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Environmental Statement – Volume 3 – Appendix 7.2 Marine Water and Sediment Quality Consultation Responses

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

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TABLE 1 – SCOPING RESPONSES

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
PINS	4.2.1	The Inspectorate notes paragraph 2.1.56 which states that routine maintenance will not be required, but that some unplanned repair operations may take place. Paragraph 7.3.3 acknowledges that some operation and maintenance activities (e.g. repair and reburial) may lead to similar impacts as construction, but that these are likely to be much smaller in scale than the construction works. The Inspectorate considers that the justification provided in the Scoping Report does not demonstrate the information necessary to support the decision to scope this out. The ES should include an assessment of operational and maintenance activities on marine water and sediment quality, where significant effects are likely to occur. The Inspectorate recognises the potential similarity between potential effects that could arise from repair and reburial works to those during construction, and therefore the Applicant should consider whether it would be appropriate to apply the same/similar mitigation measures.	An assessment of the potential impact of the operation stage works (including repair and maintenance) has been included in Section 7.6 of this chapter.
PINS	4.2.2	A study area of 2 km has been chosen to establish the marine water and sediment baseline for the ES;	A study area of 2 km was assigned at the scoping stage in order to align with Water

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		however, no justification for this distance has been provided. The ES must clearly identify and justify the extent of the study area.	Framework Directive ('WFD') guidance (Environment Agency, 2017) on scoping for WFD protected areas. This study area was used to inform the baseline which reports on protected areas within and beyond 2 km. A detailed description of activities which have the potential to increase local suspended sediment concentrations ('SSC's) is provided within Chapter 6 (Physical Processes) of the ES Volume 1 (document reference 6.1.6), and summarised within Appendix 7.1 (Marine WFD Assessment) of the ES Volume 3 (document reference 6.3.7.1). Based on this, the Zone of Influence ('ZOI') of the marine activities within the WFD jurisdiction is considered to extend 5 km from the marine activities (shown in Figure 7.1). Any residual passive plume beyond 5 km is predicted to be negligible in the context of the natural variation in SSC within the Solent. This ZOI has been used to screen in/out water bodies. The study area beyond WFD jurisdiction

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			extends seaward, 25 km either side of the Marine Cable Corridor out to the UK/France Exclusive Economic Zone ('EEZ') boundary line (Figure 7.1 of the ES Volume 2 (document reference 6.2.7.1)). Based upon review of Chapter 6 (Physical Processes) this is considered to be the ZOI of the marine activities occurring beyond the WFD jurisdiction.
PINS	4.2.3	The Inspectorate notes that contaminated sediment sampling has been completed along the inshore Marine Cable Corridor as part of the benthic sampling campaign and this is to be analysed. The Inspectorate recommends the Applicant makes effort to agree the sampling and analysis with relevant consultation bodies and present any agreements within the ES. It is noted that details of quality standards to be applied have not been provided at this stage. It should be noted that methods of chemical analysis should be compatible with the benchmarks they are compared against (for example the metal extraction method). The Inspectorate considers that the chemical analysis used to inform the assessment of likely significant effects is sufficiently robust and	Contaminated sediment sampling analysis and reporting has now been completed. It is noted that the Inspectorate considers the chemical analysis used to inform the assessment is sufficiently robust and where necessary for this purpose, conforms to Marine Management Organisation ('MMO') laboratory guidance. The quality standards which were applied are set out within Appendix 7.3 (Contaminated Sediment Survey Report) of the ES Volume 3 (document reference 6.3.7.3) which also provides details of the site specific contaminated sediment sample collection and analysis and their suitability for disposal is also provided

