Historic Environment Scotland Consultation Response



By email to: ms.marinelicensing@gov.scot

Judith Horrill
Marine Licensing Casework Officer
Marine Scotland
Marine Planning & Policy
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9D

Longmore House Salisbury Place Edinburgh EH9 1SH

Enquiry Line: 0131-668-8716

HMConsultations@hes.scot

Our case ID: 300051634 Your ref: 00009818 and 00009819 27 June 2022

Dear Judith Horrill

Marine (Scotland) Act 2010, Part 4 Marine Licensing
The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017
Town and Country Planning (EIA) (Scotland) Regulations 2017 (as amended)
00009818 and 00009819 - Forth Ports Ltd (Per Royal Haskoning DHV) - Harbour
Development - Port of Leith Outer Berth - Construction of Outer Berth, dredging and sea deposit and EIA report

Thank you for your consultation which we received on 30 May 2022. We have considered these 2 Marine Licences and the accompanying EIA Report in our role as a consultee under the terms of the above regulations and have reviewed it for our historic environment interests. Our remit is world heritage sites, scheduled monuments and their setting, category A-listed buildings and their setting, and gardens and designed landscapes (GDLs) and battlefields in their respective inventories. Under the Marine (Scotland) Act 2010 our historic environment interests also cover Historic Marine Protected Areas (HMPAs) and undesignated marine cultural heritage features.

Our Advice

We understand that these Marine Licences relate to the capital dredging of an area to enlarge the existing berth pocket at the outer berth of the Port Leith and the sea deposit of dredged material and also construction works and improvements to the existing berth for hardstanding for loading and unloading.

In our response to the EIA Screening for this application we did not raise any concerns regarding the proposed marine works and note that the historic environment was subsequently scoped out of the assessment. We have therefore considered the information received and can confirm that we do not have any comments to make on the proposals.

Our decision not to provide comments should not be taken as our support for the proposals. This application should be determined in accordance with national and local policy on development affecting the historic environment, together with related policy quidance.

Historic Environment Scotland – Longmore House, Salisbury Place, Edinburgh, EH9 1SH Scottish Charity No. **SC045925**



Further Information

This response applies to the application currently proposed. An amended scheme may require another consultation with us.

Guidance about national policy can be found in our 'Managing Change in the Historic Environment' series available online at historic-environment-guidance-notes/. Technical advice is available through our Technical Conservation website at www.engineshed.org.

Please contact us if you have any questions about this r	esponse. The officer managing
this case is Andrew Stevenson who can be contacted by	y phone on or by
email on	

Yours sincerely

Historic Environment Scotland

NatureScot Consultation Response



Judith Horrill
Marine Licensing Officer
Marine Scotland
MS.MarineLicensing@gov.scot

15 July 2022

Our ref: CLC167187/A3780536

Dear Judith

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 ("THE EIA REGULATIONS")

00009818 AND 00009819 - FORTH PORTS LTD (PER ROYAL HASKONING DHV) — HARBOUR DEVELOPMENT - PORT OF LEITH OUTER BERTH

Thank you for your consultation with the above application and accompanying EIA/HRA reports. We acknowledge the time constraints associated with this project and appreciate the extra time to allow us to complete our response.

Summary

The proposal may have effects upon several European sites (SPAs and SACs). The proposal may also have effects upon European Protected Species (EPS) that are not specifically protected by relevant European sites. Our advice is that these interests will not be adversely affected by the proposal, providing the recommended mitigation is implemented.

Background

We have been engaged in pre-application discussions with the applicant, particularly over the requirement for HRA as well as other protected species considerations. We provided advice at EIA screening stage, concluding that EIA was required due to the Habitat Regulations Assessment (HRA) and appropriate assessment work that were being undertaken for the proposal, as well as European Protected Species (EPS) considerations.

Advice

The proposal lies close to several European sites. A Habitats Regulation Appraisal (HRA) is therefore required.

Our advice is that this proposal is likely to have a significant effect on various European sites. Consequently, Marine Scotland, as competent authority, is required to carry out an appropriate assessment in view of the sites' conservation objectives for their qualifying interests.

To help you do this we advise that based on the information and assessment provided in the document: *Habitats Regulations Appraisal - Screening for LSE and Provision of Information to Inform Appropriate Assessment*, our conclusion is that the proposal **will not adversely affect the integrity of these sites, providing the recommend mitigation is in place, as discussed in the report and within this response.**

The proposal may also have effects upon EPS that are not specifically protected by relevant European sites. The assessment, conclusions, and mitigation measures identified in the HRA report will apply to marine EPS also, as well as being discussed more fully within the EIA. We are content that there will be no significant impacts on EPS, providing the recommended mitigation is in place.

The mitigation measures identified with the HRA and EIA reports should therefore be secured by Marine Scotland, although we do recommend some changes to these mitigation measure, as discussed in Annex 1 and 2.

Annex 1 contains full details of HRA requirements and required mitigation measures, as well as some areas for clarification. Annex 2 contains detailed comments on the proposal, focusing on ornithology and marine ecology.

Should you wish to discuss these comments further then please do not hesitate to contact me at my e-mail address.

Yours sincerely,

Carolyn Clark

Area Officer / Forth

Annex 1 – advice on Habitats Regulations Appraisal (HRA) and required mitigation

Several European sites could be affected by these proposals:

- Firth of Forth Special Protection Area (SPA)
- Imperial Dock Lock, Leith Special Protection Area (SPA)
- Forth Islands Special Protection Area (SPA)
- Outer Firth of Forth and St Andrews Bay Complex Special Protection Area (SPA)
- River Teith Special Area of Conservation (SAC)
- Isle of May Special Area of Conservation (SAC)
- Firth of Tay and Eden Estuary Special Area of Conservation (SAC)
- Berwickshire and North Northumberland Special Area of Conservation (SAC)
- Moray Firth Special Area of Conservation (SAC)

Further information about these internationally important sites, the special features they are designated to protect, and their conservation objectives, can be found on NatureScot's SiteLink website: https://sitelink.nature.scot/home

The status of these sites means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply. Consequently, Marine Scotland is required to consider the effect of the proposal on these sites before it can be consented (commonly known as Habitats Regulations Appraisal). Our website has summaries of the legislative requirements and the HRA process:

https://www.nature.scot/professional-advice/protected-areas-and-species/protected-species/legal-framework/habitats-directive-and-habitats-regulations

https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra

The above sites may also be notified as Sites of Special Scientific Interest (SSSI) and/or Ramsar sites. However, any issues raised in relation to these designations are fully addressed as part of the following consideration of the respective European sites.

Our advice in relation to the HRA is provided below:

HRA Stage 1 – is the proposal connected with conservation management of the European sites?

No – this proposal is not connected to conservation management of any European site. Hence further consideration is required.

HRA Stage 2 – is the proposal 'likely to have significant effects' (LSE) upon the European sites?

In plain English this asks whether there is any connectivity between the proposals and the European sites.

We previously advised that there was connectivity between the proposals and the following European sites and features, and the following document has been prepared to accompany the application: Habitats Regulations Appraisal - Screening for LSE and Provision of Information to Inform Appropriate Assessment. This document is comprehensive and identifies the following

sites, features and impact pathways/LSE, as outlined in Section 4 Stage 1: Screening (for Fish, Ornithology and Marine mammals); and in Section 5 Conclusion of Screening summary:

European Site	Feature	LSE pathways
Firth of Forth SPA	various bird species	disturbance, habitat loss, water quality effects and prey availability
Imperial Dock Lock, Leith SPA	common tern	disturbance, habitat loss, water quality effects and prey availability
Forth Islands SPA	various bird species	disturbance, habitat loss, water quality effects and prey availability
Outer Firth of Forth and St Andrews Bay Complex SPA	various bird species	disturbance, habitat loss, water quality effects
River Teith SAC	sea lamprey, river lamprey & salmon	underwater noise disturbance, water quality changes, habitat quality changes
Isle of May SAC	grey seal	underwater noise impacts, water quality changes, prey availability changes
Firth of Tay and Eden Estuary SAC	harbour seal	underwater noise impacts, water quality changes, prey availability changes
Berwickshire and North Northumberland SAC	grey seal	underwater noise impacts, water quality changes, prey availability changes
Moray Firth SAC	bottlenose dolphin	underwater noise impacts, water quality changes, prey availability changes

HRA Stage 3 – will the proposal have adverse effects on the integrity of the European sites?

The above sites, features and LSE are assessed fully in the above report, in order to inform the required appropriate assessment. Overall, the way the report has presented the screening and the HRA information is good, and is comprehensive. The HRA process has been understood well and many of the key issues and impact pathways have been addressed. Some further detailed comments are provided below and in Annex 2.

The report concludes no adverse effect on site integrity, providing the discussed mitigation is implemented, as summarised in Section 9 (p128) and discussed within each relevant section. We are content with this conclusion, although we <u>recommend some changes to the discussed</u> mitigation.

