Kyleakin Fish Feed Factory

Marine Harvest

Gap Analysis Table

May 2017

Final

Document history and status

Revision	Date	Description	By	Review	Approved
0	11/08/16	Gap Analysis Table	Colin Trigg	Jo Moran	Jo Moran
2	17/03/17	Gap Analysis Table	Colin Trigg	Harriet Rushton	
3	18/05/17	Gap Analysis Table	Colin Trigg	Rory McDonnell	Alan Brown

Distribution of copies

Revision	Issue	Date	Issued to	Comments
0		11/08/16	Chris Read	For Information
1		07/09/16	MS-LOT	For Review
2		20/01/17	Chris Read	For information (as draft)
2		17/03/17	Chris Read	For information
3		18/05/17	Chris Read & MS-LOT	FINAL

Kyleakin Fish Feed Factory

Project No:	B2261401
Document Title:	Gap Analysis Table
Document No.:	Doc. 1
Revision:	3
Date:	18/05/17
Client Name:	Marine Harvest
Client No:	N/A
Project Manager:	Joanne Moran
Author:	Colin Trigg
File Name:	Kyleakin Gap Analysis Table.docx

Jacobs U.K. Limited

28 Adelaide Street
County Antrim
Belfast, BT2 8GD
United Kingdom
T +44 (0)28 9032 4452
F +44 (0)28 9033 0713
www.jacobs.com

1.0 Gap Analysis

1.1 Introduction

It is recommended by Marine Scotland that, prior to formal submission, an ES undergoes a 'Gate Check'. This process is carried out to assist the developer by ensuring that key points for inclusion in the ES, as identified within the Scoping Opinion, have been covered as appropriate. This process also gives the developer the opportunity to clarify how and why a specific point has been covered.

Following discussions with Marine Scotland Licensing Operations Team (MS-LOT) and a meeting with consultees on 26/7/16, it was decided that production of a Gap Analysis table early on in the application process would be prudent; allowing MS-LOT to review the table and, when submitted, ensure that the ES would be cognisant of those issues raised by the consultees during the marine scoping.

The table presented below provides a summary of the issues raised by the consultees which are relevant to the Marine Licence Application and required ES for the fish feed plant at Allt Anavaig Quarry, Isle of Skye.

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
Defence Infrastructure Organisation (“DIO”)	1	• Applicant to assess the potential effects of the proposed development during its construction and operation upon the nearby MOD BUTEC range.	Chapter 20 (Cumulative Impacts), section 20.5.2 and Table 20.1 of ES. Appendix 19.3 (Harland and McMullan, 2016) RIAA, 2016.		Consideration in Chapter 20 of ES. The potential effects of noise generation on the BUTEC range were considered within a discrete technical appendix (see section 5). Appendix 19.3 Acknowledges that there would be a need to maintain communications with the range during the piling activity duration.
	2	• The application should consider establishing management arrangements to route marine traffic to avoid passing through the range area.	Appendix 16.1 (ABPmer, 2016).		Consideration given to marine traffic in focused Navigational Risk Assessment – the outcomes of which were informed via discussions with various stakeholders including Jimmy Fergusson (QinetiQ) representing MOD interests. Following implementation of appropriate mitigation, marine risk to navigational receptors will be maintained within a level that is ‘as low as reasonably practicable’.
	3	• The application should be supported by a management plan containing communication protocols to maintain regular contact with the range controller to ensure marine traffic travelling to and from the new jetty facility (both during construction and thereafter during its operation) is coordinated with MOD range operations to ensure operations are not impeded.	N/A.		Once the Marine License Application (MLA) is approved Marine Harvest will liaise with the MOD and successful contractor(s) to produce a management plan that covers such communication protocols. Following the Marine Hazard workshop attended by QinetiQ (Jimmy Ferguson) no specific communication protocols to the MOD range were identified (see Appendix 16.1).
	4	• Applicant to take account of current British Underwater Test and Evaluation Centre Byelaws (1984) as detailed in statutory instrument no.1851relating to the restrictions on the use of sea areas (as specified) containing the ranges.	N/A.		Consideration was given to the BUTEC byelaws during a Marine Hazard workshop attended by QinetiQ. The workshop attendees (maritime community stakeholders) considered vessel transits through the area that the BUTEC byelaws apply. It was concluded by the QinetiQ attendee (Jimmy Ferguson) that active management of vessel traffic can be applied. In practice, vessels are contacted prior to their transit to agree the route and avoid operational areas. This minimises interaction and underwater noise issues. Appendix 16.1 (Navigation Risk Assessment) of the ES identifies that Marine Harvest will develop a ‘Marine safety management system’ (prior to commencement of marine operations, consideration and creation of a Marine-SMS which details the marine side operations and how these will be managed. Detailed Safety Operating Instructions (SOPs) may also be established to compliment the Marine-SMS). This will include vessel routing information for vessels using the Marine Harvest facility. Following implementation of appropriate mitigation, marine risk to navigational receptors will be maintained within a level that is considered to be ‘as low as reasonably practicable’.
	5	• The applicant should review the construction techniques that will be used and evaluate the	Appendix 19.3 (Harland and		The potential effects of noise generation, such as