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		where necessary for this purpose conforms to Marine Management Organisation (MMO) dredge disposal laboratory guidelines.	within Appendix 7.3 (Contaminated Sediments Survey Report). Appendix 7.5 MMO Spreadsheet) of the ES Volume 3 (document reference 6.3.7.5) presents the MMO template spreadsheet which provides the details of the sample analysis results. Appendix 6.5 (Disposal Site Characterisation Report) of the ES Volume 3 (document reference 6.3.6.5) presents the Disposal Site Characterisation Report which further investigates the Particle Size Distribution ('PSD') data from benthic grab samples and vibrocores to examine the suitability of dredge material for disposal.
PINS	4.2.4	The Applicant should seek to agree the scope of the proposed WFD assessments with relevant consultation bodies, including the Marine Management Organisation and Environment Agency. It is recommended that transitional waters and coastal waters be addressed together in a 'marine' WFD assessment. The Applicant should also be aware that the Bathing Water Directive, as referred to in Appendix B to the Scoping Report, has been subsumed into the WFD Directive.	Transitional and coastal waters are addressed together in the Marine WFD Assessment in Appendix 7.1 (Marine WFD Assessment). Appendix 7.1 (Marine WFD Assessment) was consulted upon with the Environment Agency prior to submission. Outcomes of this consultation are presented in Section 7.3.3 of this chapter.

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PINS	4.2.5	This chapter of the Scoping Report makes no reference to the potential impacts from changes to water and sediment quality on designated sites. It is acknowledged that ecological designations are proposed to be assessed in relevant other aspect chapters of the ES. However, the Inspectorate considers that these assessments should be informed by the marine water and sediment quality assessment, and appropriate cross-references should be made in the ES.	WFD protected areas within the ZOI, with connectivity to the marine activities (Special Areas of Conservation ('SAC's), Special Protection Areas ('SPA's), bathing waters and shellfish waters) were scoped in to the Marine WFD Assessment (Appendix 7.1 (Marine WFD Assessment)) and are presented in Figure 7.1 and Table 7.3 of this chapter. While Natura 2000 sites (SACs and SPAs) were scoped in to the assessment, potential effects are assessed within the HRA Report (Document Ref. 6.8); the findings of which have been used to inform the Marine WFD Assessment (Appendix 7.1 (Marine WFD Assessment)). Other sites designated for habitat features within the ZOI are presented in Figures 8.2 of the ES Volume 2 (document reference 6.2.8.2) and 8.3 of the ES Volume 2 (document reference 6.2.8.2), and have been assessed for water quality impacts (i.e. increase in SSC and resuspension of contaminated sediments) within Chapter 8 (Benthic and Intertidal Habitats) of the ES

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
			Volume 1 (document reference 6.1.8) (and associated appendices).
MMO	Page: 212	Section 7 of the Scoping Report states that sediment samples from the inshore UK section of the cable route were collected as part of the benthic sampling campaign, and these samples will be analysed for particle size distribution and contaminant levels (metals, organotins, PAHs, THCs, and PCBs). The MMO considers this is sufficient to characterise the sediment to be dredged, and therefore no additional sampling is required.	Noted. Appendix 7.5 (MMO Spreadsheet) presents the MMO template spreadsheet which provides the details of the sample analysis results. Appendix 6.5 (Disposal Site Characterisation Report) presents the Disposal Site Characterisation Report which further investigates the Particle Size Distribution ('PSD') data from benthic grab samples and vibrocores to examine the suitability of dredge material for disposal.
MMO	Page: 212	No topics relating to dredge and disposal activities have been scoped out of subsequent assessment. No mitigation or monitoring measures are suggested in relation to dredge and disposal activities at this stage, which is to be expected.	Noted. Dredge and disposal activities have been assessed in all relevant topic chapters. The approach to dredge and disposal activities has been consulted on during the pre-application process (see Consultation Report Document Ref. 5.1) and Appendix 6.5 presents the Disposal Ste Characterisation Report.

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
MMO	Page: 212	In Sections 7 and 8 of the Scoping Report, water quality and intertidal and benthic habitats organisms have been appropriately identified as receptors to the potential impacts associated with dredge and disposal activities, such as temporary increased suspended sediments, the resuspension of contaminated sediments, smothering and disturbance of seabed.	Noted. This chapter and accompanying appendices presents the assessments relating to marine water and sediment quality. Chapter 8 (Intertidal and Benthic Habitats) and accompanying appendices presents the assessment on intertidal and benthic receptors. Chapter 6 (Physical Processes) presents the assessment on physical and coastal processes.
MMO	Page: 212	Details of quality standards have not been provided at this stage. It is noted that the Scoping Report makes reference to Cefas Action Levels for determining the suitability of sediment for disposal at sea, which is appreciated. It should be noted that methods of chemical analysis should be compatible with the benchmarks they are compared against (for example the metal extraction method). The MMO recommends that the chemical analysis conforms to the MMO dredge disposal laboratory guidelines (https://www.gov.uk/guidance/marine-licensing-sediment-analysis-and-sample-plans)	Contaminated sediment sampling analysis and reporting has now been completed (Appendix 7.3 (Contaminated Sediments Survey Report)). The laboratory that undertook the sample analysis has been approved by Cefas. Appendix 7.5 (MMO Spreadsheet) presents the MMO template spreadsheet which provides the details of the sample analysis results undertaken. Appendix 6.5 (Disposal Site Characterisation Report) presents the Disposal Site Characterisation Report which further investigates the PSD data from benthic grab samples and vibrocores