The mitigation measures identified with the HRA (and EIA for other species) to be secured are as follows. Section 14 (p201) of the EIA contains a useful summary of potential impacts and

mitigation, although we have recommended a couple of changes. Annex 2 discusses the below in more detail:

Summary of required mitigation measures:

- Soft start piling procedure
- JNCC piling guidance pre-piling search area of 500m
- Use of a piling shroud at all times through the tern breeding season, not just during the post breeding phase
- Recommend that piling works are undertaken outwith the tern breeding season but if this
 is not possible, then an experienced observer will be required to monitor disturbance at
 the colony

We have also requested some further information to clarify some areas that we feel have not been as sufficiently addressed as they could be. This information is required to ensure all potential impacts have been considered fully and to ensure no additional mitigation measures are required. We don't expect this information to change our position and overall advice but it is required to ensure the assessment is complete. We believe the required information should be relatively easy to source and provide:

- Number of additional vessel movements to the spoil site and how often that route will used against the baseline
- Clarification of what the enabling works include, likely impacts and any mitigation in addition to that already included

Annex 2

Fish - River Teith SAC

We are content with the assessment and conclusions in Section 6 of the HRA. To summarise:

- soft start piling techniques will allow these mobile species to move away from underwater noise disturbance
- due to the width of the Forth, underwater noise will not be a barrier to migration.
- water quality changes at the dredging site or disposal site will be localised and temporary
- the Firth of Forth is sufficiently wide here, so there is ample space for migrating lamprey species and salmon to pass by, avoiding both noise disturbance and any water quality changes.

We therefore agree with the conclusion of no adverse effect on site integrity.

Ornithology

In general, the scope of the proposed works do not raise significant concerns. Much of the planned development will take place in the exclusion zone for the port, with a very small proportion of the dredging works to take place within the SPA, in the region of <100m2 (image on p17). This part of the SPA (directly by the mouth of the harbour) is likely to be of poorer habitat quality and more disturbed than other parts of the SPA, so it is not expected to have a significant impact.

The planned <u>mitigation for soft-start procedures</u> for piling will also help to mitigate against noise disturbance for mobile wintering species.

We therefore support the assessment and conclusions for <u>most</u> of the SPAs (no adverse effect on site integrity), as discussed in Section 7 of the HRA report and have no further comments on these sites. We do however have some comments on the Outer Firth of Forth and St Andrews Bay Complex SPA where there remains some areas of clarification.

Outer Firth of Forth and St Andrews Bay Complex SPA

In general, any changes to species distribution within the Outer Firth of Forth and St Andrews Bay Complex SPA, as a result of disturbance outside of the site, are likely to be temporary and recoverable. The exception to this is the <u>common tern</u>, see below. There are also some remaining questions over the use of the <u>spoil site</u> within the SPA, particularly in relation to disturbance:

Spoil Site

This is one potential impact that is perhaps not addressed sufficiently within the application. It is stated that the development will use "the offsite disposal site (Narrow Deep B Spoil Disposal Ground) or disposed of on land, as appropriate" and this will be used for dredged materials. This is a licensed site within the Outer Firth of Forth and St Andrews Bay Complex SPA, however, the management measures for the SPA advise that while maintenance dredging would constitute the

baseline conditions for the site, pressures associated with capital dredging projects should be reduced or limited.

The report states (on p50 of the HRA document) that "Total dredging for the Proposed Development would be 47,000 m3 from the pre works and 54,000 m3 from the berth pockets. Out of 101,000 m3 of material, around 85 % of the material would be non-erodible (i.e. glacial till, mudstone and revetment rock). Only c.16,000m3 of soft sediment containing fines would be dredged."

- i. Loss of or damage to prey-supporting habitat This area south of Inchkeith is known to have high levels of activity for foraging common tern (see SPA site selection document). The key supporting processes for terns, red-breasted merganser and red-throated diver at the Outer Firth of Forth and St Andrews Bay Complex SPA are water quality (nutrients and turbidity), tidal cycles, and water flow. Small-scale physical processes are thought to be especially important in directly influencing prey availability and hence foraging areas used. However, the disposal site will be unlikely to host suitable prey species due to its continued use as a disposal ground for maintenance dredging and consequent disturbance/ addition of sediment. Also, because suspended sediment concentration (SSC) is anticipated to return to baseline within 1.5hrs, loss of water quality is expected to be very temporary.
- ii. <u>Disturbance</u> The report does not state how many trips would be made to the spoil site, or how many disposal events there would be. This will be important to understand in order to come to a firm conclusion on how significant this might be to the conservation objective of 'no significant disturbance' of the qualifying species. With respect to disturbance, Red-throated diver, Slavonian grebe, common scoter, velvet scoter, red-breasted merganser and guillemot are sensitive to disturbance associated with vessel movements (Jarret et al. 2018*). Current patterns and levels of vessel movement associated with dredging and disposal activities are not anticipated to pose a risk to the conservation objectives but significant increases in vessel traffic to sites not used very frequently could be disturbing. Further understanding of the number of additional vessel movements and how often that route will used against the baseline will help us confirm our advice. It is likely that the conservation objective will be met with this additional information, and that consequently we will advise no adverse effect on site integrity.

Disturbance from piling to breeding terns

Given that the other works (piling & general construction) will take place outside of the Outer Firth of Forth and St Andrews Bay Complex SPA, the relevant conservation objectives to assess impacts on are: (i) maintenance of the population of SPA, (ii) maintenance of the distribution within in the SPA, (iii) no significant disturbance to the qualifying interests within the SPA.

Within the Outer Firth of Forth and St Andrews Bay Complex SPA, common tern are in unfavourable condition and consequently a restore objective is set for common terns at this site. Common terns using the Outer Firth of Forth and St Andrews Bay Complex SPA include those breeding at Imperial Dock Lock SPA. Consequently, this SPA population is considered to be

functionally linked to the Outer Firth of Forth and St Andrews Bay Complex SPA. This means that the plan or project must ensure that it does not prevent or reduce the potential for recovery of common tern.

There is the potential that disturbance to breeding terns at Imperial Dock Lock SPA from piling could reduce the potential for recovery within this site, despite their habituation to the day to day operations of the port. This is because this is a novel type of construction, not currently part of the site baseline. Therefore, we could not be fully confident that there would be no adverse effect on site integrity if piling was to be undertaken during the breeding season (May, June, July). We therefore recommend that the piling works are undertaken outside of the breeding period as this would remove any LSE for common tern. However, if the applicant were to undertake the works during the breeding season we would require them to employ an observer to monitor disturbance at the colony, who should be suitably experienced and have the authority to halt works should there be evidence of disturbance to breeding common tern.

Additionally, it is stated (on p 71) that a piling shroud would be installed on the rig during piling activities if they were to be undertaken during the post-breeding period when terns aren't confined to the colony and are found elsewhere in the dock. We agree that this should be installed but also recommend that the shroud be employed at all times should works be undertaken in the breeding season.

Vessel traffic during operation

In the report it is stated (p9): "25 round trips of the installation vessel from the port to the project site over a period of six to 12 months, i.e., on an average, 2 to 4 times per month. The number of vessels currently using the port is, on average, 1,150 per year." We agree that the vessel movements during operational phase are unlikely to be significant, provided that they are following existing routes through the Forth.

*Jarrett, D., Cook, A. S. C. P., Woodward, I., Ross, K., Horswill, C., Dadam, D., & Humphreys, E. M. (2018). Short-Term Behavioural Responses of Wintering Waterbirds to Marine Activity. *Scottish Marine and Freshwater Science*, *9*(7). https://doi.org/10.7489/12096-1

Marine Mammals and Marine Ecology – EIA/HRA

The outline construction programme (3.2.5 EIA report) outlines the main aspects of the work including 'Demolition of existing dolphins and associated walkways, and excavation of overburden – four months'. The other elements such as piling, dredging and operation have specific sections about them and their impacts assessed but there does not appear to be a similar section for the demolition works and what it entails, other than 3.2.1.1. Enabling works: Given the existing piles are socketed it would be difficult to extract them and therefore they would be cut off at bed level. We require some clarification of what these enabling works would include, the likely impacts and any mitigation that may be required in addition to that already included, to ensure complete assessment, advice and full identification of all required mitigation.

We agree with the conclusion of LSE for all four SAC sites screened in within the HRA document (section 8). The effects pathways being underwater noise, changes in water quality and changes to prey availability. The assessment summaries for these effects are:

- For changes in water quality, this would occur mostly during the dredging phase. The effect is modelled to be very localised and is in an area that is already routinely dredged.
- For changes to prey availability, again likely to be a small and localised displacement effect. In addition the marine mammal species considered under HRA are generalist feeders and thus not reliant on a particular species of prey.
- Underwater noise: the Permanent Threshold Shift (PTS) impact ranges for impact piling, vibrio piling and dredging are all within 100m; Temporary Threshold Shift (TTS) and thus disturbance impact ranges will be much higher. We have further comments below on the underwater noise modelling. We also recommend amended JNCC piling mitigation, see below.

