere and not simply the general deterioration of the environment.

Öneryildiz v. Turkey 2002 ch/ 2004 G Ch

The Court in this case recognized that the protection from harm linked to the environment can also fall under Articles 2 (right to life), 3 (freedom from ill treatment) and 6 (fair trial).

Applied to the Cardiff Grounds planned dump, the disposal of a large amount of radioactive mud in Cardiff Bay, a zone really close to the population, would certainly cause "severe environmental pollution". Indeed, it would impact both the marine ecosystem (fishes), but also individuals as the radioactive sediments are likely to move, and could thus reach and stay on the beaches.
"Without seriously endangering their (individuals/applicants) health" This is really important as the Court seems to set a rather low threshold here. For the rights of Art 8 to be breached the applicant would not need to prove that the severe environmental pollution seriously endangered his/her life, it is a point to put forward in the current case.

2. The right to receive information about any real or eventual harm to the environment.

Guerra and others v. Italy 19 February 1998

Jamberk J stated in a concurring opinion that : "**If information is withheld by a government about circumstances which foreseeably, and on substantial grounds, present a real risk of**

danger to health and physical integrity, then such a situation may also be protected by article 2 (Right to Life)."

This statement underlines the positive obligation on the State to provide those at risk with information.

Guidance issued by the European Commission of Human Rights states, referring to Guerra, that Article 8 requires an effective and accessible procedure be established which enables such persons to seek **all relevant and appropriate information**. The 'all' may signal information more than is already held by the government. It may impose a further obligation to collect information.

In Guerra it was also recognised that there ought to be a provision of essential information that would enable concerned persons **to assess the risks** they and their families might run if they continued to reside within the vicinity of the sanctioned but potentially harmful activity.

McGinley and Egan v. the United Kingdom 9 June 1998

The ECtHR in this judgment consolidated the environmental cross-dimension of the European Convention on Human Rights pointed out in the case of *Guerra and others v. Italy*: the right to receive environmental information from the State is not protected as such under Article 10 of the European Convention, but it has a procedural implication in the context of Article 8.

Thus there is, under Art 8, a **positive duty on States** whose Governments engage in hazardous activities to respect private and family life by establishing an effective and accessible procedure which enables interested parties to seek (and obviously obtain) any relevant and appropriate information, including on the environment.

HERE: It seems that we lack concrete and scientific information concerning the level of radioactivity contained in the sediments that might end up in Cardiff Bay. Moreover, the information already given during the previous dredging was not reliable due to the sampling method employed (the collection of sediments on the surface rather than deeper in the mud).

3- The positive obligation on the State

Hatton v UK (2003) 37 EHRR 28

The **Grand Chamber** in this case stated that a government must necessarily conduct '**appropriate investigations and studies**' when its decision-making process involves '**complex issues of environmental policy**' so that it may 'strike a fair balance between the various conflicting interests at stake'.

Fedeyeva v Russia (2005) 49 EHRR 295

There is a high threshold for determining whether there has been an interference (with health & wellbeing); this was determined in this case by the 'pollution having attained a certain level' and the 'general environmental context'.

In this case the defendant was a **private factory but the Court underlined the fact that there was a positive obligation on the state as a regulator**.

GENERAL 4. INTERNATIONAL ENVIRONMENTAL LAW

Rio Declaration:

Principle 15: In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Convention on Biodiversity 1992

Article 7. Identification and Monitoring

- Each Contracting Party shall, as far as possible and as appropriate, in particular for the purposes of Articles 8 to 10:
- **(c) Identify processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity, and monitor their effects through sampling and other techniques; and**
- (d) Maintain and organize, by any mechanism data, derived from identification and monitoring activities pursuant to subparagraphs (a), (b) and (c) above.