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			to examine the suitability of dredge material for disposal.
Environment Agency	Page: 108	Water Framework Directive (WFD) We are pleased to see that the WFD has been scoped into the ES, and in particular impacts on marine water quality. We agree that the impacts on water quality from any temporary increases in suspended sediment concentrations will need to be considered, in particular those related to re-suspension of contaminated sediments. The developer proposes to only assess potential effects during construction and decommission, and to scope out any works required for maintenance. However, it is our opinion that maintenance works should be included in the ES as they still bear the same risks as any other construction work if carried out in proximity to sensitive areas such as Shellfish Waters and Bathing Waters.	An assessment of the potential impact of the operations and maintenance stage works has been included in Section 7.6 of this chapter and is included in Appendix 7.1 (Marine WFD Assessment).
Environment Agency	Page: 108	With regard to the WFD assessment, we suggest that transitional waters and coastal waters should be addressed together in a 'marine' WFD assessment. We would also like to point out that the Bathing Water Directive, which is referred to Appendix B	Transitional and coastal waters are addressed together in the Marine WFD Assessment - Appendix 7.1 (Marine WFD Assessment). It is acknowledged that Bathing Waters are

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		(page 22-23 of the appendices), has been subsumed into WFD, and is now considered a protected area therein. The same applies to the Shellfish Waters Directive.	considered a protected area under the WFD, and have been assessed as such in Appendix 7.1 (Marine WFD Assessment)
Environment Agency	Page: 108	Lastly, we would like to reiterate our advice on the scope and structure of the WFD Assessment, which is the same as given previously: A WFD assessment will be required for all elements of the works that fall within, or have the potential to affect, a WFD water body and any of the protected areas therein (including Bathing Waters and Shellfish Waters). An assessment of water quality impacts should also be included. There are Bathing Waters and Shellfish Waters around the area of landfall. Any sediment disturbances that lead to increases in suspended solids in the water column could potentially affect compliance with the WFD. Suitable evidence of no likely impact will be required for any marine works. Hence, marine water quality and a WFD assessment should be included in the ES. The WFD assessment should follow the 'Clearing the Waters for All' guidance, which has been published on the gov.uk	The scope of the Marine WFD Assessment defined within Appendix 7.1 (Marine WFD Assessment) is based on current guidance and currently available information, and has been agreed with the Environment Agency (see Section 7.3.3). In line with the 'Clearing the Waters for All' guidance, all marine activities have been screened, in accordance with Environment Agency recommendations, some of which have been taken forward to scoping and assessment where appropriate. See Appendix 7.1 (Marine WFD Assessment).

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		website:https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters. A WFD Assessment should comprise either: an explanation of why the activity has been screened out; or an explanation of why all elements have been scoped out, ideally using the scoping template; or an impact assessment. The size and scale of the WFD Assessment should be proportional to the risk posed by the potential works, but the applicant must demonstrate that they have assessed the risks and provided mitigation where necessary.	
Environment Agency	Page: 110	Summary Table Maintenance works should be included in the ES as they still bear the same risks as any other construction work if carried out in proximity to sensitive areas such as Shellfish Waters and Bathing Waters. Transitional waters and coastal waters should be addressed together in a 'marine' WFD assessment,	Operational stage works have been assessed within this chapter. Transitional waters and coastal waters have been addressed together in Appendix 7.1 (Marine WFD Assessment). Bathing Waters and Shellfish Waters have been assessed in Appendix 7.1 (Marine WFD Assessment).. This assessment