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
		associated noise emissions (e.g. piling).	McMullan, 2016). Appendix 19.4 (Barham and Mason, 2016).		from piling works, on the BUTEC range were considered within a discrete technical appendix (Appendix 19.3, section 5).
	6	• In conjunction with noise assessment (see 5) the applicant should prepare an appropriate noise impact mitigation strategy as part of a management plan to support any marine license application submitted to demonstrate what measures will be put in place to ensure pile driving type works are coordinated with the operation of the MOD BUTEC range and conducted at times when the range is not in operation. Applicant should enter into further dialogue with the range operator to establish what type of mitigation measures will be appropriate.	N/A.		Should the MLA be approved Marine Harvest (MH) will liaise with MOD, and successful contractor(s) to produce a management plan that will include consideration of noise impact mitigation. As requested, MH will enter into further dialogue with the range operator once MLA approved.
	7	• Condition to be included in any license granted to regulate the hours when pile driving type works may be conducted and to make provision that works are suspended for periods (as reasonably notified by MOD) should there be an urgent operational need for the range to be used outside the normal operating times identified.	N/A.		MH confirms they are content with this condition to any prospective marine license. No pile driving works involving the use of impact hammers, or pile installation methods involving the use of vibration equipment, shall be undertaken between the hours of 8pm and 7.30am, except in the case of emergency. In addition, piling works involving the use of impact hammers shall not be carried out at any time on a Sunday, except in the case of emergency. In case of any such emergency the Project Manager, or in their absence the Contractor's Agent, shall provide warning by phone call followed by confirming e-mail, to an agreed contact at the MOD, before commencement of the emergency work. In the event that the MOD have urgent operational need for the Contractor to halt either pile impact driving or pile installation by vibration, they shall advise the Project Manager by phone call with confirming e-mail thereafter at least 48hrs in advance of the requirement, and the Project Manager shall arrange for the cessation of the operation. In recognition of the significant additional cost and delay to the Works arising from any such cessation of piling activities, the MOD shall only request cessation of piling when absolutely essential and after exhaustion of all other options available to them. Should the MLA be approved MH will liaise with MOD, and the successful contractor(s) to produce a management plan that will include consideration of noise regulation.
	8	• MOD would wish to establish long-term communication protocols and management arrangements to direct regular marine traffic movements associated with the proposed development away from the BUTEC range area.	N/A		As above. Should the MLA be approved MH will liaise with MOD, and successful contractor(s) to produce a management plan that will include consideration of long-term communication protocols and management arrangements to direct regular marine traffic movements.
Marine Scotland - Licensing	9	**Mitigation:** • MS-LOT welcome commitment made in the Proposal Summary to identify mitigation measures in	1. Communication has been ongoing with conservation		