Article 8: In-situ Conservation

- Each party shall, as far as possible and appropriate:
- (d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings:
- **(e) Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas:**
- (f) Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies.
- Where a significant adverse effect on biological diversity has been determined pursuant to Article7, regulate or manage the relevant processes and categories of activities:

UN Convention on the Law of the Seas (UNCLOS) ---Persuasive only

Article 145: Protection of the marine environment
Necessary measures shall be taken in accordance with this Convention with respect to activities in the Area to **ensure effective protection for the marine environment from harmful effects which may arise from such activities**. To this end the Authority shall adopt appropriate rules, regulations and procedures for inter alia:

(a) the **prevention, reduction and control of pollution** and other hazards to the marine environment, including the coastline, and of interference with the ecological balance of the marine environment, **particular attention being paid to the need for protection from harmful effects of such activities as drilling, dredging,** excavation, disposal of waste, construction and operation or maintenance of installations, pipelines and other devices related to such activities;

5. WELSH LAW

The Well Being of Future Generations (Wales) Act 2015 is a groundbreaking measure which sets out a legal framework of principles, which operates alongside the Environment (Wales) Act 2016. The most salient sections are sections 2, 4 and 5.

Section 2: Sustainable Development

Provides that 'in this Act, "sustainable development" means the process of **improving the economic, social, environmental and cultural well-being of Wales by taking action**, in accordance with the sustainable development principle (see section 5), aimed at achieving the well- being goals (see section 4).

Section 4: Well-Being Goals

'A resilient Wales' - A nation which **maintains and enhances** a biodiverse natural environment with **healthy functioning ecosystems** that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).

'A healthier Wales' - A society in which people's physical and mental well-being is **maximise**d and in which choices and behaviours that benefit future health are understood.

Section 5: The sustainable development principle

(1) 'In this Act, any reference to a public body doing something "in accordance with the sustainable development principle" means that the body must act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.

(2) In order to act in that manner, a public body must take account of the following things—

(a) the importance of **balancing short term needs with the need to safeguard the ability to meet long term needs**, especially where things done to meet short term needs may have detrimental long term effect;

(b) the need to take an integrated approach, by considering how—

(i) the body's well-being objectives may impact upon each of the well-being goals;

(ii) the body's well-being objectives impact upon each other or upon other public bodies' objectives, in particular where steps taken by the body may contribute to meeting one objective but may be detrimental to meeting another;

(**c) the importance of involving other persons with an interest in achieving the well- being goals and of ensuring those persons reflect the diversity of the population of—**

(i) Wales (where the body exercises functions in relation to the whole of Wales), or

(ii) the part of Wales in relation to which the body exercises functions;

(d) how acting in collaboration with any other person (or how different parts of the body acting together) could **assist the body to meet its well-being objectives, or assist another body to meet its objectives;**

(e) how deploying resources to prevent problems occurring or getting worse may contribute to meeting the body's well-being objectives, or another body's objectives.

6. WASTE MANAGEMENT FOR DREDGING OPERATIONS

Dredging has been an ongoing requirement since the early days of waterways and waste from dredging operations has been subject to EU waste management controls for over 30 years. These controls were introduced on the adoption of the original Waste Framework Directive (75/442/EEC) in 1975 and implemented in the UK in 1976 by means of the Control of Pollution Act 1974 and associated Regulations.

The Control of Pollution (Licensing of Waste Disposal) Regulations 1976 (S.I. 1976 No.732) classified it as industrial waste, ―waste produced as a result of dredging's operations. The 1976 Regulations defined ―dredging operations as including ―the removal of anything forming part of or projecting from the bed of the sea or any inland water, by whatever means it is removed and whether or not at the time of removal it is wholly or partly above water.

The 1976 Regulations also provided an exemption from the waste management licensing system then in force where ―waste produced in the course of dredging operations for the purpose of land drainage or the maintenance of a watercourse, is deposited along the banks of a watercourse.

The 1976 Regulations provisions were re-enacted in the Collection and Disposal of Waste Regulations 1988 (S.I. 1988 No.819). The current provisions are contained in the Controlled Waste Regulations 1992 (S.I. 1992 No.588) Schedule 3 paragraph 5 which classifies ―waste from dredging operations as industrial waste; and the Environmental Permitting (England and Wales) Regulations 2007 (S.I. 2007 No. 3538) Schedule 3, paragraph 25, which provides an exemption from an environmental permit for waste arising from dredging operations.

