From: [redacted] (MARLAB)
To: [redacted] (MARLAB)
Subject: RE: D-4240-2019 - SICCAR - Cambo Environmental Statement - Marine Scotland Comments.docx
Date: Friday, 16 July 2021 11:57:00
Attachments: image003.jpg
image001.jpg

Yes I know. I am going to highlight this to BEIS. [redacted]

[redacted]

[redacted]

Please contact by email. Currently working from home until further notice

[redacted] B.Tech, PIEMA | Offshore Energy Environmental Advice (OEEA) Marine Environmental Advisor | Marine Scotland |

Scottish Government | Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

T: +44 [redacted]
S/B: +44 (0)131 244 2500
www.gov.scot/marinescotland

From: [redacted] (MARLAB) <[redacted]@gov.scot>
Sent: Friday, 16 July 2021 11:55
To: [redacted] (MARLAB) [redacted]@gov.scot>
Subject: RE: D-4240-2019 - SICCAR - Cambo Environmental Statement - Marine Scotland Comments.docx

[redacted]

Thanks for clearing that up for me. Yes that seems OK – would have been a lot easier if they had highlighted any changes instead of us (well, you…) having to sift through previous documents.

Thanks again.

[redacted].

From: [redacted] (MARLAB) <[redacted]@gov.scot>
Sent: 16 July 2021 11:48
To: [redacted] (MARLAB) <[redacted]@gov.scot>
Subject: RE: D-4240-2019 - SICCAR - Cambo Environmental Statement - Marine Scotland Comments.docx

Hey [redacted],

No highlights I'm afraid I had to go through the whole document again!

This was the wording we had on the last ES..

"MSS notes that the produced water (PW) management option chosen for the development is overboard discharge with an oil content of 15 mg/l or less measured on a monthly average basis. It is highlighted that the base case for any new developments in line with OSPAR 2001/1 should zero discharge of oil in PW, however, it is acknowledged that issues with reservoir souring and weak rock formations are provided in this case as justification for overboard discharge. It is advised the Department satisfy themselves with the technical justification provided and that all alternative options have been explored. MSS welcome that all discharges will be maintained within regulatory limits and that the Risk Based Approach (RBA) threshold for PW is likely to be met.

It is noted that section 10 (Produced water discharges) does not discuss what the density or salinity of the PW is. There is mention of temperature (and density) in the discharge characteristics section (10.3.2) but no value for density. Given that a high saline value would have an impact on the dispersion of the PW plume in the water column it would be useful to have had its value. A denser PW would be more likely to sink in the water column and possibly reach the seabed, although given the water depth at Cambo this would be highly unlikely. Clarification on the density and salinity of the PW would be beneficial. The design parameters of the FPSO PW treatment system (as shown in section 3.7.3) appear to be for 12,719 m^3/ day, however the application refers to the annualised maximum anticipated rates of PW generated are 802,910 m^3 / day. Could this please be clarified?"

Your comment re the salinity appears to have been addressed? So I would suggest we keep the first paragraph as above and remove the second highlighted in yellow. Does this sound reasonable?

[redacted]

Please contact by email. Currently working from home until further notice

[redacted] B.Tech, PIEMA | Offshore Energy Environmental Advice (OEEA) Marine Environmental Advisor | Marine Scotland |

Scottish Government | Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

T: [redacted]
S/B: +44 (0)131 244 2500
www.gov.scot/marinescotland

From: [redacted] (MARLAB) <[redacted]@gov.scot>
Sent: Friday, 16 July 2021 09:38
To: [redacted] (MARLAB) <[redacted]@gov.scot>
Subject: RE: D-4240-2019 - SICCAR - Cambo Environmental Statement - Marine Scotland Comments.docx

[redacted]

Were any of the changes highlighted or did you have to go through the whole document and check for differences with the original?!! (That seems an onerous task).

Given that I am not sure what has changed from the original I have only had a look at sections 9 and 10, but there is nothing new to note from my point of view.