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
Operations Team 'MS-LOT'		order to avoid, minimize, or reduce adverse impacts. The range of mitigation options considered in the ES should be informed by the EIA process along with any input from the relevant nature conservation bodies. Contact with these bodies should be established and maintained throughout the EIA process in order to ensure effective mitigation measures are identified. • Within ES it is important that all mitigation measures are: – Clearly stated. – Fully described with accuracy. – Assessed for their environmental effects. – Assessed for their effectiveness. – Their implementation should be fully described. – How commitments will be monitored. – If, necessary, how they relate to any consents or conditions.	bodies throughout. Key consultation is detailed in upfront sections of Chapters 16, 17, 18, 19 and 20. 2. Where provided, mitigation measures are clearly described and impacts reassessed as appropriate (e.g. sections 16.6; 17.7 and 17.8; 18.7; 19.7 and 19.8).		
	10	**Marine planning:** • MS-LOT expects the ES to demonstrate that relevant consideration has been given to The UK Marine Policy Statement 2011 and Scotland's NMP 2015.	ES sections 4.2.3; 4.2.6; 4.2.7; Table 4.4; 16.2.1; 18.2; 17.2.2; 19.2, 20.2.		
	11	**Design Envelope:** • Where flexibility is required the ES should define the alternatives or ranges within which parameters might fall and should clearly state the reasoning for requiring such flexibility, the criteria for selecting the worst case scenario and the impacts which would arise from such a scenario. Details of the most likely scenario and impacts arising from this should also be provided.	Throughout ES as appropriate e.g. sections 17.6.2.2; 18.5.2; 18.5.4, 19.5.2.2.		Acknowledgement given to the worst case scenarios and design/method flexibility. For example, in the initial phase of the development three different dredging scenarios modelled – all of which were considered viable at the time. Wave modelling and sediment transport considered infrequent storm events. Adoption of worst case for process discharge concentrations.
	12	**Ecology, Biodiversity and Nature Conservation:** • The ES should demonstrate that relevant wildlife legislation and guidance has been taken into account. • HRA required. • European Protected Species ("EPS"): Applicants must give consideration to the three fundamental tests and should refer to the guidance on the protection of marine European Protected Species for more detailed information in relation to Scottish Inshore Waters. Applicants may choose to apply for an EPS licence following any grant of consent once construction methods have been finalised, however it is useful to include a shadow EPS assessment within the ES. • Species on Schedules 5 (animals), e.g. basking sharks, and 8 (plants) of the Wildlife & Countryside Act 1981 are protected against intentional or reckless disturbance or harassment and should be given due consideration within the ES along with Marine Protected Area (MPA) species/habitats.	1. ES Section 11.2; section 19.2. 2. RIAA provided as part of MLA. 3. Recognition of EPS species are provided in Chapter 11 Table 11.1 and 11.2 sections 11.6.3; 11.6.4. Chapter 19 - Table 19.1,19.2, 19.5 and 19.9; sections 19.4.2; 19.5.1.1; 19.6.1.2. 4. Table 11.1; 19.1; 19.2; 19.9. Also section 19.4.4 and 19.4.5.	1. Recognition of EPS species are provided in Chapter 11 Table 11.1 and 11.2 sections 11.6.3; 11.6.4; Table 19.1, ,19.2 , 19.5 and 19.9; sections 19.4.2; 19.5.1.1; 19.6.1.2. It is the applicants intention to apply for an EPS licence for the relevant species in the area once consent has been granted (19.6.1.2). 2. Table 11.1; 19.1; 19.2; 19.9. Also section 19.4.4 and 19.4.5.	The Report to Inform Appropriate Assessment (RIAA) is submitted as part of the MLA. It is the applicant's (Marine Harvest) intention to apply for an EPS licence for the relevant species once consent has been granted (section 19.6.1.2). As agreed with MS-LOT (17/05/17) the applicant will submit a shadow EPS assessment post formal submission of the Marine Licence application and ES. The shadow EPS assessment is not a required supporting document for the MLA, as agreed with MS-LOT.

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
	13	**Water Environment** • Applicant to consult with SEPA to identify: 1) if a CAR license is necessary; and 2) clarify the extent of the information required by SEPA to fully assess any licence application. • Applicant to include WFD consideration within ES.	1. Applicant consulted with SEPA e.g. 26/7/16. No additional CAR license required. Also no WFD assessment required; however, commentary made on overall waterbody status and consideration to WFD made (section 17.1.1 and 17.10).		The existing water abstraction license, CAR/L/1011948, allows 1100m3/day to be abstracted from the Allt Anavaig and 800m3/day from a groundwater abstraction (see SEPA consultation response (19/01/17).
	14	**Archaeology and Cultural Heritage:** • The ES should address the predicted impacts on both the marine historic environment and the potential for the onshore impacts of terrestrial elements of the development. It should also describe the mitigation proposed to avoid or reduce impacts to a level where they are not significant. Historic environment issues should be taken into consideration from the start of the site selection process and as part of the alternatives considered.	Chapter 13 'Cultural Heritage' section 3.4.1.1.		
	15	**Socio-Economic Benefit:** • The ES should include relevant economic information connected with the project, including the potential number of jobs, and economic activity associated with the procurement, construction, operation and decommissioning of the development.	Chapter 12 'Socio Economic' e.g. 12.3.2; 12.4.2, 12.5.1and 12.5.2.		

	16	**Navigation:**
		• The ES should include the following details on the possible impact on navigation for both commercial and recreational craft:
		  • Collision risk
		  • Navigational safety
		  • Visual intrusion and noise
		  • Risk management and emergency response
		  • Marking and lighting requirements
		  • Information to mariners
		  • Effect on small craft navigational and communication equipment
		  • Weather and risk to recreational craft which lose power and are drifting in adverse conditions
		  • Evaluation of likely squeeze of small craft into routes of larger commercial vessels
			See Chapter 16 and Appendix 16.1. Hazard workshop with stakeholders (including MCA) and identified all risks from development.		Following implementation of appropriate mitigation, marine risk to navigational receptors will be maintained within a level that is 'as low as reasonably practicable'.