The original Waste Framework Directive has now been supplemented by other EU legislation which directly or indirectly affects the recovery and disposal of dredging's e.g. the Hazardous Waste Directive and the Landfill Directive.

As a result of devolution, there are regulatory variations between England/Wales and Scotland. This may result in differing costs but does not currently present any operational difficulty. It is possible that the Welsh Assembly Government may, in the future, introduce their own regulations which may differ to legislation in England and could have implications for operations on waterways which cross over the England/ Welsh border.

There is a range of legislative tools for regulating waste recovery and disposal operations. Examples of these are:

• Exemptions from environmental permits (both simple and complex)
• Environmental Permits

Not all these options apply to dredged materials; those that normally apply are discussed in Section 2.

1.1 Definition of Waste

Article 1, 1(a) of the Waste Framework Directive (2006/12/EC) provides that:- ―waste is "...any substance or object…which the holder discards or intends or is required to discard." There is no definitive list of what is and is not waste. Whether or not a substance is discarded as waste, and when waste ceases to be waste, are matters that must be determined on the facts of the case and the interpretation of the law is a matter for the Courts. It rests, in the first place, with the producer or holder of a substance to decide whether it is being discarded as waste and the Environment Agency is responsible, as a "competent authority", for implementation of the waste framework directive in England and Wales — including its definition of waste.

Since the definition came into force the European Court of Justice ("ECJ") and our National Courts have issued several judgments on the interpretation of the definition of waste and the meaning of "discard". ECJ judgments are binding on Member States and their competent authorities. A summary of ECJ judgments on the interpretation of the definition of waste is available on the Defra website at: http://www.defra.gov.uk/environment/ waste/topics/index.htm.

The European Waste Catalogue (EWC) contains a list of all types of waste and each waste type is given a six-digit code:
• some wastes, called 'absolute entries', are always classed as hazardous, for example inorganic wood preservatives, organic solvent-based waste paint or varnish remover and wastes from asbestos processing. These wastes are identified in the EWC with an asterisk (*)
• other wastes, called 'mirror entries', are classed as hazardous if contaminants are present in amounts above certain threshold concentrations, for example some wastes containing arsenic or mercury.

1.1.1. Inert Waste

The definition of inert waste in Article 2 (e) of the Landfill Directive is: ‘Inert waste ‘means waste that does not undergo any significant physical, chemical or biological transformations. “Inert” waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health. The total leachability and pollutant content and the ecotoxicity of its leachate are insignificant and, in particular, do not endanger the quality of any surface water or groundwater.

1.1.2 Hazardous Waste

Hazardous waste is waste that may be harmful to human health or the environment. Examples of hazardous wastes include:
• asbestos
• certain chemical wastes
• certain healthcare wastes
• electrical equipment containing hazardous components such as cathode ray tubes or lead solder
• fluorescent light tubes
• lead-acid batteries
• oily sludges
• pesticides
• Solvents

1.1.3 Non-Hazardous Waste
Is waste that is not hazardous.

1.1.4 Contaminated Waste
The term contaminated waste "is often confused with hazardous waste"; they are not the same. Contaminated can be defined as an impairment of quality by an undesirable substance not normally present, degradation of natural quality as a result of man's activities or unusually high concentrations of naturally occurring substances. Whether or not contaminated material is hazardous is related to the types and concentrations of substances present.

1.2 Environmental Permitting
An Environmental Permit (EP) is a legal document, issued under Regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2007 (EPR 2007). Environmental Permits, which are issued by the Environment Agency, are permits for the purposes of the Waste Framework Directive and their purpose is to ensure that waste is recovered or disposed of in ways that protect the environment and human health.

There are two types of permits: a site permit (authorising the deposit, recovery or disposal of controlled waste in or on land), or a mobile plant permit (authorising the recovery or disposal of controlled waste using certain types of mobile plant). The disposal of non-hazardous dredgings into a tip or lagoon alongside inland waterways is regulated by an environmental permit.