The HRA concludes that there will be no adverse effect on the integrity of bottlenose dolphin, harbour seal or grey seal, as a designated feature of the Moray Firth, Firth of Tay and Eden Estuary, Isle of May and Berwickshire and North Northumberland Coast SACs respectively. We agree with this conclusion given the location of the works, distance from seal SACs and with JNCC <u>standard</u> mitigation included:

The applicant has suggested that the standard JNCC piling guidance should be amended to reduce the pre-piling search area from the recommended minimum of 500m to 200m. Given the uncertainties within the underwater noise section (see our comments below), and the fact that the piling phase is likely to take 5.5 months we recommend that the mitigation zone remains at the minimum JNCC recommend, i.e. 500m. If for operational reasons this becomes difficult to maintain, then we would be happy to discuss options at that point.

Comments on the Marine Mammal sections

We are content with the sources of information used for distribution and abundance of species in these sections. Some general comments regarding the assessments are provided below, along with some comments on the Underwater Noise Modelling:

- For bottlenose dolphins the assessment has used the MU for population numbers and for density used SCANs quadrant R. There is a mismatch here as the SCANs transects will reflect the offshore population of bottlenose dolphins whereas the density of East coast management unit (aka Moray Firth associated) dolphins will be much higher.
- We do not recommend the use of the entire MU as a reference population (IAMMWG, 2021), instead, we recommend that the UK proportion of the MU reference population be used.
- For seals the assessment has used a combination of Carter et al 2020 (predicted relative density) and Russell et al 2017 absolute density estimates. The 'numbers' appear to have come from Russell et al 2017.
- Table 4.15 projects with potential for in combination effects, and we are pleased to see this outlined although there may be a couple of projects missing from the list such as Aberdeen Harbour

Underwater Noise: Appendix 10-1 Subacoustec UWN modelling

- Subacoustic have used their proprietary model (INSPIRE) to predict Permanent Threshold Shift (PTS)/Temporary Threshold Shift (TTS) impacts on marine mammals from the impact piling activity. We are <u>content that the model parameters represent the worst case scenario</u>, in terms of location (outermost point) and in the piling parameters, *i.e.*;
 - o 1.2m pile diameter
 - Max hammer energy 280kJ
 - 2 hour piling duration
 - Three piles installed in a day
 - \circ Source levels used; 226.2 dB re 1 μ Pa (SPL pk) and 201 dB re 1 μ Pa²s (SELss)
- A simple modelling approach was used to assess dredging and vibropiling. It is not straightforward to convert levels in rms to SEL, unless noise recordings of these activities were available for use. Subacoustec appear to have used adjusted (reduced) source levels for input into the simple model. It is not that clear how the reduction has been calculated, and does not appear to be an accepted/common method. We therefore would need more detail on this method as the reduction in source levels used are not insignificant. Where there is uncertainty, we recommend that a precautionary approach is taken, and in this case our view is that the unweighted levels should have been used. However, we anticipate that even with an unweighted calculation the impact ranges and thus number of animals impacted would still be low.
- Based on these calculations, all marine mammal impact piling PTS impact ranges are less than 100m. The maximum range for TTS impacts was up to 780m.
- The accumulated PTS impact ranges for dredging and vibropiling are also within 100m, with a max of 220m for TTS onset. <u>Had this been calculated without the reduction in source</u> <u>level to mimic weighting, these distances would have been larger.</u>
- There is no attempt to predict area disturbed by the proposed activity.

Marine EPS

An EPS licence for disturbance will be required and we have responded separately to the licence consultation. To summarise here, our advice is that the proposal will not have a detrimental effect on the favourable conservation status of the European Protected Species concerned.

Benthic habitats and species

The area of work is a busy harbour that has been routinely dredged for many years and the spoil disposal site is an existing and recently used site. There are no records of any Priority Marine Features or other benthic habitats/species of conservation interest in the construction area. Therefore we agree with the conclusions of Chapter 9 Marine and Coastal Ecology.

Coastal Processes

We are content with conclusions of coastal modelling undertaken in Section 7, as summarised in section 7.8.

NatureScot European Protected Species Consultation Response

Horrill J (Judith)

From: Carolyn Clark

Sent: 15 July 2022 17:00 **To:** MS Marine Licensing

Subject: EPS-00009909 - FORTH PORTS LTD (PER ROYAL HASKONING DHV) - PORT OF

LEITH OUTER BERTH - NatureScot response

FAO: Judith Horrill

Hi Judith,

CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 (AS AMENDED)

EPS-00009909 - FORTH PORTS LTD (PER ROYAL HASKONING DHV) - PORT OF LEITH OUTER BERTH

Thank you for your consultation regarding the licence for disturbance for the Leith Outer Berth project work (construction, dredging, deposits).

We have reviewed the EPS licence application and Risk Assessment (RA) documents. We can confirm that:

- An EPS licence for Injury is not required, provided the mitigation as proposed is employed (JNCC, 2010 https://hub.jncc.gov.uk/assets/31662b6a-19ed-4918-9fab-8fbcff752046) including the use of a 500m MMO mitigation zone (as discussed in our response to the harbour project consultation).
- We agree that an EPS licence for disturbance is required.
- The proposal in not capable of having a detrimental effect on the favourable conservation status of the European Protected Species concerned.
- We agree with the species detailed. Sei whale would normally be unusual in the area although we acknowledge it has been seen in the Forth within the last couple of years.

We offer the following comments on the RA submitted:

- We do not recommend the use of the entire MU ref population (IAMMWG, 2021) instead, we recommend that the UK proportion of the MU reference population be used.
- We highlight that the use of the SCANS III Survey Block R density for bottlenose dolphin is likely to be an underestimate given the location of the proposed activity.
- Section 3 The consultant does not appear to fully reflect Scottish EPS legislation where the RA considers magnitude of effects as would be considered under EIA regulations.
- P13 Potential for disturbance. We agree that there are no specific thresholds for disturbance, and the
 uncertainties regarding defining disturbance. We also agree that a single threshold approach is subject to
 errors. However, for EPS licences for disturbance, the number of individual animals at risk of disturbance
 needs to be defined on the application. This together with the context (e.g. duration) helps with the
 consideration of impact on FCS. We do not agree with the use of TTS onset thresholds as a proxy for
 disturbance, as it is understood that animals can be disturbed at lower levels that TTS thresholds. Where
 there is no other alternative, we recommend the precautionary use of the US NMFS level B harassment
 thresholds.
- All predictions of disturbed animals are less than 1 individual (based on TTS onset thresholds). Ideally this
 should be recalculated using NMFS thresholds. However, we feel that this extra work is not proportionate
 to the level of risk from this project and so suggest that each species is rounded up to one individual for
 licence purposes.

I hope these comments are helpful. Do get in touch if you need to discuss.

Regards, Carolyn

Carolyn Clark | Operations Officer - South

NatureScot | Silvan House, 3rd Floor East, 231 Corstorphine Road, Edinburgh, EH12 7AT | 0131 316 2637 nature.scot | @nature_scot | *Scotland's Nature Agency* | *Buidheann Nàdair na h-Alba*

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Tha am post-dealain seo agus fiosrachadh sam bith na chois dìomhair agus airson an neach no buidheann ainmichte a- mhàin. Mas e gun d' fhuair sibh am post-dealain seo le mearachd, cuiribh fios dhan manaidsear-siostaim no neach- sgrìobhaidh.

Thoiribh an aire airson adhbharan gnothaich, 's dòcha gun tèid sùil a chumail air puist-dealain a' tighinn a-steach agus a' dol a- mach bho NatureScot.

Royal Society for the Protection of Birds Consultation Response



Judith Horrill
Marine Scotland – Marine Planning & Policy
By email: MS.MarineRenewables@gov.scot

15th July 2022

Dear Ms Horrill,

Re: Marine Licence Application (00009818 and 00009819) Forth Ports Limited - Harbour Development - Port of Leith Outer Berth

Thank you for consulting RSPB Scotland on the above Marine Licence application.

In 2019, First Minister Nicola Sturgeon confirmed that we are facing an ecological emergency and emphasised the responsibilities of all of us is to look afresh at everything that we are doing to protect Scotland's wildlife.¹

The proposal is within, close to, and/or within foraging rage of a number of Special Protection Areas (SPAs) for birds including the Firth of Forth SPA Imperial Dock Lock Leith SPA, the Forth Islands SPA and the Outer Firth of Forth and St Andrews Bay Complex (OFFSABC). SPAs represent the best of Scotland's wildlife, and we encourage Forth Ports to do more to protect and enhance these sites, in line with local and national policy.

To a large extent, we consider the Environmental Impact Assessment (EIA) and Habitats Regulations Appraisal (HRA) give an accurate representation of the likely impacts of the proposed development on the features for which the SPAs are designated. We agree with the conclusion of the HRA that there is a likely significant effect of the proposed Leith Outer Berth on the Firth of Forth SPA, Imperial Dock Lock Leith SPA, the Forth Islands SPA and the OFFSABC SPA. However, we have concerns relating to the assessment of changes to activities on the eastern breakwater site of the proposed Outer Berth (Areas 1-3 Fig.1.1 EIA Report) and concerns over the degree to which construction impacts on post-breeding common terns can be mitigated.

As is noted in the HRA, the development is not directly connected with the management of the SPAs and would have a likely significant effect on the SPAs. Therefore, Marine Scotland, as the competent authority, must not authorise the proposed development unless it can show beyond reasonable scientific doubt – using appropriate assessment – that the plan or project will not adversely affect the integrity of the SPA, in light of the site's conservation objectives. We do not consider this test has been met.