	17	**General Advice:**
		• If it is intended to dispose of any dredged material at sea, adequate pre-dredge sample analysis must be submitted in support of the ES and marine licence dredging application.
		• Developers are requested at application stage to submit a detailed OS plan showing the site boundary and location of all proposed works in a format compatible with The Scottish Governments Spatial Data Management Environment ("SDME"), along with appropriate metadata.
		• Within Annex 2 a scoping checklist template is provided to assist in the consideration and collation of the relevant ES information. MS-LOT expect this template to be completed by the applicant and submitted in support of their application.
		• Please ensure that any applications submitted include detailed coordinates (WGS84 datum) for each individual element of the marine aspects of the development including:
		  • Full dredge area.
		  • All land reclamation.
		  • Slipway.
		  • Rock armour.
		  • The pier extension area.
		  • Pile diameter/size, location (or average distance between piles) and number.
			1. No intention to dispose any dredged material at sea (see BPEO and MLA dredging application).
			2. An OS plan has been submitted as part of the MLA package (Drawing A.2).
			3. See this document.
			4. These are provided as part of the MLA package.		

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
Marine Scotland Science	18	• An assessment of impacts upon marine fish species should be considered.	Chapter 19 – section 19.4.4; 19.5.1 and 19.5.2.		
	19	• Diadromous fish including salmon, sea trout and eels will be present in the coastal waters at this site and consideration will be needed as to: – The extent different life stages are likely to be present at the different times of the year, and whether they are likely to be associated with local rivers or migrating from or to rivers further afield. – What aspects of the marine construction work, including dredging, and changes to habitat or water quality, either temporary or permanent might impact or interfere with salmon, sea trout and eels or fisheries for these. – What aspects of the operation of the marine elements of the facility might impact or interfere with salmon, sea trout and eels or fisheries for these. – What can be done to prevent or minimise adverse effects. – What monitoring is needed.	Chapter 19 – section 19.4.4, Table 19.7; section 19.5.1 and 19.5.2. Section 19.7.1.		A general monitoring plan will be finalised under condition once the Marine License is approved. This will supplement the CEMP.
	20	• Applicant should approach Skye and Wester Ross District Salmon Fishery Boards and Fisheries Trusts for advice and information regarding diadromous fish.	Communication made with Skye District Salmon Fishery Board and Wester Ross Fisheries Trust. See section 19.4.4.		
	21	• Investigations need to include all aspects of the physical environment during both the construction and operational phases of the development, such as sediments (sediment plumes for example, especially considering the proximity to the MPA), hydrodynamics (for example changes to tides and currents), water quality (and subsequent effects on the flame shells), coastal processes, sea level rise mitigations, and storm surge events.	See Chapter 9 (flood risk). Chapter 18 (sediment plumes; hydrodynamics; coastal processes; storm surge events). Chapter 17 (Water quality and marine sediment). Chapter 19 (subsequent effects on flame shells).		
	22	• Hydrodynamic and sediment plume modelling is required.	Chapter 18 (section 18.5) and Appendix 18.1 and 18.3.		
	23	• How much material and what type of materials will get dredged? What methods will be used and where will the material be disposed of?	Chapter 2, section 2.10.1.3 and 2.10.2.3. Also sections 17.4.1, 18.1, 18.5.4, 18.5.5. See BPEO. Further detail of quantities and breakdown of likely dredged material is provided in the MLA.		No intention to dispose material. Most dredged material will be relocated to quarry for reuse (see BPEO). A small quantity will be used to stabilise the side slopes of the dredged area (sections 2.10.1.3 and 18.5.5).
	24	• Any impact on the water environment and possible mitigation measures need to be assessed.	Chapters 16 (section 16.5 and 16.6), 17 (section 17.6 and 17.7), 18 (section 18.6 and 18.7), 19 (section 19.5 and 19.7) and 20. Assessment and mitigation measures, as appropriate, are provided.		Also see Appendix 17.1 for 'initial dilution assessment' of marine outfall.
	25	• Cumulative impacts will need to be discussed	See Chapter 20 (Cumulative Impacts).		No significant cumulative impacts identified from other developments or from multiple impacts from the Proposed Development on the same receptor(s).
Maritime and Coastguard Agency ("MCA")	26	• Applicant to include consideration of the impact the development may have on the safety of navigation for vessels operating in the area. For example, does the development restrict vessels in any way, increase risk of collision, or impede safe navigation to any local ports, harbours or jetties	ES Sections 16.3 to 16.7. Also Appendix 16.1.		