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		and this should be reference in the ES. The Bathing Water Directive and Shellfish Waters Directive has been subsumed into WFD. This should be reflected in the ES. A WFD assessment will be required for all elements of the works that fall within, or have the potential to affect, a WFD water body and any of the protected areas therein (including Bathing Waters and Shellfish Waters). An assessment of water quality impacts should also be included. This should be reflected in the ES. Any sediment disturbances that lead to increases in suspended solids in the water column could potentially affect compliance with the WFD. Suitable evidence of no likely impact will be required for any marine works. Marine water quality and a WFD assessment should be included in the ES.	considers all elements of the works which fall within or have the potential to affect a WFD water body and protected areas. Disturbance of sediments are considered in Appendix 7.1 (Marine WFD Assessment), in line with the Environment Agency's recommendations and guidance.
Natural England	Page: 225	We have assessed the scoping report under the knowledge that the proposed cable route is currently indicative and will be refined in the later stages of the application. Natural England has commented in respect to designated sites and species out to 12 nmi under our remit. The Joint Nature Conservation Committee (JNCC) is the statutory adviser for sites	It is noted that Natural England support the consideration of impacts provided in Appendix C - Table C1 of the scoping report. This table included an error. In line with page 98 of the EIA Scoping Report (PINS Ref: EN020022) 'temporary increase in

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		beyond 12nmi. This is a complex proposal which will result in a number of different impacts. Natural England supports the consideration of the following impacts which have been scoped in for further assessment (as summarised in Appendix C - Table C1 of the scoping report): Marine Water and Sediment Quality: Impacts on water quality Temporary increase in suspended sediment concentrations during construction (and decommissioning) Impacts from the resuspension of contaminated sediment during construction (and decommissioning) Natural England has noted that the following impacts have been scoped out of further assessment: Marine Water and Sediment Quality: Temporary increase in suspended sediment concentrations and impacts associated with resuspension of contaminated sediment during	suspended sediment concentrations' and 'impacts from the resuspension of contaminated sediment', are considered to sufficiently assess impacts on marine water & sediment quality. An assessment of the potential impact of the operational stage works is included in Section 7.6 of this chapter.

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		operation and maintenance.	
Public Health England	Page: 238	Receptors The ES should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land. Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.	It is acknowledged that impacts to water and sediment quality could have impacts on public health if there is a reduction in the quality of recreational areas such as bathing waters. Appendix 7.1 (Marine WFD Assessment) addresses potential for effects on designated bathing waters which may result from the marine works, the findings of which have informed this chapter. Further information and assessment on health matters arising from onshore impacts are presented in Chapter 26 (Human Health) of the ES Volume 1 (document reference 6.1.26).
Public Health England	Page: 239	Emissions to air and water: When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these: Should include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary.	Appendix 7.1 (Marine WFD Assessment) considers the potential for effects on designated bathing waters which may result from the marine works, findings of which have informed this chapter. PINS agreed that air quality assessment within the marine environment could be scoped out (see Appendix 6.1 (Physical

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		Should encompass all pollutants which may be emitted by the installation in combination with all pollutants arising from associated development and transport, ideally these should be considered in a single holistic assessment should consider the construction, operational, and decommissioning phases. Should consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts. Should fully account for fugitive emissions. Should include appropriate estimates of background levels. Should identify cumulative and incremental impacts (i.e. assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (i.e. rail, sea, and air).	Processes Consultation Responses) of the ES Volume 3 (document reference 6.3.6.1)). The assessment in this chapter is also based upon information and outputs from the plume dispersion modelling presented in Chapter 6 (Physical processes) and Appendix 6.2 (Modelling Technical Report) of the ES Volume 3 (document reference 6.3.6.2). Any coatings/treatments used will be suitable for use in the marine environment, however, potential impacts of pollutant release have been addressed both in relation to potential release of contaminants in sediment disturbed during the works and through pollution events (Section 7.6.). Adoption of project plans and procedures for marine pollution prevention and waste management to eliminate and mitigate the potential risk to water quality receptors is considered as embedded mitigation and is covered in the Marine Outline Construction Environmental Management Plan (‘CEMP’) (document

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		Should include consideration of local authority, Environment Agency, Defra national network, and any other local site-specific sources of monitoring data. Should compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as UK Air Quality Standards and Objectives and Environmental Assessment Levels) – If no standard or guideline value exists, the predicted exposure to humans. Should be estimated and compared to an appropriate health-based value (a Tolerable Daily Intake or equivalent). Further guidance is provided in Annex 1. This should consider all applicable routes of exposure e.g. include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion. Should identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development	reference 6.5).

