

Sent by e mail to
C/O Nicola Simpson <SimpsonN@rpsgroup.com>

Date 04 October 2018

Dear Ms Simpson,

SCREENING AND SCOPING OPINION UNDER THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007 (as amended)

REQUEST FOR SCOPING OPINION – PEMBROKE DOCK MARINE

I am writing further to your request for a scoping opinion, received 05/07/2018, made in accordance with The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) ("The Regulations").

The purpose of the Environmental Impact Assessment (EIA) screening procedure is to determine whether the proposed works require an Environmental Impact Assessment and submission of an Environmental Statement (ES). The purpose of the scoping procedure is to determine what information should be provided in the ES.

In reaching our Screening Opinion we have considered the proposed works against Schedule A1 and A2 of the above regulations. In reaching our scoping opinion we have had regard to the information provided in the "Pembroke Dock Marine, Environmental Impact Assessment Scoping Report", dated June 2018, and considered the requirements of Schedule 3 of the Marine Works Regulations. We have also consulted with the bodies that we consider have an interest in the project by reason of their environmental responsibilities, or local or regional competences, as required by the above regulations, and had regard to their comments.

Screening Opinion

It is our opinion that the works fall within the categories of project listed within Schedule A2, paragraph 88 (Any change to or extension of development of a description listed in Schedule A1 (other than a change or extension falling within paragraph 31 of that Schedule) where that development is already authorised, executed or in the process of being executed). (Schedule A1 paragraph 14. Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1,350 tonnes). of the above regulations, and therefore must be considered in terms of its size, nature and location having regard to the relevant criteria listed in Schedule 1 of the above regulations.

We have carefully considered the criteria as set out in Schedule 1 of the regulations, and have determined, based on the information provided; that a statutory Environmental Impact Assessment is required.

We have come to this conclusion on the basis of the likely significant impacts of the whole project development. The proposed development may have significant effects on the environment by virtue of factors including its size, nature and location.

Scoping Opinion

This letter sets out the additional information that we consider necessary to be included and/or assessed in the ES for this Project.

Please note our scoping opinion is based on the information available to use at this time. The information provided is not a definitive list of the ES / EIA requirements and further information may be required following an application for this project, to ensure a full assessment is carried out.

This Screening and Scoping Opinion will be provided to all those bodies that were consulted and will be publicised on our website and on our Public Register.

The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)

Scoping Opinion SC1810

1. Summary of the proposal

1.1. The Developers summary of the proposal taken from the Scoping Report Section 2.19.

1.2. The intention of the proposed development is to create a flexible and efficient port-related office,

1.3. industrial, warehousing and distribution and ancillary area capable of meeting the needs of the modern blue economy (meaning the sustainable use of ocean resources for economic growth, improved livelihoods and jobs and ocean ecosystem health) that will provide a significant contribution to the £1.Bn Swansea Bay City Deal. This will involve the intensive use of land side areas for fabrication, repair and servicing of boats, renewable energy devices, transporting cargo and other works requiring marine access, served by an appropriately structured highly flexible enlarged slipway.

1.4. The marine works will include:

- The creation of a single large slipway by combining the two existing westernmost slipways and extending the slipway into the Milford Haven Waterway into deeper water;
- The infilling of the Graving Dock;
- Capital dredging around the slipways and within the Graving Dock; and
- The infilling of the timber/pickling pond

2. Location

2.1. Pembroke Dock is in the south of Pembrokeshire on the southern side of the Milford Haven. Pembroke Port is located at the north-western edge of the settlement of Pembroke Dock (grid reference: SM958037, X [Easting]: 195835 and Y [Northing]: 203799).

2.2. To the north of the Port lies the Milford Haven Waterway. To the east lies Front Street and Commercial Row with a residential area and Pembroke Dock town centre beyond. To the south lies Fort Road and Meyrick Owen Way with South Pembrokeshire Hospital and commercial and residential properties beyond. To the west lies a sewage treatment work with the Milford Haven beyond.

2.3. Pembroke Port itself comprises a broadly rectangular area of approximately 33.25 ha (82.15 acres) enclosed on three sides by the Grade II listed dockyard walls.