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
		etc? Will local operators be consulted? What mitigation measures will be put in place?			
Northern Lighthouse Board ("NLB")	27	• Require that further information be provided at the marine licence application stage with regard to: - the dimensions of the proposed pier. - the installation co-ordinates (WGS-84 datum). - number, type and size of vessels anticipated to use the facility.	Information has been provided in MLA forms unless specified (see section 5(h)). Also see ES Chapter 2. Detail on vessel movements in Chapter 16 and Appendix 16.1. Also detail in Chapter 2 "Project description" (Appendix E).		
Scottish Environment Protection Agency ("SEPA")	28	• The following info must be provided in the ES: – Details of proposed materials, processes and technology to be used in the manufacturing process and emissions. – Map showing assessment of all engineering works within and near the water environment including buffers supported by a flood risk assessment. – Map of proposed waste water drainage layout. – Map of proposed surface water drainage layout. – Map of proposed water abstractions including details of the proposed operating regime. – Map and table detailing forest removal. – Schedule of mitigation for construction including pollution prevention measures. – Quarry Site Management Plan of pollution prevention measures.	• Chapter 2 (section 2.3.1 and 2.3.2, 2.7); Chapter 6. • As part of Appendix A of MLA, layouts of the works/design are provided. • A plan of the proposed surface water and waste water drainage layout has been provided in ES Appendix 2.1. • Mitigation measures provided in technical chapters. In relation to pollution prevention on water environment specific detail contained in Chapter 17 (section 17.7). • A Quarry Site Management Plan will be produced once the MLA has been approved (see justification).		A Construction Environmental Management Plan (CEMP) will be finalised once a successful contractor has been appointed and the Development has been approved. It is envisaged that a 'Quarry Site Management Plan' would either be contained within the CEMP or supplement this document. The CEMP will set out the intended methods of effectively managing potential environmental impacts resulting from construction of the Proposed Development. It will contain specific environmental objectives, environmental risks and the proposed mitigation such as dust and soil management, storage of chemicals and use of SEPA PPG's (SEPA, 2003). It will also contain, where relevant, method statements as a means of controlling environmental risks including biosecurity maintenance. As per SEPA's consultation response (19/01/17) – the CEMP (as produced following approval of MLA) will comprise a Schedule of Mitigation, specific plans and maps, and detail of the ECOW's responsibilities.
	29	• Should the applicant intend to scope out any of the issues, evidence must be provided in the ES submission to support why an issue is not relevant.	Where issues have been scoped out evidence is provided in the ES.		
	30	• If there is a delay between scoping and the submission of the application, SEPA's website should be referred to for latest info requirements as they are regularly updated; current best practice must be followed.	Reference made to SEPA website. E.g. Water-Environment hub accessed online in late 2016. See Chapter 17.		
	31	• SEPA note that there is an existing abstraction license under CAR (CAR/L/1011948) from the onsite lagoon. Any additional abstractions for the sea or the watercourse will require authorization from SEPA.	See justification.		SEPA stated in consultation response (19/1/17) *The proposed water abstraction will be consentable under the existing water abstraction licence in place on site and therefore we have no objection to it.* The existing water abstraction licence, CAR/L/1011948, allows 1100m3/day to be abstracted from the Allt Anavaig and 800m3/day from a groundwater abstraction (see SEPA consultation response (19/01/17). No additional abstractions required.

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
	32	• Given the marine designations adjacent and close to the site and the interrelationship between the above issues and the marine environment, it will be important to consider consentability during the planning application determination. For example, the regulated processes will impact upon issues such as discharges or abstractions to/from the MPA. This may be particularly important should AA be required for impacts upon the environmental designations.	Consideration given in Chapter 17 (section 17.6.2 and Table 17.8). Chapter 19 (section 19.5.1 and 19.5.2). Also refer to Kyleakin RIAA and RIAA memo (both are submitted as part of MLA).		SEPA stated in consultation response (19/1/17) The proposed water abstraction will be consentable under the existing water abstraction license in place on site and therefore we have no objection to it. The existing water abstraction license, CAR/L/1011948, allows 1100m^3/day to be abstracted from the Allt Anavaig and 800m^3/day from a groundwater abstraction (see SEPA consultation response (19/01/17). No additional abstractions required. There are no abstractions from the MPA so only the potential effect of discharge is considered. In Chapter 17 the assessment concluded that potential effects on water quality from the operation of the Proposed Development, specifically from the operation of the discharge, would be negligible. Chapter 19 specifically assesses the effects of operation discharge in section 19.5.2.2. Particular consideration is given to the conservation objectives of the MPA and it was concluded that the process discharge would have no detectable effect on the flame shells and the community that this feature supports. The RIAA memo concluded that the achievement of the Inner Herbrides and Minches cSAC Conservation Objectives would not be compromised as a result of the outfall and there would be no adverse effect on the European sites' integrity.
	33	• The site layout must be designed to avoid impacts upon the water environment.	Chapter 3 (e.g. section 3.6.3)		
	34	• Guidance should be sought from Marine Scotland with regards to the engineering works within the marine environment	Please refer to Scoping Opinion from MS-LOT and MSS. The ES has acknowledged comments from MS-LOT and MSS – also refer to comments detailed in this Gap Analysis table (9-25 above).		
	35	• SEPA regulate abstractions and discharges below MHWS and therefore will work with Marine Scotland and SNH on any issues pertaining to their interests.	Consultation with SEPA has been ongoing throughout development of ES e.g. Chapter 17 (section 17.1.1).		Consultation response from SEPA received 19/1/17 – covers abstraction and discharges.
	36	• Scottish Planning Policy clearly states (paragraph 255) that "the planning system should promote flood avoidance by safeguarding flood storage and conveying capacity, and locating development away from functional flood plains and medium to high risk areas". It further defines (glossary) that "For planning purposes the functional flood plain will generally have a greater than 0.5% (1:200) probability of flooding in any year". Built development should not therefore take place on the	Chapter 9 – Hydrology and Flood Risk. Also, Appendix 9.1 (Flood Risk Assessment). Continual consultation has been sought and received from SEPA		