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
Public Health England	Page: 239	Emissions to air and water: Significant impacts are unlikely to arise from installations which employ Best Available Techniques (BAT) and which meet regulatory requirements concerning emission limits and design parameters. However, PHE has a number of comments regarding emissions in order that the EIA provides a comprehensive assessment of potential impacts. When considering a baseline (of existing water quality) and in the assessment and future monitoring of impacts these: Should include assessment of potential impacts on human health and not focus solely on ecological impact. Should identify and consider all routes by which emissions may lead to population exposure (e.g. surface watercourses; recreational waters; sewers; geological routes etc.). Should assess the potential off-site effects of emissions to groundwater (e.g. on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for	A human health assessment is presented in Chapter 26 (Human Health). Appendix 7.1 (Marine WFD Assessment) assesses potential impacts on recreational areas such as bathing waters. Chapter 13 (Shipping, Navigation and Other Marine Users) of the ES Volume 1 (document reference 6.1.13) presents assessments on impacts to recreational users of the marine environment as well as recreational angling. Chapter 12 (Commercial Fisheries) of the ES Volume 1 (document reference 6.1.12) assesses impacts on fisheries and fishing.

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		population exposure. Should include consideration of potential impacts on recreational users (e.g. from fishing, canoeing etc.) alongside assessment of potential exposure via drinking water	
Public Health England	Page: 241	Other aspects: Within the EIA PHE would expect to see information about how the promoter would respond to accidents with potential off-site emissions e.g. flooding or fires, spills, leaks or releases off-site. Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects. The EIA should include consideration of the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009: both in terms of their applicability to the installation itself, and the installation's	In relation to marine waters, marine pollution contingency methods will be developed and are covered within the Marine Outline CEMP (document reference 6.5). The CEMP outlines an emergency response procedure for pollution events and dropped objects.

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		potential to impact on, or be impacted by, any nearby installations themselves subject to the these Regulations.	
Public Health England	Page: 246	Human health risk assessment (chemical pollutants): The points below are cross-cutting and should be considered when undertaking a human health risk assessment: The promoter should consider including Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES. Where available, the most recent United Kingdom standards for the appropriate media (e.g. air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants. Where UK standards or guideline values are not available, those recommended by the European Union or World Health Organisation can be used. When assessing the human health risk of a chemical emitted from a facility or operation, the background exposure to the chemical from other sources should be taken into account.	PINS agreed that air quality assessment within the marine environment could be scoped out (see Appendix 6.1 (Physical Processes Consultation Responses)). Appendix 7.1 (Marine WFD Assessment) considers the potential for effects on designated bathing waters which may result from the marine works, findings of which have informed this chapter. Any coatings/treatments used will be suitable for use in the marine environment, however, potential impacts of pollutant release have been addressed both in relation to potential release of contaminants in sediment disturbed during the works and through pollution events (Section 7.6). Adoption of project plans and procedures for marine pollution prevention and waste management to eliminate and mitigate the potential risk to water quality receptors is

Consultee	Scoping Opinion ID/Page	Summary of Comment Received	How this has been addressed by the Applicant
		When quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the 'Margin of Exposure' (MOE) approach10 is used	considered as embedded mitigation and is covered in the Marine Outline CEMP (document reference 6.5).