Regards,

[redacted]

From: [redacted] (MARLAB) <[redacted]@gov.scot>
Sent: 08 July 2021 13:34
To: [redacted] (MARLAB) <[redacted]@gov.scot>
Subject: D-4240-2019 - SICCAR - Cambo Environmental Statement - Marine Scotland Comments.docx

Hi [redacted]

[redacted]

Not sure if [redacted] sent this through to you whilst I was away, but I was hoping you could have a quick look at this for me before 16th July? An ES for Cambo was lodged in 2019 and our comments are attached. The application has had to be sent in again due to changes in the Regs and some (what appear to be minor) changes to the application.

Please find the new ES here: Click on the link to open 'D/4261/2021 - SICCAR - Cambo Environmental Statement Phase 1 - ES' - https://erdm.scotland.gov.uk:8443/documents/A33623286/details

Thanks [redacted]

[redacted]

marinescotland

Scottish Government
Riaghaltas na h-Alba
gov.scot

[redacted]
MS.PON15@gov.scot

OPRED EMT
BEIS
Aberdeen

16th July 2021

D/4261/2021 – Siccar Point Energy E&P Limited (SPE) - Cambo Field Development – Environmental Statement

Application summary

This Environmental Statement (ES) presents the results of the Environmental Impact Assessment (EIA) conducted to evaluate the environmental impacts of the proposed Cambo Field Development located in quadrants 204 (Cambo field) and 205 (gas export pipeline route to the West of Shetland Pipeline System (WOSPS)), which comprises:

- The installation and commissioning of a custom designed, new build, Sevan-type, Floating Production Storage and Offload (FPSO) vessel;
- The batch drilling, commissioning and operation of up to thirteen sub-sea wells (nine production wells from two drill centres and four water injection wells), targeting the Cambo reservoir using a semi-submersible drilling rig. One of these wells (204/10a-5Y) was drilled as an appraisal well in 2018 and will be completed as a production well;
- The installation, of;
    - A 69.9 km long 10", carbon steel, gas export pipeline with a concrete weight coating, tying into the WOSPS. The shallower section of the pipeline from WOSPS to 600 m or 800 m depth (dependant on the outcome of a fisheries interaction risk assessment) is to be trenched and buried using jet trenching techniques and the remaining section (either 24.6 km from the 800 m depth or 39.6 km from the 600 m water depth) is to be surface laid;
    - A 25 km fibre optic cable connecting the FPSO to the SHEFA-2 cable;
    - Three gravity based / suction piled manifold structures (one production manifold at each drill centre and a water injection manifold);
    - A gravity based / suction piled Water Injection and Controls Distribution Structure (WICDS);
    - A gravity based / suction piled Pipeline End Termination Structure (PLET);
    - A gravity based / suction piled Sub-Sea Isolation Valve (SSIV);
    - A piled Cambo Tie-in structure (CTIS) at the WOSPS location;
    - Associated in-field flowlines, umbilicals, and jumpers, some of which will be up to 3.73 km in length.
- The worst case use of protective materials (40,000 tonnes of rock and 36 concrete mattresses);
- Production of hydrocarbons (crude oil and gas) via the new FPSO (crude oil to be exported by tanker) and gas to be exported via the WOSPS gas pipeline. The field has a projected 25 year life, with first oil anticipated in 2025;
- The discharge of produced water with an oil content of 15 mg/l or less measured on a monthly average basis.

Response summary

Marine Scotland Science (MSS) previously provided advice on an Environmental Statement (D/4240/2019) which was submitted in 2019 in accordance with the Offshore Petroleum Production and Pipelines (Assessment of Environmental Effects) Regulations 1999 (as amended). This application (D/4261/2021) is now required due to the introduction of new regulations (The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020). The revised application also contains a number of amendments to the original proposal.

The ES is considered to be of a good standard and appropriate for the nature of this development. The document is well thought out and uses a logical process to identify potential impacts and describes appropriate mitigation. The assessment addresses MSS areas of interest well and is aligned with the policies and objectives of Scotland's National Marine Plan.

MSS would advise that the ES is acceptable for a project of this nature.

MSS welcome that SPE have committed to conducting a trenching and fisheries risk assessment, with a view to address potential interactions with fishing gear down to 800 m water depth. MSS advise that the risk assessment takes account of foreign fishing vessel activity which is not represented in the Scottish Government landings statistics, potential future changes to regulatory restrictions and potential changes to fishing effort within the 25 year life of the development, particularly as species move into deeper, colder waters as highlighted in section 4.3.3.