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
		functional flood plain. Consequently, the development must be located away from the Allt Anavig and outwith the 1 in 200 year flood plain which would need to be determined in a Flood Risk Assessment (FRA). Watercourse crossings should be designed to accommodate the 0.5% Annual Exceedance Probability (AEP) flows.	throughout the design process.		
	37	• As the site is adjacent to the SEPA Coastal Flood Map, coastal flood risk must be assessed as part of the FRA.	Chapter 9 – Hydrology and Flood Risk. Also, Appendix 9.1 (Flood Risk Assessment).		Coastal sources of flooding have been included in the FRA. Tidal flood risk information was provided by SEPA and incorporated into the FRA. The site is located at levels above extreme high tide levels, including the effects of climate change. The interaction of high tide with fluvial flood risk is also included in the FRA.
	38	• As part of FRA a topographic survey of the site would be required to demonstrate that the site is above the 1 in 200 year water level for the area, 4.03m AOD, (based on extreme still water level calculations using the CFB Method) plus a recommended freeboard. Advice on the appropriate levels of freeboard for the area should be sought from Highland Council's Flood Team.	Chapter 9 – Hydrology and Flood Risk. Also, Appendix 9.1 (Flood Risk Assessment).		A topographic survey is available for the site and this confirms that the site is above the 1 in 200 year still water tidal flood level. The site is located at levels above extreme high tide levels, including the effects of climate change. The interaction of high tide with fluvial flood risk is also included in the FRA.
	39	• SEPA appreciate that some elements of the scheme such as the pier and associated works need to be located within the coastal flood plain for operational reasons. This should be detailed in the FRA.	Chapter 9 – Hydrology and Flood Risk. Also, Appendix 9.1 (Flood Risk Assessment). 9.		The existence of the pier is discussed in the FRA. Further, more detailed inclusion of the pier in terms of tidal flood risk has been incorporated into an updated FRA in response to SEPA's consultation comments (19/01/17).
	40	• Ground investigations should be carried out to determine the level of the water table in relation to the proposed ground levels. Should it be determined that groundwater may pose a flood risk then should be assessed within the FRA.	Chapter 9 – Hydrology and Flood Risk. Also, Appendix 9.1 (Flood Risk Assessment).		Groundwater levels are presented in the Hydrogeology and Geology chapter of the ES. Groundwater flood risk is considered within the FRA.
	41	• SEPA offer guidance on the completion of a FRA in the document entitled: "Technical Flood Risk Guidance for Stakeholders". This document provides generic requirements for undertaking Flood Risk Assessments and can be downloaded from http://www.sepa.org.uk/media/162602/ss-nfr-p-002-technical-flood-risk-guidance-for-stakeholders.pdf. Please note that this document should be read in conjunction with Part 2 of SEPA Policy 41: "Development at Risk of Flooding, Advice and Consultation – a SEPA Planning Authority Protocol", available from Guidance and advice notes | Scottish Environment Protection Agency (SEPA).	Chapter 9 – Hydrology and Flood Risk. Also, Appendix 9.1 (Flood Risk Assessment).		Noted.
	42	• SEPA's Flood Risk Assessment checklist should be completed and attached within the front cover of any FRAs issued in support of a development proposal which may be at risk of flooding.	Chapter 9 – Hydrology and Flood Risk. FRA is Appendix 9.1. Checklist is attached to this appendix.		Noted. A checklist has been completed and incorporated into an updated FRA in response to SEPA's consultation comments (19/01/17).
	43	• A schedule of mitigation, supported by site specific maps and plans must be submitted. These must include reference to best practice pollution prevention and construction techniques, regulatory requirements, the daily responsibilities of ECOWs, how site inspections will be recorded and acted upon and proposals to fund a monitoring enforcement officer.	Mitigation measures appropriate to the water environment have been provided in Chapters 16-20. Specific measures in relation to pollution prevention are contained in sections 17.7and 19.6 of the ES.		As per SEPA's consultation response (19/01/17) – the CEMP (as produced following approval of MLA) will comprise a Schedule of Mitigation, specific plans and maps, and detail of the ECOW's responsibilities
	44	• In this site specific instance, given the proximity to designated sites and the scale of construction works required, discharges from temporary welfare facilities during construction should be to sealed units and removed off site via licensed carriers.	Refer to ES section 17.6.1.5.		
	45	• SEPA's Pollution prevention guidelines should be referred to for general guidance on managing	ES Sections 17.7.1, 19.6.1.1,		

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
		construction works.	19.6.2.4.		