TABLE 2 – PEIR CONSULTATION RESPONSES

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
Marine Management Organisation	Overall, the approach to characterising the sediment and water quality baseline and subsequent assessment is appropriate. However, the MMO notes that the sediment contaminant analysis methods have not been provided. The MMO notes in Table 7.1 of the PEIR (Column 2: "Scoping Opinion ID 4.2.3") that the applicant states that the chemical analysis conforms to MMO laboratory guidance. The PEIR or appendices should reference the analytical methods and laboratories used and if these laboratories are registered by the MMO as validated dredge disposal testing facilities. The MMO recommends the processing laboratory is made clear and the detailed methods followed are made available.	The laboratory that was employed for the analysis of benthic and contaminated samples was Socotec (previously ESG) approved by Cefas (see Consultation Report document reference 5.1) . The analytical methods used are described within Appendix 7.3 (Contaminated Sediment Survey Report). Appendix 7.5 (MMO Spreadsheet) also provides information relating to sample analysis using the MMO's spreadsheet template.
Marine Management Organisation	Further, the MMO notes that sediment contaminant samples have been obtained for the nearshore area only and not the full study area. The MMO notes from Appendix 8.1 that PSD data has been obtained over the whole route (Figure 10 in Appendix 8.1) and shows much of the route to be comprised of sandy gravel. Coarse sediment has a limited affinity for	Acknowledged. This is limitation has been noted in Section 7.4.3 of this chapter.

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	sorption of chemical contaminants and therefore sediment contamination would not be expected to pose a significant risk in the offshore areas of the route given the PSD results. Nevertheless, the MMO would expect the limitation of the sediment samples to be noted in Section 7.5.3.8.	
Marine Management Organisation	In Table 7.1 of the PEIR it is stated that the MMO dredge material reporting template was not used as it was 'not considered appropriate'. The proposed dredge volumes are quoted in Section 3 of the PEIR and dredging may be required as part of this application. Therefore, the MMO considers that the MMO dredge material reporting template is applicable and the data should be submitted in this format in the final ES. This will not only facilitate review of the ES, but it will also support the dredging "returns" processes. The MMO recommends that all the PSD plus chemical data is reported in this format.	The MMO's Dredge material reporting template has been completed and is submitted as part of the Aquind DCO application (Appendix 7.5 (MMO Spreadsheet)). A Disposal Site Characterisation Report has been consulted upon with the MMO and is presented in Appendix 6.5 (Disposal Site Characterisation Report).

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
Marine Management Organisation	The apparent lack of sediment contaminant samples over much of the offshore area has not been explained. Although it is not considered this substantially affects the conclusions of no significant impact, incorporating the PSD data into Section 7.6.3, would in the MMO's opinion offer a more robust assessment and fully utilise the survey data.	Further discussion regarding PSD data, as presented within Appendix 8.1 (Benthic Ecology Survey Report), is provided in relation to potential contamination within sediments in the Channel (beyond WFD jurisdiction) in Section 7.5.3.9 of this chapter.
Marine Management Organisation	The MMO notes that the assessment of impacts within 1 nm is yet to be completed (see Section 7.9.1.3). The MMO expects this to be included in the final ES.	The assessment of impacts within WFD jurisdiction has been completed and is presented within Appendix 7.1 (Marine WFD Assessment) and is summarised within this assessment.
Marine Management Organisation	It is noted that a separate disposal site characterisation report, as required in the MMO Scoping Opinion, is currently being discussed with the MMO.	A disposal site characterisation report has been prepared and consulted on with the MMO. This is presented in Appendix 6.5 (Disposal Site Characterisation Report).
Marine Management Organisation	The assessment of sediment contamination impacts from the resuspension of contaminated sediment and the increases in suspended sediment from dredging activities are both appropriate.	Acknowledged. Consideration of this impact is included with Section 7.6.
Marine Management Organisation	Potential cumulative and inter-related impacts and effects on the physical and biological environment are identified in Section 7.6.5.4. It is noted that the cumulative assessment of the relevant projects is yet	The cumulative assessment is presented in Section 7.7.

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	to be undertaken and this will be detailed in the ES when more detailed modelling work has been undertaken.	
Cefas	Overall, the approach to characterising the sediment and water quality baseline and subsequent assessment is appropriate. However, I note that the sediment contaminant analysis methods have not been provided. I note in Table 7.1 of the PEIR (ID 4.2.3) that the applicant states that the chemical analysis conforms to MMO laboratory guidance. I cannot see in either the PEIR or appendices detail of the analytical methods and laboratories used and if these laboratories are registered by the MMO as validated dredge disposal testing facilities. I recommend the processing laboratory is made clear and the detailed methods followed made available.	The laboratory that was employed for the analysis of benthic and contaminated samples was Socotec (previously ESG) approved by Cefas (see Consultation Report document reference 5.1) . The analytical methods used are described within Section 1.3 of Appendix 7.3 (Contaminated Sediment Survey Report). Appendix 7.5 (MMO Spreadsheet) also provides information relating to sample analysis using the MMO's spreadsheet template.
Cefas	Further, I note that sediment contaminant samples have been obtained for the nearshore area only and not the full study area. I note from Appendix 8.1 that PSD data have been obtained over the whole route (Figure 10 in Appendix 8.1) and shows much of the route to be comprised of sandy gravel. Coarse sediment has a limited affinity for sorption of chemical contaminants and therefore I would not expect sediment contamination to pose a significant risk in the offshore areas of the route given the PSD results.	Acknowledged. This is limitation has been noted in Section 7.4.3 of this chapter.