RSPB Scotland Headquarters 2 Lochside View Edinburgh Park Edinburgh EH12 9DH Tel: 0131 317 4100 Facebook: @RSPBScotland Twitter: @RSPBScotland rspb.org.uk



The RSPB is part of Birdlife International, a Partnership of conservation organisations working to give nature a home around the world.



SCOTLAND

We are concerned that both EIA and HRA documents assess the operational impacts on bird species as if the existing, baseline noise and day-to-day activities are uniform across the Port and thus birds using the area of the proposed development are likely to be habituated to and therefore unaffected by these activities (mentioned for example in Section 11.8.1 of the EIA and Section 4.2.2.3 and 7.1.2.1 of the HRA). We wish to see evidence that this is indeed the case. It seems that currently the eastern breakwater (site of the proposed Outer Berth) may have relatively lower levels of disturbance – in particular activities by workers – and thus act as a quieter, refuge site for some of the bird species, in particular common tern, ringed plover and kittiwake. This appears to be supported by the survey records. If the proposed development leads to a significant increase in operational usage of this area, and in particular foot-traffic from workers, then it may well lead to an increase in disturbance and resulting reduction in value of this area to birds during ongoing operation of the berth, not just for the construction phase.

We are also concerned about the construction impacts of the proposed development on post-breeding groups of roosting or loafing common terns. Although we agree with the conclusion that there could be a 'moderate adverse impact' on post-breeding groups of roosting / loafing common terns, connected to Imperial Dock Lock Leith SPA from the construction of the Outer Berth, we do not agree that the proposed mitigation will reduce this to a point that it is not significant. The survey records suggest that post-breeding groups of common terns use the eastern breakwater area in preference to most other areas of the dock. As such, even with mitigation in the form of a piling shroud (as proposed in Section 11.7.23 of the EIA) we do not believe it can confidently be concluded that the common terns can relocate elsewhere in the Port without detrimental impacts. These effects on common tern should also be considered alongside the operational effects described above.

In summary, due to the underestimation of impacts associated with changes to activities on the eastern breakwater site of the proposed Outer Berth to SPA qualifying species (namely kittiwake, ringed plover and common tern) and substantial doubt over the success of the proposed mitigation measures for common tern (a qualifying feature of the Imperial Dock Lock Leith SPA) during construction we <u>object</u> to the proposed development. We do not consider the information provided enables Marine Scotland to conclude beyond reasonable scientific doubt that there will not be an adverse effect on the integrity of the Firth of Forth SPA, Imperial Dock Lock Leith SPA, the Forth Islands SPA and the OFFSABC SPA.

We may be prepared to reconsider our objection following the provision of the following additional information:

- further mitigation measures for common tern during construction; and
- re-assessment of how potential changes from current usage in specific parts of the port, namely the Outer Berth-end of the Port, will affect qualifying species.

RSPB Scotland Headquarters 2 Lochside View Edinburgh Park Edinburgh EH12 9DH Tel: 0131 317 4100 Facebook: @RSPBScotland Twitter: @RSPBScotland rspb.org.uk



The RSPB is part of Birdlife International, a Partnership of conservation organisations working to give nature a home around the world



SCOTLAND

Should this re-assessment indicate a potential increase in operational disturbance, it may be possible to mitigate this, for example by installing screened fencing and creating refuge areas at the Outer Berth site. Without further details, it is hard to advise on this.

Notwithstanding our objection to this application, should Marine Scotland be minded to grant consent without first requesting and considering this additional information, we request that the following elements be secured using conditions:

- a. Implementation of a programme of pre- and post-construction bird monitoring, to be agreed with NatureScot and RSPB, in order to validate the assumptions of the Environmental Statement.
- b. Annual reports to be submitted to the planning authority, NatureScot and RSPB Scotland on the monitoring/ surveillance results.
- c. The enhancement of the West Pier, with nesting platforms, to provide alternative nesting, roosting and loafing areas for common terns prior to the commencement of any works, with enhancement works to be agreed with NatureScot and RSPB prior to implementation.
- d. The installation of permanent screening fencing on the eastern side of the new Outer Berth to reduce disturbance to species using the foreshore, with fencing to be agreed with NatureScot and RSPB prior to implementation.

I hope these comments are useful. Please do not hesitate to contact me should you require further information or explanation.

Yours sincerely



Toby Wilson
Senior Conservation Officer – Central Scotland

RSPB Scotland Headquarters 2 Lochside View Edinburgh Park Edinburgh EH12 9DH

Tel: 0131 317 4100 Facebook: @RSPBScotland Twitter: @RSPBScotland rspb.org.uk



The RSPB is part of Birdlife International, a Partnership of conservation organisations working to give nature a home around the world.

Scottish Water Consultation Response



Marine Licensing 375 Victoria Road

Aberdeen

Development Operations
The Bridge
Buchanan Gate Business Park
Cumbernauld Road
Stepps
Glasgow
G33 6FB

Development Operations
Freephone Number - 0800 3890379
E-Mail - <u>DevelopmentOperations@scottishwater.co.uk</u>
www.scottishwater.co.uk



Dear Customer,

Port Of Leith, Leith

Planning Ref: 00009818 00009819 Our Ref: DSCAS-0066245-ZLZ

Proposal: Construction, alteration or improvement of any works, Dredging

Please quote our reference in all future correspondence

Audit of Proposal

Scottish Water has no objection to this planning application; however, the applicant should be aware that this does not confirm that the proposed development can currently be serviced. Please read the following carefully as there may be further action required. Scottish Water would advise the following:

Drinking Water Protected Areas

A review of our records indicates that there are no Scottish Water drinking water catchments or water abstraction sources, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed activity.

Surface Water

For reasons of sustainability and to protect our customers from potential future sewer flooding, Scottish Water will not accept any surface water connections into our combined sewer system.

There may be limited exceptional circumstances where we would allow such a connection for brownfield sites only, however this will require significant justification from the customer taking account of various factors including legal, physical, and technical challenges.

In order to avoid costs and delays where a surface water discharge to our combined sewer system is anticipated, the developer should contact Scottish Water at the earliest opportunity with strong evidence to support the intended drainage plan prior to making a connection request. We will assess this evidence in a robust manner and provide a decision that reflects the best option from environmental and customer perspectives.

General notes:

- Scottish Water asset plans can be obtained from our appointed asset plan providers:
 - Site Investigation Services (UK) Ltd
 - ▶ Tel: 0333 123 1223
 - ► Email: sw@sisplan.co.uk
 - www.sisplan.co.uk

I trust the above is acceptable however if you require any further information regarding this matter please contact me on or via the e-mail address below or at planningconsultations@scottishwater.co.uk.

Yours sincerely,

Angela Allison

Development Services Analyst PlanningConsultations@scottishwater.co.uk

Scottish Water Disclaimer:

"It is important to note that the information on any such plan provided on Scottish Water's infrastructure, is for indicative purposes only and its accuracy cannot be relied upon. When the exact location and the nature of the infrastructure on the plan is a material requirement then you should undertake an appropriate site investigation to confirm its actual position in the ground and to determine if it is suitable for its intended purpose. By using the plan you agree that Scottish Water will not be liable for any loss, damage or costs caused by relying upon it or from carrying out any such site investigation."

Chamber of Shipping

From: Robert Merrylees <

Sent: 08 June 2022 16:53

To: MS Marine Licensing

Subject: RE: 00009818 and 00009819 - Forth Ports Ltd (Per Royal Haskoning DHV) - Harbour

Development - Port of Leith Outer Berth- Consultation- Response required by 30

June 2022

Dear Licensing at Marine Scotland,

Thank you for the consultation, please to confirm a nil return from the Chamber of Shipping.

Kind regards,

Robert

Robert Merrylees

Policy Manager (Safety & Nautical) & Analyst

UK Chamber of Shipping

30 Park Street, London, SE1 9EQ



www.ukchamberofshipping.com

SEPA

From: Planning South East < PlanningSouthEast@sepa.org.uk >

Sent: 30 May 2022 12:51

To: MS Marine Licensing

Cc: Horrill J (Judith)

Subject: RE: 00009818 and 00009819 - Forth Ports Ltd (Per Royal Haskoning DHV) - Harbour

Development - Port of Leith Outer Berth- Consultation- Response required by 30

June 2022

OFFICIAL

Dear Judith Horrill

Thank you for the above consultation. Based on the information provided, it appears that this application falls below the thresholds for which SEPA provide site specific advice. Please refer to our standing advice and other guidance which is available on our website at www.sepa.org.uk/environment/land/planning. In addition, please also refer to our SEPA standing advice for the Department for Business, Energy and Industrial Strategy and Marine Scotland on marine consultations available at https://www.sepa.org.uk/media/143312/lups-gu13.pdf

If there is a significant site-specific issue, not addressed by our guidance or other information provided on our website, with which you would want our advice, then please reconsult us highlighting the issue in question and we will try our best to assist.