2.4. The Port contains a mixture of larger modern industrial and older, generally smaller industrial and ancillary office buildings, several of which are listed due to their architectural or historical (associated with the former royal naval dockyard use of the site) value. The majority of the remainder of the Port is covered in hardstanding with some small areas of land covered in grass or scrub vegetation.

3. Consultation Responses Received

3.1. In considering the scoping report, the NRW PS consulted with various consultation bodies. The consultation bodies that responded are listed below:

- Natural Resources Wales (NRW)
- Maritime and Coastguard Agency (MCA)
- Royal Yachting Association (RYA)

- Trinity House Lighthouse Service (THLS)
- Pembrokeshire County Council,
- Cadw
- Centre for Environment, Fisheries and Aquaculture Science (Cefas)
- National Air Traffic Services (NATS)
- Dyfed Archaeology Trust

4. The Scoping Report

4.1. The Scoping Report is structured into the following chapters:

- 1) Introduction
- 2) The Site and the proposed development
- 3) General approach to EIA
- 4) Scope of the Assessment
- 5) Technical Assessments – Non-technical summary
 - 1) Introduction
 - 2) Project description
 - 3) Need and alternatives considered
 - 4) Environmental assessment methodology
 - 5) Planning policy context
 - 6) Marine environment – marine ecology
 - 7) Marine environment - coastal processes
 - 8) Noise and vibration
 - 9) Air quality
 - 10) Historic Environment
 - 11) Transportation
 - 12) Socio-economics
 - 13) Ground conditions
 - 14) Landscape and visual impact
 - 15) Flooding and hydrology
 - 16) Biodiversity
- Figures
- Appendices
- 6) Scoping summary
- 7) References

4.2. The structure in the scoping report does not cover the following EIA topics: vulnerability of the project to major accidents or natural disasters, and cumulative and in combination assessment. These must be included in the ES.

4.3. The following comments are provided in the order of the chapters of the Scoping Report.

5. CHAPTER 1 INTRODUCTION

5.1. The Introduction (Chapter 1) of the report clearly explains the purpose of the Environmental Impact Assessment and the purpose of scoping in line with the relevant legislation

5.2. The legislation referenced within the Scoping Report refers to The Town and Country Planning (Environmental Impact Assessment) Regulations 2017. The Developer must be aware that the requirements are not the same as for the Marine Works (Environmental Impact Assessment) Regulations 2017. All relevant legislation should be referenced accordingly even though one Environmental Statement is to be produced.

6. CHAPTER 2 THE SITE AND THE PROPOSED DEVELOPMENT

6.1. Chapter 2 provides a clear description of the entire proposed development site and the surrounding environment and clearly defines the marine elements of the project. Maps and plans have also been included defining development areas within the Figures section of the report.

6.2. Within this section the Developer has identified the onshore and marine components of the project. References have been made to the relevant legislation and local Government policies. When referencing Legislation ensure the latest amendments have been identified at the time of publishing.

6.3. The Developer has not referenced the UK Marine Policy Statement. This must be included in the ES.

7. CHAPTER 3 GENERAL APPROACH TO EIA

7.1. The Environmental Statement must contain charts and maps identifying the location of each activity to be undertaken within the project scope. Co-ordinates defining each activity area should also be provided, reflecting the charts and maps.

7.2. Consideration should be given in relation to the potential of the port development to impact other European states. The conclusions must be documented within the Environmental Statement

8. CHAPTER 4 SCOPE OF ASSESSMENT

8.1. Table 2 identifies the proposed chapter headings for the structure of the Environmental Statement. The ES must contain all the information required within **The Marine Works (Environmental Impact Assessment) (Amendment) Regulations 2017, Schedule 3**. This includes:

- A requirement to provide a description of the likely significant effects of the development on the environment resulting from impacts on climate change, risks to human health and use of natural resources;
- Ensuring EIA quality by requiring that those who undertake the work are competent experts;
- More detailed demonstration of the consideration of reasonable alternatives to the proposed project; and
- Further consideration of how to avoid, prevent, reduce and / or off-set significant adverse effects where possible and develop monitoring strategies

9. CHAPTER 5 TECHNICAL ASSESSMENTS - Comments have been provided under the proposed Environmental Statement chapter headings.