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	Nevertheless, I would expect the limitation of the sediment samples to be noted in section 7.5.3.8.	
Cefas	With regard to comment 11 in the scoping advice (regarding a separate disposal site characterisation report), I understand from the MMO that this is being delivered separately from the PEIR.	A Disposal Site Characterisation Report has been prepared and consulted on with the Cefas and the MMO. This is presented in Appendix 6.5 (Disposal Site Characterisation Report).
Cefas	With regards to comment 21 in the scoping advice (regarding analytical methods). At present I cannot see any evidence that MMO validated laboratories for chemical testing have been used. The applicant should confirm this.	The laboratory that was employed for the analysis of benthic and contaminated samples was Socotec (previously ESG) approved by Cefas (see Consultation Report document reference 5.1)
Cefas	Noting the report in Table 7.1 of the PEIR ('MMO page 212') the applicant has stated that the MMO dredge material reporting template was not used as it was 'not considered appropriate'. The proposed dredge volumes are quoted in section 3 of the PEIR and dredging may be required as part of this application. Therefore, I consider that the MMO dredge material reporting template is applicable and encourage the applicant to submit the data in this format with the final ES. This will not only facilitate review of the ES it will also support the dredging "returns" processes. I recommend that all the PSD plus chemical data is reported.	The MMO dredge material reporting template has been completed and is presented in Appendix 7.5 (MMO Spreadsheet).

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
Cefas	With regards to sediment contamination impacts from the resuspension of contaminated sediment have been assessed. Impacts of increases in suspected sediment from dredging activities was also considered. This is appropriate.	Acknowledged.
Cefas	The apparent lack of sediment contaminant samples over much of the offshore area has not been explained (see comment 11 above). Although I do not consider this substantially effects the conclusions of no significant impact, incorporating the PSD data into section 7.6.3, would in my opinion offer a more robust assessment and fully utilise the survey data.	Appendix 6.5 (Disposal Site Characterisation Report) further investigates the PSD data from benthic grab samples and vibrocores to examine the suitability of dredge material for disposal. Furthermore, discussion regarding PSD data, as presented within the Appendix 8.1 (Benthic Ecology Survey Report) and Appendix 6.3 (Intertidal Survey Report), is provided in relation to potential contamination in sediments within the Channel (beyond WFD jurisdiction) in this chapter in Section 7.6.
Cefas	I note that the assessment of impacts within 1 nmi is yet to be completed (see section 7.9.1.3). I anticipate this will be included in the final ES.	The assessment of impacts within WFD jurisdiction has been completed and is presented within this chapter as well as Appendix 7.1 (Marine WFD Assessment).
Cefas	Potential cumulative impacts are identified in section 7.6.5.4. It is noted that the cumulative assessment of the relevant projects is yet to be undertaken and this will be detailed in the ES (when more detailed modelling work will have been undertaken).	The cumulative assessment is presented in Section 7.7 and in Appendix 7.4 (Marine Water and Sediment Quality Cumulative Assessment Matrix).