Yours sincerely

Jess Taylor

Planning Officer Planning Service

SEPA Stirling Office, Strathallan House, Castle Business Park, Stirling FK9 4TZ

email: planningsoutheast@sepa.org.uk

Dh'fhaodadh gum bi am fiosrachadh sa phost-d seo agus ceanglachan sam bith a tha na chois dìomhair, agus cha bu chòir am fiosrachadh a bhith air a chleachdadh le neach sam bith ach an luchd-faighinn a bha còir am fiosrachadh fhaighinn. Chan fhaod neach sam bith eile cothrom

fhaighinn air an fhiosrachadh a tha sa phost-d no a tha an cois a' phuist-d, chan fhaod iad lethbhreac a dhèanamh dheth no a chleachdadh arithist.

Mura h-ann dhuibhse a tha am post-d seo, feuch gun inns sibh dhuinn sa bhad le bhith cur post-d gu postmaster@sepa.org.uk.

Oifis chlàraichte: Taigh Srath Alain, Pàirc Gnothachais a' Chaisteil, Sruighlea FK9 4TZ. Fo Achd Riaghladh nan Cumhachdan Rannsachaidh 2000, dh'fhaodadh gun tèid an siostam puist-d aig SEPA a sgrùdadh bho àm gu àm.

Edinburgh City Council

From: Keith Miller

Sent: 29 June 2022 13:54 **To:** Horrill J (Judith)

Subject: RE: 00009818 and 00009819 - Forth Ports Ltd (Per Royal Haskoning DHV) - Harbour

Development - Port of Leith Outer Berth- Consultation- Response required by 30

June 2022

Afternoon Judith,

The Council has considered your consultation on the proposals at Forth Ports. It has no comments to make on the proposals or the associated EIA.

Regards

Keith

Keith Miller | Senior Planning Officer | Development Planning | Planning & Building Standards | Sustainable Devt | Place Directorate | The City of Edinburgh Council | Waverley Court, Level G3, 4 East Market Street, Edinburgh, EH8 8BG | www.edinburgh.gov.uk

Please note that as a result of the Covid-19 situation I am currently working from home full time.

Have you signed up to the <u>Planning Blog</u>? We will be using the Planning Blog to communicate and consult on important changes and improvements to the <u>Planning Blog</u> to make sure you are up-to-date.

MOD

From: DIO-Safeguarding-Offshore (MULTIUSER) < DIO-Safeguarding-

Offshore@mod.gov.uk>

Sent: 10 June 2022 15:47 **To:** MS Marine Licensing

Subject: MoD Response (DIO10055268) for 00009818 and 00009819 - Forth Ports Ltd (Per

Royal Haskoning DHV) – Harbour Development - Port of Leith Outer Berth

Good afternoon

Thank you for your email requesting our comments for the above.

After further investigation I can confirm the MoD has no objection to this activity at the locations specified.

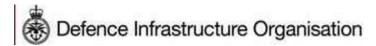
Kind regards

Debi Parker | Safeguarding Officer| Estates - Safeguarding| Defence Infrastructure Organisation Head Office | St George's House | DMS Whittington | Lichfield | Staffordshire, WS14 9PY



Due to COVID-19 I am working from home until further notice.

In line with the latest guidance, I am working offline where possible to ease the pressure on the IT network. Therefore I will only check emails and Skype periodically which will mean that I might not respond as promptly as usual.



Website: www.gov.uk/dio/ Twitter: @mod dio

Read DIO's blog http://insidedio.blog.gov.uk/

RYA

From: Pauline McGrow

Sent: 30 May 2022 14:23

To: MS Marine Licensing

Subject: RE: 00009818 and 00009819 - Forth Ports Ltd (Per Royal Haskoning DHV) – Harbour

Development - Port of Leith Outer Berth- Consultation- Response required by 30

June 2022

Hi Judith,

I write to inform you that RYA Scotland has no comment that they wish to make on this application.

Kind Regards

Pauline

Pauline McGrow Senior Administrator

Royal Yachting Association Scotland

T: 0131 317 7388





RYA Scotland, Caledonia House, 1 Redheughs Rigg, South Gyle, Edinburgh, EH12 9DQ T: 0131 317 7388, Fax: 0844 556 9549

Protecting your personal information is important to us, view our full Privacy Statement here









MCA

From: navigation safety < navigationsafety@mcga.gov.uk >

Sent: 27 June 2022 13:19

To: MS Marine Licensing < MS. MarineLicensing@gov.scot>

Subject: RE: 00009818 and 00009819 - Forth Ports Ltd (Per Royal Haskoning DHV) - Harbour Development - Port of

Leith Outer Berth- Consultation- Response required by 30 June 2022

Dear Judith,

Thank you for the opportunity to comment on the Marine Licence application for the harbour development, capital Dredging and sea Deposit at Port of Leith outer berth. The UK Technical Services Navigation team of the Maritime and Coastguard Agency has reviewed the documents received and would like to comment as follows:

We note that the works fall within the jurisdiction of a Statutory Harbour Authority (SHA) - Forth Ports Ltd and that the disposal of the material is within a designated disposal site. Therefore they are responsible for the safety of navigation within their waters.

The MCA confirms we have no objections to a licence being granted on this occasion. This is on the understanding that all maritime safety legislation is adhered to, and that the following risk mitigation measures take place:

Conditions:

None

In addition, the following advice should be provided to the applicant to facilitate the proposed works:

Advisories:

- 1. Bunding and/or storage facilities must be installed to contain and prevent the release of fuel, oils, and chemicals associated with plant, refuelling and construction equipment, into the marine environment.
- 2. The site is within port limits and the applicant should gain the approval/agreement of the responsible local navigation authority or the Harbour Authority/Commissioners/Council. They may wish to issue local warnings to alert those navigating in the vicinity to the presence of the works, as deemed necessary.
- 3. A local notification must be sent to the Harbour Authority who will decide if a Port NM is necessary. Details required: start date/ end date, work to be done, positions of the work area (WGS84), marking of the work area. UKHO will then review the subsequent Port NM to see if action is required.
- 4. The site is within port limits and the Harbour Authority may wish to issue local warnings to alert those navigating in the vicinity to the presence of the works, as deemed necessary. Any change data including engineering drawings, hydrographic surveys, details of new or changed aids to navigation must then be passed onto the UKHO as per guidance in 'Harbour Master's Guide to Hydrographic and Maritime Information Exchange' published on the UKHO website.
- 5. A local notification must be sent to the Harbour Authority on completion of the work. Any change data including engineering drawings, hydrographic surveys, details of new or changed aids to navigation must then be sent to the Harbour Authority who will review the info and determent what action to take. ref the harbour guide

The MCA has considered the relevant Marine Plan as part of its assessment of this application.

If you have any questions on this response, please let us know.

Kind Regards

Sam Chudley

Maritime Licence Advisor
Marine Licensing and Consenting
UK Technical Services Navigation







Maritime & Coastguard Agency Bay 2/25, Spring Place 105 Commercial Road, Southampton SO15 1EG

Safer Lives, Safer Ships, Cleaner Seas

Marine Scotland Science Advice





T: +44 (0)131 244 2500 E: MSS Advice@gov.scot

Judith Horrill
Marine Scotland Licensing Operations Team
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

05 July 2022

00009818 AND 00009819 - FORTH PORTS LTD (PER ROYAL HASKONING DHV) - CONSTRUCTION AND CAPITAL DREDGE AND SEA DEPOSIT

Marine Scotland Science (MSS) have reviewed the Port of Leith-Outer Berth Environmental Impact Assessment Report (EIAR) Reference: PC2045-RHD-ZZ-XX-RP-EV-0007, the Habitat Regulations Appraisal (HRA) report (Port of Leith – Outer Berth Habitats Regulations Appraisal-Screening for LSE and the Provision of Information to Inform Appropriate Assessment: PC2045-RHD-ZZ-XX-RP-EV-0009.

The following advice relates to two licence applications:

- 00009818 Forth Ports Ltd (per Royal Haskoning DHV) Construction Port of Leith Outer Berth
- 00009819- Forth Ports Ltd (per Royal Royal Haskoning DHV) Capital Dredge and Sea Disposal - Port of Leith Outer Berth.

MSS understand that NatureScot (NS) have been consulted on these applications, together with other consultees (e.g. the Royal Society for the Protection of Birds), however MSS provide the following comments without having sight of other representations, at the request of MS-LOT.

Marine Mammals

MSS note that exact timings of construction works have not been outlined in the EIAR, and this limits our ability to comment on the seasonality of any impacts associated with the development. This also applies to the conclusions of cumulative assessment. The key sensitive period with respect to marine mammals in association with this development is the grey seal breeding season (October to December).

MSS agree with the species listed and broadly agree with data sources used. We note the study area is not defined in section 12.5.1, but instead a list of the relevant Management Units (MUs) is presented. In Table 12-8, Carter *et al.* (2022) should be used for seal densities, as the updated methodology is more robust for data deficient areas given the use of a habitat preference based prediction rather than *null usage* (linear decay of usage from a haul-out site). Absolute density estimates, using the scalars and methodology found in the Supplementary Information of Carter *et al.* (2022), should be used rather than relative density in order to predict the number of individuals which may be impacted.