9.1. The following applies to all of the technical/topic chapters:

The ES must include a description of the likely significant effects of the project and regulated activity on the environment resulting from:

- The construction and existence of the project and regulated activity
- Use of natural resources
- Emissions (pollutants, noise, light, vibration, heat, radiation)
- Risks to human health, cultural heritage or the environment (including accidents and natural disasters)
- Impacts of the project on climate

- Technologies and substances used

9.2. Non-Technical summary – we currently have no comments to make on this chapter.

9.3. Written statement – we currently have no comments to make on this chapter.

9.4. (1) Introduction – we currently have no comments to make on this chapter.

9.5. (2) Project description. To re-iterate co-ordinates defining each activity area should also be provided, reflecting the charts and maps.

9.6. (3) Need and alternatives considered – we currently have no comments to make on this chapter.

9.7. (4) Environmental assessment methodology - we currently have no comments to make on this chapter.

9.8. (5) Planning policy context

9.8.1. As a Marine Licence under the Marine and Coastal Access Act (2009) will be sought for this project, this legislation must be explained in the ES. The ES should make the licensing requirements of the project clear. If you are in any doubt as to whether an activity requires a marine licence from Natural Resources Wales please contact the marine licensing team at marinelicensing@cyfoethnaturiolcymru.gov.uk.

9.8.2. This section should also cover the Marine Works (Environmental Impact Assessment) Regulations (2007) (as amended) which this scoping opinion has been provided under.

9.8.3. The Environmental Statement must consider the implication of the proposals on other European Directives, including;

- EC Habitats Directive (protected sites and protected species)
- The Birds Directive
- Marine Strategy Framework Directive
- Water Framework Directive

9.8.4 As set out in the scoping report, the requirements of national legislation will also need to be considered, including;

- The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000
- The Conservation of Habitats and Species Regulations 2017 (as amended) The Environment (Wales) Act 2016
- Well-being of Future Generations (Wales) Act 2015

9.8.5 The scoping report recognises and highlights the developing Welsh National Marine Plan (WNMP) and marine planning framework as key policy context and correctly identifies that the plan is not yet adopted. Once the plan has been adopted NRW PS must make decisions in accordance with the marine plan, unless relevant considerations indicate otherwise. In preparation for the adoption of the plan, we recommend that any EIA undertaken reviews the contents of the draft WNMP, and the Environmental Statement

considers how the project complies with the draft Policies, or the final policies once the plan is adopted.

9.9. (6) Marine environment – marine ecology

9.9.1. With regards to designated sites within the vicinity of the works, we consider that the correct sites and features of interest have been scoped in. In addition, we consider that the proposed approach to the EIA and the potential effects listed in Chapter 6 of the proposed structure of the ES are appropriate for the works.

9.9.2. The scoping report correctly identifies the primary impact of dredging is a change to water quality due to increased suspended sediment concentrations (SSC), and the associated sediment disposal, and the resuspension of sediment-bound contaminants. The sediment impact is not to be given its own chapter in the ES however the impacts will be assessed within the chapters on marine ecology, including the potential impact to fisheries and shellfisheries, designated shellfish waters, and intertidal and subtidal habitats.

9.9.3. The preliminary investigation conducted by RPS on behalf of Milford Haven Port Authority have concluded that the slipway, graving dock and Milforge site are potential areas of contamination from a wide range of sources. Contaminants include, asbestos, tin, PAH, TPH, TBT, lead and hydrocarbons, amongst others. Appropriate and timely sediment sampling and analysis of the proposed dredge areas, on the surface and at depth, must be presented in the ES. This must be undertaken in line with OSPAR requirements for the management of dredged material and the results must be compared to Cefas action levels to assist in determining the suitability of the material for dredging and/or disposal at sea. The distribution and fate of potentially contaminated sediments released and the potential impacts on the water quality and biology are also critical for the HRA and WFD assessments.

9.9.4 The applicant has suggested the possibility of disposing of dredge arisings for beneficial use but has not provided details of the proposed use at this stage. If beneficial use is deemed not suitable in this case, the material will be cleaned and disposed of to a licenced disposal site.

9.9.5 There is the potential for release of contaminants through infiltration/migration/leaching of contaminated water from land-based construction activities into the water column. The ES must consider appropriate avoidance and mitigation measures for this potential impact.