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
Cefas	Consideration of transboundary impacts has been given (Section 7.6.6). It is concluded that such impacts will not be significant as they are limited to some sediment plume migrating into French waters. I would concur with this assessment.	Acknowledged.
Natural England	Paragraph 7.6.1.2: Natural England agrees that the impacts of operation and maintenance activities will be smaller in scale than construction works, however, if they are of any concern then they should be flagged and assessed accordingly.	Potential effects of operational and maintenance activities have been assessed in Section 7.6.4.
Natural England	Paragraph 7.6.3.6 states that marine water and sediments of the Channel (beyond 1 nmi) demonstrate high recoverability to the impact, and while the sediment plume may extend over a large area, its magnitude (in this instance considered to be the degree of change from baseline) is predicted to be low and the impact will be temporary. It is concluded therefore, that no significant effects will occur as a result of this impact. Natural England is likely to agree with this conclusion; however, it is recommended that this statement should be better evidenced.	This statement has been expanded to better evidence the conclusion (Section 7.6.3.) based upon the findings of the plume dispersion modelling presented in Appendix 6.2 (Modelling Technical Report).
Natural England	Paragraph 7.6.3.10: Natural England requires further clarification with regards to the survey data for the cited cable routes IFA2 and Rampion Offshore Wind	Further information on the proximity to neighbouring projects (IFA2 and Rampion OWF) has been included Section 7.5.3.13), along with a comparison of PSD

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	Farm ('OWF'); and how spatially close this survey data is, to demonstrate they are applicable for AQUIND.	data between projects, in order to demonstrate they are applicable to AQUIND.
Natural England	Paragraph 7.6.4.1 states that temporary and localised increases in Suspended Sediment Concentration ('SSC') are anticipated to occur within the study area during cable repair. Natural England requests that further information is provided to quantify this temporary increase in SSC.	Further information relating to repair activities is provided in Section 7.6.1. However, the assessment parameters used for construction activities have been used to inform this assessment, including, where relevant, modelled worst case construction stage increases in SSC (Section 7.6.4.5).
Environment Agency	In regard to impacts on Shellfish and Bathing Waters, we advise the Applicant to include assessment of short-term effects as part of the WFD assessment.	Potential impacts on bathing and shellfish waters (including short term increases in SSC) have been assessed within Appendix 7.1 Marine WFD Assessment.
Environment Agency	We are pleased to see a Water Framework Directive (WFD) assessment has been included (Appendix 7.1 of the PEIR), and in particular impacts on marine water and sediment quality, Shellfish Waters and Bathing Waters.	Acknowledged.
Environment Agency	We agree that the impacts on water quality from increases in suspended sediment concentrations will be temporary, including those related to re-suspension of contaminated sediments. However, even temporary deterioration of water quality in proximity to sensitive areas such as Shellfish Waters	HDD works at landfall are proposed to occur between KP 1 and KP 1.6 but no disposal of dredged material is proposed within approximately 3 km of WFD jurisdiction (i.e. marine disposal site is proposed between KP 21 and KP 109). Potential impacts on bathing and shellfish waters (including short term

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	and Bathing Waters can have negative impacts on the designated sites. Hence, we advise the Applicant to assess even short-term effects as part of the WFD assessment. This will be particularly relevant in the context of any dredging activities and floatation pits near the Eastney bathing water. We would also suggest to screen in any OOS cable removals where they have the potential to give rise to increased suspended sediment concentrations in proximity to sensitive areas.	increases in SSC) have been assessed within the Marine WFD Assessment (Appendix 7.1). Plume dispersion modelling has been undertaken to investigate the extent and sediment concentration of the passive plumes from the disposal of dredged material and the area likely to be affected. The results of the modelling are presented in Appendix 6.2. It should be noted that flotation pits are no longer proposed and have been removed from the Description of the Proposed Development, and no OOS cable crossings are required within the WFD jurisdiction.
Environment Agency	We would like to emphasise the proximity of the Eastney Bathing Water protected area to the proposed cable corridor and landfall site. Any sediment disturbance in proximity to the bathing water during the Bathing Water Season (May to September) has the potential to impact on bathing water quality and WFD compliance at this site by elevating suspended sediment concentrations and potential faecal contamination.	A full assessment of potential impacts on the Eastney bathing water has been presented within Appendix 7.1 (Marine WFD Assessment).
Environment Agency	Section 7.5.4. We are pleased that the potential effects on Natura 2000 sites will be assessed within the HRA, and that the findings will be used to update the Marine WFD assessment accordingly. In particular, the potential impacts on the Solent	Acknowledged.

Consultee	Summary of Comment Received	How this has been addressed by the Applicant
	Maritime SAC will need to be assessed due to the close proximity to the proposed landfall location at Eastney.	