1.2.1 Technical Competence (Operator Competency)
The Environment Agency must refuse an application for the grant or transfer of an environmental permit if it is not satisfied that the applicant: a) will be the operator; or b) will operate in accordance with the permit.

The definition of operator is given by Regulation 7. Details of how the Environment Agency decides whether an operator is likely to comply with the permit can be found in section 8 of the EP Core Guidance at http://www.defra.gov.uk/environment/epp/ documents/core-guidance.pdf Operators of permitted waste activities must demonstrate their technical competence by satisfying the requirements of an approved technical competence scheme.

Two schemes have initially been proposed: i) a variation of the previous WAMITAB scheme; waste activities are categorised as low, medium or high risk. Operators ensure their activities are managed by someone with an appropriate qualification. Technical competence must be maintained and is assessed every two years. ii) based on a written competence management system (CMS); operators write a CMS to an agreed industry standard to identify necessary skills, ensure suitably qualified people fill key posts, and deliver training and development to fill skill gaps. The CMS is independently audited and accredited annually.

WAMITAB Certificates of Technical Competence (CoTC) awarded under the previous waste management licensing regime are still valid under EPR 2007 but the level of Award for a particular site may vary depending on where it falls within the permitting hierarchy. Any CoTC holder who was technically competent for an activity under the old scheme will not need to obtain another award. Neither will people who passed an Environment Agency assessment or who benefited from deemed competence. However, everyone will now have to pass the 2-year continuing competence assessments. More information on the new technical competence schemes can be found at www.defra.gov.uk/environment/epp/ index.htm

1.2.2 Obtaining an Environmental Permit
To landfill non-hazardous dredgings adjacent to the watercourse they are coming from, requires an environmental permit. The requirements for applications are set out in Schedule 5 to EPR 2007. The application must:
• be made by the operator (though it may be made by an agent acting on behalf of the operator)
• in case of a transfer application, be made by the current operator and future operator
• be made on the form provided by the regulator
• include the information required by the application form, and
• include the relevant fee An applicant can withdraw an application at any time before it is determined but the regulator is not obliged to return any of the application fee.

Application forms Operators must use the forms provided by the regulators to make their applications and application forms should:
• be clear and simple to understand
• identify any administrative and technical information required
• require the information required by any relevant Directive(s)
• require, where relevant, the assessment of the potential impact on the environment and human health
• require, where relevant, a level of detail proportionate to the environmental risk, and
• be sufficiently comprehensive to enable operators to submit complete applications

1.3 Exemptions from Environmental Permits
The Waste Framework Directive enables Member States to adopt general rules providing exemptions from the Directive‘s permit requirements. The UK is one of a very few Member States to make significant use of this discretion and has provided a wide range of permit exemptions – mainly to encourage the recovery and recycling of waste. The exemptions are provided in Schedule 3 to the EPR 2007. If a waste management activity is exempt, then an environmental permit is not required. The exemptions from environmental permits are mainly for waste recovery and recycling operations and are provided within the terms of the Waste

Framework Directive. This means that they are provided on the basis of ―general rules― which set conditions to protect the environment and human health; and specify the waste activity subject to exemption and the types and quantities of waste which may be disposed of or recovered under the terms of it.

The Waste Framework Directive‘s key objective – which applies to exempt activities as well as those carried out under the terms of a permit - is to ensure that waste is recovered or disposed of without endangering human health and without processes or methods which could harm the environment and in particular without:

- Risk to water, air, soil, plants or animals
- Causing nuisance through noise or odours
- Adversely affecting the countryside or places of special interest Operators carrying out waste activities under the terms of an exemption are required to register the activities with the Environment Agency (EA). There are two types of exemption; simple and complex, and the registration process differs accordingly.

The complex exemption registration involves the submission of certain information regarding the activity and the payment of a fee. The details of the registration processes and the current fees can be found on the EA website. The exemptions relevant to the disposal of dredgings are discussed in section 2.5.