Scottish Natural Heritage (“SNH”)	46	• Key marine natural heritage issues arising from this development which will need to be considered in the EIA include effects on:
		  • The designated features of Lochs Duich, Long and Alsh Nature Conservation Marine Protected Area, specifically flame shell beds and burrowed mud features;
		  • Reefs in Lochs Duich, Long and Alsh Special Area of Conservation;
		  • Cetaceans, including harbour porpoise within Inner Hebrides and the Minches proposed Special Area of Conservation;
		  • Other Priority Marine Features where impacts could be significant.
			ES Sections 19.4.2, 19.5.		

	47	• Applicant expected to follow the latest SNH guidance as published on their website via http://www.snh.gov.uk/planning-and-development/advice-for-planners-and-developers/ Guidance on the EIA process is also available, including a link to our EIA handbook - http://www.snh.gov.uk/planning-and-development/environmental-assessment/eia/	Throughout the ES.		

	48	**Lochs Duich, Long and Alsh Nature Conservation Marine Protected Area**
		• Existing benthic data should be collated and assessed.
		• Marine Harvest commissioned a diver survey in January 2016 and two transect were surveyed in the vicinity of the proposed pier and dredging area. The results of this survey should be presented in the ES and associated photos/videos should be provided as supplementary information.
		• Further survey not essential to determine the edge of the flame shell bed – EIA could be based on an assumption that the sea bed below 9.5m BCD is uniform high quality flame shell bed. However, further survey data may be required in order to fully assess the wider benthic impacts, depending on the location of the pier and dredging, and the scale of the indirect impacts.
		• Regulators will need sufficient information to assess whether there is a ‘significant risk of hindering the achievement of the conservation objectives’.
		• SNH expect the EIA to include an assessment of both direct and indirect impacts on the interests of the MPA at all stages of the development. Direct impacts involve the loss of flame shell habitat from construction of the pier, dredging and any anchoring. It is important to clarify the length and shape of pier required at the outset or preferably to assess a series of possible options.
		• Assessment of indirect impacts will likely be informed by modelling of changes in water movement and resulting changes in bathymetry and bed sediment. There should be separate modelling for construction and operational phases. Key aspects for inclusion are:
		  – Changes in water movement due to new pier and dredged area. This will vary with pier design (which should also be considered as part of mitigation).The extent and degree of siltation likely to arise from the dredging and construction phases. The frequency of maintenance dredging should be defined as well as the disposal location for dredged material.
		  – The effects of propeller wash from supply/distribution ships, taking into account size and design of ships, frequency of visits to the pier, any amplification caused by the shallow water, large ships turning to berth.
		  – The location of discharge points for waste/effluent from shore activities. Levels of effluent treatment should be defined and, if levels are significant, the dispersal of plume should be modelled.
		  – Clarification regarding the need for seawater cooling. If required, provide details of the location and temperature of discharged water.
		  – The development of an appropriate pollution prevention plan covering fuel, chemical, raw material and feed spills.
		  – The potential anchoring of ships in the channel or elsewhere during construction, dredging and operation. This should include consideration of any mechanisms available for controlling anchoring associated with the facility.
			• ES Section 19.4.3.3.
			• 19.4.3.4 and Appendix 19.1.
			• See 19.4.3.4.
			• Sections 19.4, 19.5 and 19.6.
			• Sections 19.5.1 and 19.5.2.
			• Assessment carried out on impacts from modelling on geomorphology (Chapter 18), in relation to water quality and hydromorphological status (chapter 17 and 18), in relation to marine ecological receptors (chapter 19).
			• The changes in flow have been modelled based on the new pier and dredged area (Chapter 18 and Appendix 18.1). There is no requirement for disposal of material in either phase of the works (see Chapter 18 and BPEO).
			• The effects of propeller wash have been considered and modelled (Chapter 18 and Appendix 18.1). Consideration given to vessel sizes and movements (see Chapter 16 and Appendix 16.1).
			• As per consultation with SEPA (19/01/17) process effluent will be discharged into marine environment (see Justification for further detail).
			• No requirement for seawater cooling
			• Pollution Prevention plan will be as detailed in Chapter 17. This
					Following consultation by SEPA the process discharge will be located seaward of MLWS. To inform the assessment ‘initial dilution’ modelling was carried out. Further to this modelling secondary treatment (nutrient removal) is detailed in Chapter 2 of the ES.