9.9.6. Whilst the information required to inform the Habitats Regulations Assessment (HRA) and Water Framework Directive (WFD) assessment should be coordinated with the EIA, it is important to note that there is distinction between the EIA, HRA and WFD processes; We therefore recommend that the ES should include sections containing 'information to inform the HRA' and 'WFD compliance assessment', or separate reports should be provided.

The WFD assessment must consider:

- all activities carried out; and,
- each stage of the activity, for example construction, operation, maintenance and decommissioning

- The WFD compliance assessment process needs to also consider the zone of influence of the project in its entirety and any WFD waterbodies that fall within it, not just where there are direct impacts.
- Consideration should be given to whether the potential impacts are short term effects (< 6 years) or will cause a non-temporary/permanent change (e.g. direct habitat loss, alteration to sediment transport pathways, interference with migratory fish pathways etc). If the impacts are considered a non-temporary/permanent effect on the biological, chemical or hydro morphological elements of the WFD water body in question then the impact must be carried forward for consideration in the WFD compliance assessment process.

9.9.7. Guidance on the WFD assessment in the form of NRW OGN72 has been provided with this scoping opinion. This is internal guidance that has been provided to assist the Developer to understand what is expected of a Water Framework Directive Assessment.

9.9.8 Further information to assist in the production of the WFD assessment can be found at the following links:

<http://waterwatchwales.naturalresourceswales.gov.uk/en/>

<https://www.gov.uk/government/publications/complying-with-the-water-framework-directive-marine-dredging>

9.9.9. It is noted that there will be non-temporary impacts on the biological intertidal and subtidal benthic ecology (caused by direct loss of habitat, damage to habitat and potential sediment smothering and direct mortality to the benthos) caused by the capital dredging activities during construction of the slipway and caused by footprint of the slip way itself after construction.

9.10 (7) Marine environment - coastal processes – we currently have no comments to make on this chapter.

9.11 (8) Noise and vibration

9.11.1 The scoping report is considered fit for purpose for the development as described. The relevant marine receptors which might be impacted by the proposed works have been identified. Given the variety of the proposed works, i.e. piling and dredging with the possibility of rock excavation/drilling, it is likely that numerical modelling will be required.

The following must be considered:

- Noise sources should be accurately identified as either continuous (shipping, vibro-piling) or impulsive (percussive piling, UXO detonation) and the correct respective metrics must be used.
- Zones of influence must be constructed carefully according to the relevant receptor response thresholds – these must be informed by the most recent and relevant resources such as NMFS (NOAA) (2016) for marine mammals and Popper et al (2014) for fish.

9.11.2 From a cumulative perspective the potential threat is the impact of any activity further downstream at Milford Haven, in that migratory or travelling receptors may be exposed to stress from both the proposed works, and any existing works in the surrounding area.

9.11.3 Marine receptors have been scoped in to further assessment, this includes the specific mention of underwater noise impacts to fish and marine mammals. Underwater noise can have a range of effects on marine fauna, including masking of biologically important sound, auditory injury (permanent threshold shift [PTS] or temporary threshold shift [TTS]), and in extreme cases, direct or indirect mortality.

9.11.4 The report states in section 5.52 that “General activities will be considered qualitatively, and numerical assessments will be undertaken for significant works, such as piling”. This section requires further clarification. Will a desk-based assessment be conducted for ‘non-significant’ activities, and that some form of modelling will be undertaken for ‘significant’ works? The use of the word ‘significant’ is also confusing given that it could be argued that this has been used in place of ‘harmful’ or ‘percussive’. There may be other various noise sources proposed which would also warrant numerical assessment.

9.11.5 Excavation is proposed with the proviso that some removal of subsurface hard rock might be required. This also has the potential to generate additional underwater noise into the water column which must be assessed in the ES.

9.11.6 Assessment: Considering the potential for these works to introduce significantly increased levels of noise into the marine environment, it is expected some form of underwater noise modelling will be undertaken. This is especially pertinent given the number of protected sites and species which might be affected by these works, and the relatively narrow width of the river.

9.11.7 The applicant should consult the most recent and relevant literature in conducting their EIA, for marine mammals this comprises NOAA (2016) and for fish this comprises Popper et al (2014).