In section 12.7 it is important to note that Inchkeith, the closest designated haul-out site for grey seals, is also a breeding site. Seasonal considerations should be made to ensure potentially higher local densities during breeding season are taken into account. At-sea distributions of seals during this time may be higher than reflected by averaged density maps from Carter *et al.* (2022), which primarily uses data collected during spring and summer months.

MSS are content that the following impact pathways to marine mammals during construction have been considered: potential for auditory injury and/or behavioural impacts from underwater noise during piling and dredging works, and changes in water quality and prey availability. A quantitative assessment of impacts from tubular piling (impact piling) has been undertaken using underwater noise modelling (Marine Mammal and Fish Technical Report for Underwater Noise Impacts PC2045-RHD-ZZ-XX-RP-EV-0011). MSS are content with the method and application of the noise modelling carried out. In the pre-application consultation report there is reference to the steel piled lead-in jetty, which will be cut at seabed level. More information on the anticipated noise profile of this process would be useful. MSS note that the use of a piling shroud is mentioned as mitigation in the ornithology section of the EIAR 11.7.2.3 for airborne noise. MSS request further clarification on this methodology, with respect to the potential of the shroud to minimise underwater noise emissions. If so, this should be included in the relevant mitigation section of the EIAR for marine mammals. As previously advised, pile driving activities and suction dredging should be screened in to the EPS licensing process. These activities will produce noise that is within the hearing range of cetaceans, with the potential to cause disturbance or injury.

The deposition of the dredged material should also be considered with respect to marine mammals in the EIAR. Given the proximity of the dredge deposit site to Inchkeith island, which is a designated grey seal haul-out site, MSS recommend vessel operators follow best practice in relation to marine wildlife, as laid out in the Scottish Marine Wildlife Watching Code: The Scottish Marine Wildlife Watching Code SMWWC | NatureScot and ensure there are no marine mammals near the barge prior to dumping.

MSS consider the approach taken to assess the connectivity of the proposed works to Special Areas of Conservation, as outlined in the HRA report, to be appropriate and are content with the list of protected sites included.

Marine Ornithology

MSS are content that the baseline ornithology surveys undertaken (and presented here) provide appropriate baseline data to inform the EIA/HRA.

The EIAR refers to ornithology as "ornithology" and the HRA to "Birds". MSS recommend consistency in terminology within and between application documents to avoid ambiguity.

MSS note that the duration of construction works for the proposed development is 5.5 months, but it is not stated when this will occur. For ornithology, the key period for disturbance of the identified populations is likely to be during the spring and early summer months, when birds are breeding. Of particular concern are common tern breeding at the Imperial Dock SPA, which are constrained to make regular excursions to foraging areas before returning to feed young (known as *central place foraging*) at this time. As such, to mitigate for impacts on breeding birds at this SPA, MSS advise that works likely to cause the highest disturbance (e.g. piling) should ideally be undertaken outside the tern breeding season (May to mid-September, NatureScot 2020). In addition, in consideration of the







noise modelling, other construction activities and the potential for birds to be using the immediate and surrounding areas for breeding, we advise that an Ecological Clerk of Works (ECoW) should be present to monitor disturbance for the duration of the bird breeding season, should works occur at this time.

Port of Leith - Outer Berth: Environmental Impact Assessment Report (Reference: PC2045-RHD-ZZ-XX-RP-EV-0007)

MSS understand that no formal scoping was undertaken for this project but that the developer had liaised with NatureScot in preparing their application. MSS agree with the proposed methodology for bird surveys outlined in Section 6.2.2.1 (p 31), which is in line with the bird survey specification report (Appendix 6-3) issued to and agreed with NatureScot. Specifically: twice-monthly estuarine bird counts, twice-monthly common tern colony counts at Imperial Dock, Leith SPA, and twice-monthly common tern flight behaviour studies at Imperial Dock, Leith SPA.

While MSS are content with the approach taken to modelling noise impacts (Section 11.4.3, p. 116), MSS advise that the source level used should be listed and referenced, along with an assessment of how comparable this is to the piling proposed. MSS also recommend that more detail is provided on the piling shroud, including modelling of noise impacts both with and without the shroud to better understand potential noise abatement.

MSS agree with the sites listed as having potential connectivity to the development (Section 11.5.1, p. 118): Imperial Dock Lock, Leith SPA, Forth Islands SPA, Firth of Forth SPA, Firth of Forth Ramsar Site, Outer Firth of Forth and St Andrews Bay Complex (OFFSABC) SPA (Table 11-3, p. 119).

Potential impact pathways affecting ornithological features are identified and listed in Table 11-11 (p. 155) by project phase. This is generally appropriate but does not specifically identify vessel activity during construction, which should be considered. MSS advise that a Vessel Management Plan may be appropriate for the Construction and potentially also Operational phases of the development to mitigate disturbance impacts.

Artificial lighting is also not considered in Table 11-11 (p. 155). While artificial lighting is likely already present within the development area and surrounding area, MSS advise that consideration is given to impacts from any new proposed lighting specifically with respect to illuminating the area used by breeding terns (during the breeding season) within Imperial Dock SPA (ca. 100 m from the laydown area element of the proposed development), as artificial lighting could lead to disturbance (direct or indirect e.g. via increased predation).

MSS also recommend that if construction works do occur during the breeding season then it may be appropriate to appoint an Ecological Clerk of Works to advise on avoiding disturbance to breeding birds. Where construction activity is planned during the breeding season that could lead to disturbance of nesting birds, MSS advise that breeding bird surveys should be undertaken, and suitable mitigation is identified and implemented where required. MSS would expect this to be considered in a Construction Environmental Management Plan (CEMP).

Port of Leith - Outer Berth: Habitats Regulations Appraisal - Screening for LSE and Provision of Information to Inform Appropriate Assessment (Reference: PC2045-RHD-ZZ-XX-RP-EV-0009)

Potential impacts for ornithology by project phase are listed in Section 4.2.2.3 (p. 37). This is generally appropriate but does not specifically identify potential for disturbance from vessel activity (other than noise from impact piling) during construction, which should be considered. The developer considers that there would not be any likelihood for significant effects during the operational phase of







the development, as the port already accepts vessels of similar size. However, MSS advise that any significant increase in vessel activity (e.g. associated with increases in infrastructure/components for offshore wind developments) should be considered. As advised above, MSS reiterate our advice to consider whether a Vessel Management Plan is required to cover both the Construction and Operation phases of the Proposed Development, to mitigate disturbance impacts.

As advised above (for the EIAR), MSS advise that impacts from lighting during the Construction and Operational phases are considered, specifically with respect to disturbance of breeding common terns from Imperial Dock SPA.

With respect to protected sites with ornithological features, a long-list approach is taken with the use of >1% of the SPA population as the inclusion criteria for the species screened in for Likely Significant Effects on qualifying features (Section 4.2.2.4, p. 37). MSS consider the approach taken and designated sites and ornithological features screened in for Appropriate Assessment to be appropriate (provided in Table 4.13, p. 38). MSS note that the Conservation and Management Advice for the Outer Firth of Forth and St Andrews Bay Complex SPA (NatureScot 2022) was published very recently and thus was likely not considered during the preparation of the HRA report. MSS therefore advise that MS-LOT may wish to clarify with NatureScot whether further consideration is needed for this SPA to reflect the conservation and management advice.

Marine fish ecology

The Fish and Shellfish Ecology chapter of the EIA focuses mainly on migratory (or diadromous) fish species rather than other marine fish species. Whilst this is understandable due to the estuarine environment of the area of works, Section 10.5.3 notes that the Firth of Forth also supports a diverse range of fish species including spawning and nursery grounds for species, including herring (*Clupea harengus*), cod (*Gadus morhua*), whiting (*Merlangius merlangus*), plaice (*Pleuronectes platessa*), sprat (*Sprattus sprattus*), and lemon sole (*Microstomus kitt*). MSS are content with the identified impacts during construction on fish and shellfish however MSS recommend that other marine fish species are considered for impacts arising from underwater construction noise within the underwater noise assessment. Marine fish species such as herring and cod are sensitive to underwater noise and should be considered in this assessment.

MSS note that the construction works, including piling, will take place over 5.5 months but does not state a time period for this work. MSS recommend that the applicant provides details on when construction is likely to take place. This information will aid the underwater noise assessment.

Commercial fisheries

MSS have considered the marine licence applications and have no further comments with regards to commercial fisheries.

Benthic Ecology

We have considered the request and have no advice to provide on benthic ecology.







Diadromous Fish

MSS advise that the species of diadromous fish within the location of the development and dredging have been correctly identified. Diadromous fish are also associated with a number of other rivers within the firth apart from the Forth, Teith and Allan which are at the head of the Firth (e.g. Almond and Avon).

MSS agree with the conclusions in Table 10-2 of the EIA specifically in relation to diadromous fish. For salmon, and some of the other species, soft start procedures are unlikely to provide mitigation in relation to piling with evidence showing salmon do not respond to the stimulus (Harding *et al.*, 2016)

The dredged material includes fine material which will disperse. MSS consider the failure to consider oxygen demand of the sediment and oxygen levels in the water column by modelling or from sampling data during previous disposals at the site to be a notable omission, as reduced oxygen levels can result in fish mortalities, particularly at high temperatures.