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
		– The discharge of ballast water and potential transfer of invasive non-native species. • Preferred methodologies to assess these aspects should be agreed with SNH, Marine Scotland and SEPA and should be informed by input from specialist consultants as appropriate. • Once the extent and scale of impacts have been predicted and quantified these can be assessed against known sensitivities of flame-shell beds. A summary of current understanding regarding sensitivity to various pressures is available via the FEAST (Feature Activity Sensitivity Tool) section of the Marine Scotland website http://www.marine.scotland.gov.uk/FEAST/FeatureReport.aspx This information provides a useful starting point but a specialist contractor is likely to be required to carry out a review of scientific literature and research. Where studies specific to flame shell beds are not available it may be possible to use other habitats or species as a proxy. Best way to assess the gaps in the literature to be agreed with SNH prior to finalisation of the ES.	will be provided once the MLA is approved. • Consideration given to anchoring in Chapter 16 and Appendix 16.1. • Methodologies agreed following meeting in July 2016 with SNH, SEPA and MS-LOT. • Sensitivities against pressures have used FEAST and MarLIN where relevant in Chapter 19.		
	49	**Lochs Duich, Long and Alsh Special Area of Conservation** • The EIA needs to assess indirect impacts on this site and to demonstrate that there would be no adverse effect on site integrity. The issues and assessment process will be similar to assessing the MPA described above. Only those aspects where significant effects are likely need to be considered in detail. Based on current info it seems likely that avoidance of ballast water discharge inside the SAC and agreement of a robust pollution prevention plan will be two of the key requirements to protect the SAC.	This is considered in Chapter 19.		
	50	**Inner Hebrides and the Minches proposed Special Area of Conservation** • The proposals lie within the Inner Hebrides and the Minches proposed SAC for harbour porpoise. • Other species of cetaceans are also present in this area. All cetaceans are European Protected Species. They are likely to be affected by similar aspects of the works and we would also expect them to be considered in the EIA. • The construction methods should be clarified following site investigations including: – Piling – what type of piles would be installed; how many; impact or vibratory piling; duration of installation. – Dredging techniques and duration. – Blasting – what size of charge; how many; over what duration • Appropriate mitigation should be put forward based on relevant best practice guidance including: – Statutory nature conservation agency piling protocol (August 2010): http://jncc.defra.gov.uk/pdf/JNCC_Piling%20protocol_August_2010.pdf – JNCC guidelines for minimising the risk of disturbance and injury to marine mammals whilst using explosives (August 2010): http://jncc.defra.gov.uk/pdf/JNCC_Guidelines_Explosives%20Guidelines_August%202010.pdf • An underwater noise assessment should be carried out including: – predicted noise levels from all noisy activities (taken from published literature); – A description of the possible noise footprint; – Use of Southall *et al* (2007) to assess marine mammal injury thresholds plus Lucke *et al* (2009) for harbour porpoise injury thresholds; – Assessment of disturbance. There are no agreed disturbance thresholds. However, NOAA interim disturbance thresholds can be used initially to determine whether this needs to be considered in more detail - seehttp://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/threshold_guidance.html – description of the sound propagation in the area together with rationale as to the propagation model used.	EPS are considered in ES (see Chapter 19, section 19.6.1.2) Piling methodology detailed in Chapter 2. Chapter 19 considers potential effects of piling on marine receptors. Dredging detailed in chapter 18, Appendix 18.1 and 18.3; and chapter 19. No blasting required. Mitigation measures provided as requested, in ES section 19.7. Noise assessment carried out using Southall and Lucke (see Chapter 19, section 19.5.1.1) and RIAA. Also refer to Appendix 19.3 and 19.4 of ES, for predicted sound levels and modelling outputs of piling, respectively. These technical appendices have informed the assessment of potential noise impacts on marine receptors.		It should be acknowledged that the Inner Hebrides and the Minches proposed SAC became a candidate SAC in September 2016.
	51	• The review of existing marine data should also identify any Priority Marine Features which may be affected by the proposals. If PMFs are identified their sensitivity to pressures associated with the	Detail on PMFs given in baseline of Chapter 19 (section 19.4) and		

Consultee	No.	Point for Inclusion	Section ES	Sign	Justification (as appropriate)
		development should be assessed. To clarify what habitats are present in the proposed dredge areas further drop-down or diver survey should be carried out.	consideration in assessments. A further dive survey was carried out (as discussed during stakeholder meeting in July 2016).		