9.11.8 Specific details have not been provided regarding the consideration of cumulative effects.

9.12. (9) Air quality– we currently have no comments to make on this chapter

9.13. (10) Historic Environment

9.13.1 NRW PS understand that the historic environment is to be assessed appropriately, with an archaeological desk-based assessment (DBA) being prepared in accordance with a specification seen and approved by Dyfed Archaeological Trust in March 2018. We note that the scoping report (para. 5.80) confirms that an ASIDOHL2 (Assessments of the Significance of the Impact of the Development on the Historic Landscape) is to be undertaken as the development is located within a Registered Historic Landscape.

9.13.2 Key documents that should be consulted in support of the assessment include:

- Planning Policy Wales, Chapter 6 – the Historic Environment
- TAN24 The Historic Environment
- Managing Setting of Historic Assets in Wales
- Managing Heritage Impact Assessments in Wales

- Managing Change to Listed Buildings in Wales

9.13.3 NRW PS recommend that contact be made with Cadw at the start of the evaluation process to agree appropriate key viewpoints and key built heritage elements to take account of in support of the assessment of the scheme within both the immediate and wider historic environment.

9.13.4 The Environmental Statement must address both the direct effects on historic assets within the immediate locale and the effect on the settings of historic assets both within the Dockyard and within a buffer zone around the development.

9.13.5 For illustration of the density of historic survival, Cadw provided a list of designated assets within a 500m buffer of the proposed project., The ES must assess designated assets within an appropriate buffer around the project. The area of this buffer should be agreed with Cadw and may be greater than 500m.

9.13.6 Cadw's records show that the following historic assets within a 500m buffer could potentially be affected by the proposal.

Listed Buildings	14340	THE MARKET (FORMERLY ONLY NE ELEVATION LISTED)	II
	14341	PATERCHURCH TOWER, THE DOCKYARD	I
	14342	CENTENARY MEMORIAL STANDARD LAMP, ALBION SQUARE (IN CENTRE)	II
	14352	NO 28, COMMERCIAL ROW (E SIDE)	II
	14353	THE SOUTH WEST MARTELLO TOWER, FORT ROAD (W END)	II*
	14354	NORTH EAST MARTELLO TOWER, FRONT STREET (N SIDE)	II*
	14371	DRY-MOAT WALLS, PRESELY VIEW (W END)	II*
	14372	BARRACKS PLATFORM, PRESELY VIEW (W SIDE)	II*
	14374	FORMER NATIONAL SCHOOL (NOW EMPLOYMENT EXCHANGE), VICTORIA ROAD (N SIDE)	II
	14376	THE DOCKYARD WALLS, THE DOCKYARD	II
	14377	DOCKYARD GATES, THE DOCKYARD	II*
	14378	PIERS AND LODGES (FORMERLY LISTED WITH DOCKYARD WALL), THE DOCKYARD	II*
	14379	THE PORT HOTEL (FORMERLY LISTED AS THE COMMODORE CLUB), THE DOCKYARD	II*
	14380	LONG STABLE RANGE TO S, THE DOCKYARD	II*
	14381	NO 3, THE TERRACE, THE DOCKYARD	II*
	14382	GARDEN WALLS TO REAR OF NO 1, THE TERRACE THE DOCKYARD	II
	14383	GARDEN WALLS TO REAR TO NO 2, THE TERRACE, THE DOCKYARD	II
	14384	GARDEN WALLS TO REAR TO NO 3, THE TERRACE, THE DOCKYARD	II
	14385	COACH-HOUSE BUILDING TO REAR OF NOS 1 AND 2 THE TERRACE, THE DOCKYARD	II
	14386	NO 5, THE TERRACE, THE DOCKYARD	II
	14387	NO 1, HANGAR AND ANNEXES, THE DOCKYARD	II
	14388	NO 2 HANGAR AND ANNEXES, THE DOCKYARD	II

14389	FORMER FOREMEN'S OFFICE, THE DOCKYARD	II
14390	PATER FORT SW AND W WALLS, THE DOCKYARD	II
14391	BUILDING SLIP NO 1 (FORMERLY LISTED WITH OTHER BUILDING SLIPS), THE DOCKYARD	II
14392	BUILDING SLIP NO 2 (FORMERLY LISTED WITH OTHER BUILDING SLIPS), THE DOCKYARD	II
14393	THE GRAVING DOCK INCLUDING BOLLARDS AND CPSTAN (FORMERLY LISTED WITH 13 BUILDING SLIPS AND CARR JET)	II*

9.14. (11) Transportation

9.14.1 The Environmental Statement must include a Navigational Risk Assessment and show how the works – both during construction and subsequent operation – will be incorporated within MHPA's Safety Management System as described under the Port Marine Safety Code (PMSC).