The resilience of the salmon populations to loss of fish is assessed annually by Scottish Government. The latest assessment can be found at <u>Salmon fishing: proposed river gradings for 2022 season - gov.scot (www.gov.scot)</u>. The salmon population of the River Teith SAC was assessed as Category 2 (it has some resilience to the loss of fish). The salmon populations of the River Forth and Water of Allan were also jointly assessed as Category 2. The salmon populations of all the other rivers discharging into the Firth were assessed as Category 3 (they have no resilience to the loss of fish).

MSS advise that there should be a reporting condition within the licence that the sighting of dead, distressed or injured fish which could be connected with the activities must be immediately reported to MS-LOT

Physical environment / coastal processes

The EIAR appropriately covers coastal processes and, as part of that, modelling of tidal currents and sediment plume dispersal was conducted. The EIA concludes that changes in sea bed level and changes to tidal currents during the construction and operation phase are negligible. The only potential impacts to water quality are of minor adverse significance, as effects will be localised with a rapid rate of dispersion.

The proposed spread of 101,000 m³ of material across an area below 20 m CD at the Narrow Deep (B) site will result in an average deposition depth of 0.122 m. The BPEO concludes that sea disposal is the most practicable method of disposal and all necessary logistics procedures are already understood. MSS advise that we foresee no major issues with the continued use of the spoil site at Narrow Deep (B) as it has routinely been used in recent years. Forth Ports has undertaken maintenance dredging at the Port of Leith and approach channels since 1968 with disposal at sea at the Narrow Deep (B) spoil disposal ground and we consider that the dredging campaigns comprising this development (two campaigns, one year apart) should therefore not pose any problems.

Overall, with respect to physical / coastal processes MSS are content with the information provided in the marine licence applications, covering the construction, capital dredge and sea disposal.

References

Carter, M. I., Boehme, L., Cronin, M. A., Duck, C., James Grecian, W., Hastie, G. D., Jessopp, M. J., Matthiopoulos, J., McConnell, B. J., Morris, C. D., Moss, S. E. W., Thompson, D., Thompson, P., &







Russell, D. J. F. (2022). Sympatric seals, satellite tracking and protected areas: habitat-based distribution estimates for conservation and management. *Frontiers in Marine Science*, 9

Harding, H., Bruintjes, R., Radford, A.N., and Simpson. (2016) Measurement of Hearing in the Atlantic salmon (*Salmo salar*) using Auditory Evoked Potentials, and effects of Pile Driving Playback on Salmon Behaviour and Physiology. *Scottish Marine and Freshwater Science Vol 7 No 11*.

NatureScot (2020) Seasonal Periods for Birds in the Scottish Marine Environment, Short Guidance Note Version 2. October 2020. Available from: <u>Guidance note - Seasonal definitions for birds in the Scottish Marine Environment.pdf (nature.scot)</u>

NatureScot (2022). Conservation and Management Advice. Outer Firth of Forth and St Andrews Bay Complex SPA. Available from: https://sitelink.nature.scot/site/10478

Hopefully these comments are helpful to you. If you wish to discuss any matters further, then please contact the REEA Advice inbox at MSS Advice@gov.scot.

Yours sincerely,

Renewable Energy Environmental Advice group Marine Scotland Science





Marine Scotland Science Clarification





T: +44 (0)131 244 2500 E: MSS Advice@gov.scot

Judith Horrill
Marine Scotland Licensing Operations Team
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

25 July 2022

00009818 - FORTH PORTS LTD (PER ROYAL HASKONING DHV) - CONSTRUCTION- PORT OF LEITH OUTER BERTH AND 00009819- FORTH PORTS LTD (PER ROYAL ROYAL HASKONING DHV) - CAPITAL DREDGE AND SEA DISPOSAL - PORT OF LEITH OUTER BERTH

Marine Scotland Science (MSS) have reviewed the relevant documentation and have provided the following comments.

*No Comments = "We have considered the request and have no advice to provide."

Marine Ornithology

MSS mentions the piling shroud in relation to ornithology and state that although happy with the modelling of noise impacts, the source level should be listed and referenced along with an assessment of how comparable this is to the piling proposed and that MSS also recommends more detail is provided on the piling shroud and how noise levels compare with and without this in use. Is MSS able to clarify if Additional Information/further noise assessment as noted above is required before MSS can advise on whether the proposal will have a significant adverse impact on the environment and on mitigation requirements?

In line with the NS response, MSS agree that piling works should be undertaken outside of the tern breeding period (May, June, July). However, if piling does occur during breeding then a piling shroud should be used and an observer employed to monitor disturbance at the Imperial Dock SPA tern colony.

MSS advises that a vessel management plan may be appropriate for the construction and possibly operational phases of the Works as the EIA does not specifically identify vessel activity during construction, which should be considered. Is MSS able to clarify if Additional Information/further assessment as noted above is required before MSS can advise on whether the proposal will have a significant adverse impact on the environment and on mitigation requirements?

MSS agree with the NS response that vessels movements during the operational phase are unlikely to be significant, provided they are following the exact routes through the Forth. Although no specific reference is made to the construction phase in the NS response, MSS consider this response to relate to both constrution and operation as the NS response quotes "25 round trips of the installation vessel".







MSS noted that artificial lighting is also not considered and MSS advises that consideration is given to impacts from any new proposed lighting specifically with respect to illuminating the area used by breeding terns (during the breeding season) within Imperial Dock SPA (ca. 100 m from the laydown area element of the proposed development), as artificial lighting could lead to disturbance (direct or indirect e.g. via increased predation). Is MSS able to clarify if Additional Information/further assessment as noted above is required before MSS can advise on whether the proposal will have a significant adverse impact on the environment and on mitigation requirements?

MSS remain concerned that the introduction of increased artificial lighting in close proximity to breeding terns could have an impact on the SPA feature. As such MSS suggest the developer clarifies the potential for impacts of lighting in this context to allow consideration as to the magnitude of impact and on the requirement for mitigation. However, MSS do not advise that Additional Information is required.

MSS notes that: "Where construction activity is planned during the breeding season that could lead to disturbance of nesting birds, MSS advise that breeding bird surveys should be undertaken, and suitable mitigation is identified and implemented where required". If breeding bird surveys are required, is MSS able to advise on the scope of such surveys?

All wild birds, their nests and eggs are protected during breeding under the Wildlife and Countryside act (1981). As such, should works are undertaken during the breeding season, a trained ornithologist should survey the terrestrial site ahead of any construction works to check for breeding birds, which may include ground nesting waders or passerines with unenclosed nests or nests in holes/crevices. Where nests are identified, works should be halted in the immediate vicinity until the young are fledged.

Marine Mammals

MSS states the following re marine mammals: "We note the study area is not defined in section 12.5.1, but instead a list of the relevant Management Units (MUs) is presented. In Table 12-8, Carter et al. (2022) should be used for seal densities, as the updated methodology is more robust for data deficient areas given the use of a habitat preference based prediction rather than null usage (linear decay of usage from a haul-out site). Absolute density estimates, using the scalars and methodology found in the Supplementary Information of Carter et al. (2022), should be used rather than relative density in order to predict the number of individuals which may be impacted" and "Seasonal considerations should be made to ensure potentially higher local densities during breeding season are taken into account". Is MSS able to clarify if Additional Information/further assessment using different data as noted above is required before MSS can advise on whether the proposal will have a significant adverse impact on the environment?

MSS notes that seal usage derived from Russell *et al* (2017) is sufficient in this case given the fact that no new telemetry data has been collected for either grey or harbour seals in the Forth and Tay region since 2017. MSS would like to note that in the future, updated usage maps derived from the more robust methodology presented by Carter *et al.* (2022) is preferable for quantitative assessment. Even in lieu of more current telemetry data, these recent predictions are taking the population trajectory into account which has shown inter-annual fluctuations, particularly in the east coast management unit over the past decade.

With regards to marine mammals, MSS notes: "In the pre-application consultation report there is reference to the steel piled lead-in jetty, which will be cut at seabed level. More information on the anticipated noise profile of this process would be useful. MSS note that the use of a piling shroud is mentioned as mitigation in the ornithology section of the EIAR 11.7.2.3 for airborne noise. MSS request further clarification on this methodology, with respect to the potential of the shroud to minimise underwater noise emissions. If so, this should be included in the relevant mitigation section of the EIAR for marine mammals". Is MSS able to clarify if Additional Information/further noise







assessment as noted above is required before MSS can advise on whether the proposal will have a significant adverse impact on the environment and on mitigation requirements?

MSS require clarification on the process of cutting the steel lead-in jetty piles and demolition works given the lack of information on anticipated noise levels of this process and potential impacts due to underwater noise. MSS cannot effectively advise on the necessity for mitigation of this process without information on the potential for disturbance.

Regarding the shroud, MSS require further details on if there will be any noise abatement effects to underwater noise and if this would reduce impact ranges for marine mammals and fish as well as birds.

MSS notes: "The deposition of the dredged material should also be considered with respect to marine mammals in the EIAR". Is MSS able to clarify if Additional Information/further assessment as noted above is required before MSS can advise on whether the proposal will have a significant adverse impact on the environment?