1.3.1 Low Risk Waste Regulation

The Environment Agency maintains a list of low risk waste activities; these activities are not exempt from environmental permitting, but they do not justify enforcement. If an activity appears on the list, the EA take the view that it would not be in the public interest to require an environmental permit for the activity. The list is subject to change and the EA can revoke it in full, or part, at any time.

1.4 Landfill Directive

The Landfill Directive, implemented in England and Wales by the Landfill (England and Wales) Regulations 2002 (as amended), and recently re-transposed by the Environmental Permitting (England and Wales) Regulations 2007 has led to significant changes in the way we dispose of wastes. The requirements of the Landfill Directive have been progressively introduced since 2002.

One of the consequences has been the reduction in the number of operational landfills; due to stringent technical and engineering requirements of the Landfill Directive. The main requirements of the Landfill Directive are:

- Landfills must be classified as hazardous, non-hazardous or inert.
- Waste acceptance procedures have to be in place at the landfill.
- Waste must be pre-treated before being landfilled.
- Certain waste types cannot be landfilled e.g. liquid, certain tyres and some hazardous materials.
- Biodegradable municipal waste will be progressively diverted away from landfill.
- The waste producer is responsible for ensuring that basic characterisation of the waste has taken place to establish its key characteristics as specified in the Environmental Permitting

Regulations. For example, details of the chemical composition and leaching behaviour of the waste are required.

1.4.1. Waste Acceptance Criteria

The Waste Acceptance Criteria (WAC) sets leaching and other limit values that components of the waste stream must meet in order to be landfilled. There are WAC for inert, for hazardous and for stable, nonreactive hazardous wastes. Each class of landfill may only accept wastes that meet the relevant waste acceptance criteria. There is no WAC, and therefore no leaching limit values for non-hazardous wastes destined for non-hazardous landfills. Hazardous liquid waste has been banned from landfill since July 2004 and the ban was extended to non-hazardous liquids from 30 October 2007. Waste in liquid form is regarded as: i) Any waste that near instantaneously flows into an indentation void made in the surface of the waste; or ii) Any waste load containing free draining liquid substance in excess of 250 litres or 10% of the load volume, whichever represents the lesser amount. Free draining means a liquid as defined in (i), irrespective of whether that liquid is in a container.

The first of these interpretations can be used to distinguish between liquids and sludges. A waste that flows only slowly, rather than near instantaneously, into an indentation void will be sludge and therefore not prohibited. The Landfill Directive requires that all waste destined for disposal at landfill must be subject to prior treatment unless it is inert waste for which treatment is not technically feasible. Any treatment must fulfil the following criteria (but need only meet one of the four objectives of the third point):

1. It must be a physical/thermal/chemical or biological process (including sorting).
2. It must change the characteristics of the waste.
3. It must do so in order to:

a) reduce its volume, or
b) reduce its hazardous nature, or
c) facilitate its handling, or
d) enhance its recovery

The Landfill Directive excludes from its scope the deposit of non-hazardous dredgings alongside small waterways from which they are dredged. In the UK, it is accepted that all inland waterways are ―small waterways.

This has been transposed into domestic legislation using the wording from the Landfill Directive. Dredging disposal sites falling within this exclusion will continue to be regulated by an environmental permit. Sites which fall outside the Landfill Directive exclusion will also require an environmental permit.

1.5 Landfill Tax

Landfill Tax is payable on waste that is disposed of at landfills; the Tax is regulated by HM Revenue and Customs.

Definition of Inactive and Active wastes

Inactive waste Inactive waste is defined in the Landfill Tax (Qualifying Material) Order 1996 (extract below). The definition of inactive waste has similarities but is not the same as the term inert used in waste legislation.

Dredge Material – Disposal or Reuse?

Regulations and Classification

- Statutory authorities:
  - Environment Agency (EA) and Natural Resources Wales
  - Marine Management Organisation (MMO)

Marine disposal may require an MMO consent (potentially Port Authority in some areas).
Fluvial disposal may require EA consent and/or flood risk activity consent
On shore (land-based) disposal requires a Waste Permit or a waste exemption from the EA.
As part of the regulations waste materials are required to be assessed and classified appropriately.