9.14.2 NRW PS advise the developer fully engages with local RNLI and HM Coastguard, so that any impacts on Search and Rescue operations and access can be considered. The local Marine and Coast Guard Agency Marine Office should also be engaged with early on, so that local Survey & Inspection operations can be informed.

9.14.3 The sections that cover navigational safety under the PMSC and its Guide to Good Practice are within section 7 of the guide which can be found at the following link.

<https://www.gov.uk/government/publications/a-guide-to-good-practice-on-port-marine-operations>

9.14.4 Section 7.8 of the above report relates to Regulating Harbour Works.

9.14.5 NRW PS note that any Aids to Navigation (AtoNs) required will be agreed between Trinity House and Milford Haven Port Authority as the local lighthouse authority for the Area.

9.15. (12) Socio-economics – we currently have no comments to make on this chapter.

9.16. (13) Ground conditions – we currently have no comments to make on this chapter.

9.17. (14) Landscape and visual impact – we currently have no comments to make on this chapter.

9.18. (15) Flooding and hydrology – we currently have no comments to make on this chapter

9.19. (16) Biodiversity - See comments in relation to Marine Ecology and the Marine Environment in addition to NRW's response to Pembrokeshire County Council to the Town and Country Planning (Environmental Impact Assessment Regulations) (Wales) 2017 Scoping Opinion request dated 16th August 2018.

9.20. Figures - we currently have no comments to make on this chapter

9.21. Appendices - we currently have no comments to make on this chapter

9.22. Cumulative impacts and in-combination effects

9.22.1 The ES must include an assessment of cumulative and in-combination effects. This has not been provided within the Scoping Report.

9.22.2 The following data sources may provide useful information on other projects for the assessment of cumulative effects:

- The Nationally Significant Infrastructure Projects register:
<https://infrastructure.planninginspectorate.gov.uk/projects/register-of-applications/>
- The Developments of National Significance Register:
<http://gov.wales/docs/desh/publications/180312-dns-register-en.pdf>
- Planning Policy E.g. Local Development Plans, Transport Plans (National and Local) and National Policy Statements.
- An up to date list of marine licensable developments can be found at the following link:
<http://lle.gov.wales/catalogue/item/MarineLicences/?lang=en>

10. CHAPTER 6 SCOPING SUMMARY

10.1. The items highlighted in this letter should be considered in the Environmental Impact Assessment process, and I would like to see the outcome of our suggestions in the subsequent Environmental Statement. However, I would not see this letter as a definitive list of all Environmental Statement / Environmental Impact Assessment requirements and other subsequent work may prove necessary.

10.2. The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.

10.3. The following link will take you to the central location for external facing marine and coastal guidance on the NRW website.

Links to the website are:

- English: <https://naturalresources.wales/guidance-and-advice/business-sectors/marine/marine-and-coastal-guidance/?lang=en>
- Welsh: <https://naturalresources.wales/guidance-and-advice/business-sectors/marine/marine-and-coastal-guidance/?lang=cy>

Yours sincerely

Z McMellin

Zoe McMellin

Marine Licensing Team
Natural Resources Wales

Cc: All Consultation Bodies providing a response

References

References

National Marine Fisheries Service. (2016). *Technical guidance for assessing the effects of anthropogenic sound on marine mammal hearing: Underwater acoustic thresholds for onset of permanent and temporary threshold shifts*. U.S. Dept. of Commer. NOAA. NOAA Technical Memorandum, NMFS-OPR-55, 178 p

Popper, A. N., Hawkins, A. D., Fay, R. R., Mann, D. A., Bartol, S., Carlson, T. J., ... Tavalga, W. N. (2014). *ASA S3/SC1.4 TR-2014 Sound exposure guidelines for fishes and sea turtles: A technical report prepared by ANSI Accredited Standards Committee S3/SC1 and registered with ANSI*. American National Standards Institute.

Port Marine Safety Code

<https://www.gov.uk/government/publications/port-marine-safety-code>

<https://www.gov.uk/government/publications/a-guide-to-good-practice-on-port-marine-operations>