MSS are content with no further information on this however would like to note the absence of detail with regards to dredged deposit impact to marine mammals during disposal.

MSS mentions the piling shroud in relation to ornithology and state that although happy with the modelling of noise impacts, the source level should be listed and referenced along with an assessment of how comparable this is to the piling proposed and that MSS also recommends more detail is provided on the piling shroud and how noise levels compare with and without this in use. Is MSS able to clarify if Additional Information/further noise assessment as noted above is required before MSS can advise on whether the proposal will have a significant adverse impact on the environment and on mitigation requirements?

MSS request additional details of the shroud in order to clarify if it will be an effective mitigation measure for birds and also potentially for marine mammals and fish. Currently there are scant details on the shroud in the EIA.

The assessment of in-air piling noise does not state a source level used, only that with a shroud in place it will be reduced by 7 dB. MSS are therefore unclear whether this reduction in noise level is sufficient. MSS recommend that a source level used in the assessment is provided and referenced to ensure that it is comparable to proposed piling activity being assessed. If the applicant were to provide an assessment of noise levels with and without the shroud this would clarify if the mitigation is appropriate.

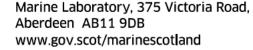
Response to NS comments

MSS adopted a practical approach to guidance on mitigation during piling, agreeing with the proposed 200 m pre-piling monitoring zone; a reduction from the JNCC advised minimum of 500 m. However, in light of NS comments, MSS concur that the recommended minimum of a 500 m pre-piling search area is appropriate unless it can be demonstrated that this is unfeasible due to operational reasons or if the shroud is evidenced to be an effective mitigation measure for underwater noise.

All other advice remains unchanged, except those points noted above in response to specific MS-LOT queries.







Marine fish ecology

• Regarding marine fish ecology, MSS advises that it is "content with the identified impacts during construction on fish and shellfish however MSS recommend that other marine fish species are considered for impacts arising from underwater construction noise within the underwater noise assessment. Marine fish species such as herring and cod are sensitive to underwater noise and should be considered in this assessment. The construction works, including piling, will take place over 5.5 months but does not state a time period for this work. MSS recommend that the applicant provides details on when construction is likely to take place. This information will aid the underwater noise assessment". Is MSS able to clarify if Additional Information/further assessment as noted above is required before MSS can advise on whether the proposal will have a significant adverse impact on the environment and on mitigation requirements?

MSS have considered whether additional information/further assessment is required in relation to marine fish species. The identified spawning grounds for cod and herring are situated out with the Forth estuary and are therefore thought to be a far enough away from the construction site that underwater construction noise impacts are unlikely to have a significant adverse impact on spawning marine fish. MSS can confirm that additional/information/further assessment is not required in relation to marine fish species.

Diadromous fish

• With regards to diadromous fish, MSS notes that: "The dredged material includes fine material which will disperse. MSS consider the failure to consider oxygen demand of the sediment and oxygen levels in the water column by modelling or from sampling data during previous disposals at the site to be a notable omission, as reduced oxygen levels can result in fish mortalities, particularly at high temperatures". Is MSS able to clarify if Additional Information/further assessment as noted above is required before MSS can advise on whether the proposal will have a significant adverse impact on the environment and on mitigation requirements?

Additional information / further assessment is not required before MSS can advise on whether the proposal will have a significant adverse impact on the environment and on mitigation requirements regarding diadromous fish. MSS confirm that the disposal of the dredged material is unlikely to have a significant adverse impact on the environment or require additional mitigation.

Nonetheless, the additional information / further assessment would have provided additional reassurance over the safety of the disposal activities, particularly for migrating salmon smolts, which are considered to be at particular risk, as their migration is highly directional and they are therefore unlikely to be easily displaced by adverse conditions. The advice of SEPA would have also been welcome as they have carried out extensive monitoring of water quality and biological response in the Firth, which would be likely be relevant.

The responses from NatureScot and the RSPB do not affect MSS's earlier advice with respect to diadromous fish.

Hopefully these comments are helpful to you. If you wish to discuss any matters further, then please contact the REEA Advice inbox at MSS Advice@gov.scot.

Yours sincerely,

Renewable Energy Environmental Advice group
Marine Scotland Science
Marine Laboratory, 375 Victoria Road,
Aberdeen AB11 9DB
www.gov.scot/marinescotland







Transport Scotland Advice

Buchanan House, 58 Port Dundas Road, Glasgow G4 0HF



Judith Horrill
Marine Scotland
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

Your ref: 00009818 and 00009819

Our ref: GB01T19K05

Date: 29/06/2022

ms.marinelicensing@gov.scot

Dear Sirs,

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017

FORTH PORTS LTD (PER ROYAL HASKONING DHV) - HARBOUR DEVELOPMENT - PORT OF LEITH OUTER BERTH

With reference to your recent correspondence on the above development, we acknowledge receipt of the Environmental Impact Assessment Report (EIAR) prepared by Royal Haskoning DHV in support of the above development.

This information has been passed to SYSTRA Limited for review in their capacity as Term Consultants to Transport Scotland – Roads Directorate. Based on the review undertaken, we would provide the following comments.

Proposed Development

We understand that that the proposed development comprises improvement works to the outer berth at the Port of Leith in Edinburgh, designed to increase the port capacity. The nearest trunk road to the site is the A1(T) at Old Craighall, located some 10km to the east. The works will comprise the following:

- Improve a 125m section of existing berth;
- Provide an area of hardstanding to be used for loading/unloading;
- Provide a laydown area for the storage and transhipment of components for the offshore renewables industry; and,
- Dredging to enlarge the existing berth pocket.



Assessment of Environmental Impacts

The EIAR states that while the majority of materials will be delivered by sea, some of the fill material will be imported by road from local quarries. A screening exercise has, therefore, been undertaken whereby it is assumed that all deliveries would arrive/leave the Port of Leith on the A199 towards the A1(T).

The screening exercise has been based upon Department for Transport (DfT) traffic count data site 20198 which highlights that south of the Port of Leith, the A199 typically carries in the region of 22,000 vehicles per day of which approximately 1,000 are HGVs.

A predicted peak increase in traffic movements of 176 per day would equate to a change in total traffic of less than 1% and an increase in HGVs of approximately 18%. The EIAR states that as these increases are less than the 30% thresholds as identified in the Guidelines for the Environmental Assessment of Road Traffic, the topic of Traffic and Transport is not considered to be significant and, therefore, scoped out of the EIAR. Transport Scotland is satisfied with this conclusion and is satisfied that the proposed development will not give rise to any significant environmental impacts on the trunk road network.

Abnormal Loads Assessment

The EIAR makes no mention of any need to transport abnormal indivisible loads, therefore, Transport Scotland is satisfied that no further information is required in this regard.

I trust that the above is satisfactory but should you wish to discuss any issues raised in greater detail, please do not hesitate to contact myself or alternatively, Alan DeVenny at SYSTRA's Glasgow Office on 0141 343 9636.

Yours faithfully



pp Gerard McPhillips

Transport Scotland Roads Directorate

cc Alan DeVenny - SYSTRA Ltd.

NLB Consultation Response



84 George Street Edinburgh EH2 3DA

Tel: 0131 473 3100 Fax: 0131 220 2093

Website: www.nlb.org.uk Email: enquiries@nlb.org.uk

Your Ref: MSL 00009818 & 00009819 Our Ref: AL/OPS/ML/F1_01_224

Ms Judith Horrill
Marine Licensing Casework Officer
Marine Scotland – Marine Planning and Policy
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

31 May 2022

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING
THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017

<u>00009818 & 00009819 – Forth Ports Ltd (Per Royal Haskoning DHV) – Harbour Development – Port of Leith Outer Berth, Firth of Forth</u>

Thank you for your e-mail correspondence dated 30th May 2022 relating to the application submitted by **Forth Ports (per RHDHV)** for consent to undertake harbour development works, including a capital dredge and sea deposit campaign, at the Port of Leith, Firth of Forth.

Northern Lighthouse Board have no objection to the proposed capital dredge campaign (ML 00009819), utilising disposal site Narrow Deep B (FO 038) for the deposit of spoil material.

NLB also have no objection to the proposed construction works (ML 00009818) and advise the following;

- **Forth Ports** should liaise with local stakeholders with regard to the operations, and issue a local Notice to Mariners informing of the scope and timeframe of the works.
- NLB understand that the Aid to Navigation (AtoN) currently positioned on the outer lead in dolphin (ALL Ref: A2887) will be removed for the period of construction. An AtoN exhibiting the same flash character should be installed on the outer dolphin of the revised berth design when completed.

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- The removal and subsequent replacement of this AtoN will require the Statutory Sanction of the Commissioners of Northern Lighthouses. An application form for this alteration can be obtained on request from navigation@nlb.org.uk or from the NLB website.
- The East Breakwater Head AtoN (ALL Ref: A2884) should not be obscured during the construction process. However, if this is not possible, a Notice to Mariners should be promulgated informing of the obstruction, and the Forth Navigation VTS should also inform local marine traffic.
- Upon completion of the construction and grudging works, final 'as-built' plans should be provided to the UK Hydrographic Office to enable the update of navigational publications.



Peter Douglas Navigation Manager

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