- CEFAS action levels 1 & 2: sediment to be disposed to sea (WID/Sea Dump)
- Waste Acceptance Procedure (WAP): Guidance on the classification and assessment of waste (1st edition 2015) Technical Guidance WM3 (EA, NRW).
- The Waste Acceptance Criteria (WAC) refers to leachability testing relating to disposal at inert, stable non-reactive hazardous cells and hazardous cells.

7. ENVIRONMENTAL IMPACT ASSESSMENT LEGISLATION

The Town and County Planning (Environmental Impact Assessment) (Wales) Regulations 2017

These Regulations revoke and restate with amendments the provisions of the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2016 ("the 2016 Regulations"). The 2016 Regulations consolidated and updated earlier instruments which implemented Council Directive 85/337/EEC ("the 1985 Directive") on the assessment of the effects of certain public and private projects on the environment in relation to town and country planning in Wales.

The 1985 Directive has been replaced by Directive 2011/92/EU ("the Directive") of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment. The Directive has been amended by EU Directive 2014/52/EU.

The Regulations impose procedural requirements in relation to the granting of planning permission under the Town and Country Planning Act 1990.

All development in Schedule 1 requires an environmental impact assessment ("EIA"). Development in column 1 of the table in Schedule 2 which is either to be carried out in a sensitive area or satisfies a threshold or criterion in column 2 requires an EIA if it is likely to have significant effects on the environment.

Regulation 3 requires an EIA to be carried out before consent is given to development likely to have significant effects on the environment ("EIA development").
New regulation 4 describes the environmental impact assessment process.

The Marine Works (Environmental Impact Assessment) (Amendment) Regulations 2017

Projects which fall under the requirement of an Environmental Impact Assessment under Schedule A1:
(15) Waste disposal installations for the incineration, chemical treatment (as defined in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste(1) under heading D9), or landfill of hazardous waste as defined in Article 3(2) of that Directive.

Directive 2008/98/EC

Article 1 – Subject Matter and Scope
This Directive lays down measures to protect the environment and human health by preventing or reducing the generation of waste, the adverse impacts of the generation and management of waste and by reducing overall impacts of resource use and improving the efficiency of such use, which are crucial for the transition to a circular economy and for guaranteeing the Union's long-term competitiveness.

Article 3 – Definitions
2. 'Hazardous waste' means waste which displays one or more of the hazardous properties listed in Annex III;
2a. 'Non-hazardous waste' means waste which is not covered by point 2;
2b. 'Municipal waste' means:
(a) Mixed waste and separately collected waste from households, including paper and cardboard, glass, metals, plastics, bio-waste, wood, textiles, packaging, waste electrical and electronic equipment, waste batteries and accumulators, and bulky waste, including mattresses and furniture;
(b) Mixed waste and separately collected waste from other sources, where such waste is similar in nature and composition to waste from households;
Municipal waste does not include waste from production, agriculture, forestry, fishing, septic tanks and sewage network and treatment, including sewage sludge, end-of-life vehicles or construction and demolition waste.
This definition is without prejudice to the allocation of responsibilities for waste management between public and private actors;
2c. 'Construction and demolition waste' means waste generated by construction and demolition activities.

Article 4 – Waste Hierarchy
1.The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:

(a) prevention;
(b) preparing for re-use;
(c) recycling;
(d) other recovery, e.g. energy recovery; and
(e) disposal.
2.When applying the waste hierarchy referred to in paragraph 1, Member States shall take measures to encourage the options that deliver the best overall environmental outcome. This may require specific waste streams departing from the hierarchy where this is justified by life cycle thinking on the overall impacts of the generation and management of such waste.
Member States shall ensure that the development of waste legislation and policy is a fully transparent process, observing existing national rules about the consultation and involvement of citizens and stakeholders.
Member States shall take into account the general environmental protection principles of precaution and sustainability, technical feasibility and economic viability, protection of resources as well as the overall environmental, human health, economic and social impacts, in accordance with Articles 1 and 13.

Article 10 - Recovery
1.Member States shall take the necessary measures to ensure that waste undergoes preparing for re-use, recycling or other recovery operations, in accordance with Articles 4 and 13.

Article 12 -Disposal
1. Member States shall ensure that, where recovery in accordance with Article 10(1) is not undertaken, waste undergoes safe disposal operations which meet the provisions of Article 13 on the protection of human health and the environment.
2. By 31 December 2024 , the Commission shall carry out an assessment of the disposal operations listed in Annex I, in particular in light of Article 13, and shall submit a report to the European Parliament and to the Council, accompanied, if appropriate, by a legislative proposal, with a view to regulating disposal operations, including through possible restrictions, and to consider a disposal reduction target, to ensure environmentally sound waste management.

Article 13 – Protection of human health and the environment
Member States shall take the necessary measures to ensure that waste management is carried out without endangering human health, without harming the environment and, in particular:
(a) without risk to water, air, soil, plants or animals;
(b) without causing a nuisance through noise or odours; and
(c) without adversely affecting the countryside or places of special interest.

Marine Licence
Case of 2018 – Marine Licence 12/45/ML: a licence related to the disposal of sediment being dredged as part of the construction of a cooling water system for Hinkley Point C Nuclear Power Station in Somerset.

Section 9 of the licence sets out a number of project specific conditions.
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.

The key legislation covering the marine licensing regime is contained within Part 4 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 seabed, 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.
- Use a vehicle, vessel, aircraft, marine structure or floating container to remove any substance or object from the seabed; and
- Carry out any form of dredging, whether or not involving the removal of any material from the sea or seabed.

Welsh Ministers are the licensing authority for Welsh waters. 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. Prior to the creation of NRW, marine licensing was administered by the Welsh Government's Marine Consents Unit.

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,
(1c) The need to prevent interference with legitimate uses of the sea, and such other matters the authority thinks relevant.
The licensing authority may 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, 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.

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.

European Biodiversity Action Plan

The EU Biodiversity Action Plan calls for the relevant territorial plans and projects within the EU to undergo a Strategic Environmental Assessment and an Environmental Impact Assessment that takes full account of biodiversity concerns.

8. PUBLIC NUISANCE

Any member of the public who suffers special damage as a consequence of the use of land and coastal water in this case has a remedy under the tort of public nuisance. This would be particularly relevant were the dumping ground to emit liquid or solid particulate pollution, that is harmful to health. The leading authority is Corby Group Litigation [2009] EWHC 1944. Here dust from contaminated land undergoing redevelopment caused birth defects in babies of members of the public exposed to it, for which the council (responsible for the development) was liable. Note that a successful claimant must establish that the damage they suffered was reasonably foreseeable at the time of the defendant's (EDF's) activity.

9. ENVIRONMENT BILL

The Environment Bill is likely to become law over the course of this Parliament. It contains provisions relevant to English and Welsh river basins which are pertinent, as well as more general 'governance' provisions of importance concerning environmental principles and environmental law enforcement. The latter is particularly salient, because it allows for 'environmental review' by a new Office for Environmental Protection of breach of environmental law. Though the jurisdiction of the OEP does not extend to Wales, the dumping site is in UK waters, and that may be enough to establish the OEP's jurisdiction. Alternatively, the OEP could have jurisdiction by virtue of the fact that the river basin has an English element.

10. CONCLUSION

The sampling plan under consultation envisages samples being taken from the deepest sediment (circa 9 meters), which will cover historic as well as recent waste from the Hinkley C site. If satisfactorily complied with, the above legal framework should see that decisions relating to the Hinckley C site are safe for the environment and public health.

When the results of the sampling are obtained, it will be possible for an environmental impact assessment of the dumping proposal to be carried out, based on fuller knowledge of the risks and issues. It is vital that the sampling process is transparent, and that any advisory group with input into decision making is inclusive of a wide range of expertise, including that within the group of objectors to the proposal.