MSS also welcomes that SPE have considered additional mitigation for the polyester ropes of the FPSO and understand the constraints presented. It is advised the Scottish Fishermen's Federation (SFF) are consulted further to ensure the mooring lines are appropriately charted on Kingfisher / Fish Safe. Consideration should be given to advanced notification of these potential hazards, given the time lag highlighted by SFF of six months.

Contradictory statements are made throughout the document with regards the worst case amount of rock dump required. Section 3.8 refers to 40,000 tonnes and section 7.1.1. and 7.1.4. refer to 20,000 tonnes. Table 7.1 also appears incorrect. It is not clear to MSS why the amount of rock dump has increased from the original Cambo application (D/4240/2019), particularly as the proposal now considers the pipeline being trenched and buried down to the 800 m water depth. MSS advise this is clarified.

MSS would like to understand whether a Health and Safety Executive granted 'Offshore Development Area' would be appropriate for this development during the construction phase.

Overall, the mitigation proposed appears proportionate and appropriate to minimise potential impacts of the project.

<u>Section comments</u>

Option selection and project description

The ES acknowledges that this project includes a section of pipeline (~25 km long), routed through a Nature Conservation Marine Protected Area (NCMPA) (The Faroe Shetland Sponge Belt) but fully describes alternative options and using high quality site survey information, accurately demonstrates the limited potential for impact on the NCMPA. It is unfortunate that infrastructure sharing opportunities with other potential or existing developments are not considered feasible and is advised that the Department satisfy themselves in this regard. It is also noted that the only feasible oil export route (due to cost effectiveness and flow assurance issues) is to tanker oil from the development, which is likely to carry an inherently higher risk of an accidental event, particularly given the environmental conditions experienced at this exposed location. In the event that offloading is disrupted by weather, will production be curtailed / shut in? MSS welcome that the SPE are actively pursuing options for future electrification of the FPSO and that the revised design will allow for this. It is not clear from the application whether any alternatives were explored for the fibre optic cable choice. On balance, MSS consider the option of an FPSO and the proposed gas export route with the stated mitigation an appropriate option.

It appears from the description that the pipeline will first be laid then jet trenched (potentially from the WOSPS tie in point down to 800 m water depth). MSS welcome that guard vessel provision is now proposed where the exposed pipeline on the seabed may pose a hazard to commercial fishing operations during laying. MSS advise that appropriate guard vessel coverage is discussed with SFF and that due consideration is given to timing of this operation to avoid the peak fishing season. Will a post lay survey be conducted along the pipeline to ensure no hazards remain as a result of trenching activities? An appropriate reference in support of the likely sediment plume from jet trenching activities is advised in section 7.1.3.

MSS welcome that CAN-Ductors are proposed where technically feasible, and that these will limit the volume of discharged water based mud and cuttings and associated cement deposits. MSS note that the Non-Technical Summary and the commitments register state that the pumping of cement will cease when cement returns are observed by ROV at the seabed, however, section 3.5.4. states "An ROV will monitor the return flow at the seabed and all attempts will be made to identify returns and reduce the pumped slurry volume when possible and safe to do so". MSS advise this position is clarified. Will the pumping of cement also stop in the event that returns are observed by ROV from the 20" × 13⅜" casing cement job? What is the worst case volume of cement that will be

discharged when using the CAN-Ductor? How will cement returns be monitored during periods of inclement weather / poor visibility. It is advised this is addressed at the appropriate permitting stage.

In response to the original application (D/4240/2019), MSS requested that the project considered locating the WICDS, PLET and SSIV within the Cambo FPSO safety zone. This has been addressed and MSS understand the limitations presented and are satisfied with the fact that these structures will be within the anchor pattern of the FPSO and any approaching fishing vessel would be identified and warned of the potential hazard by the ERRV.

It is noted that no wellhead protective structures are to be used, however, SFF have advised that 'fishing friendly structures' as opposed to 'overtrawlable structures' are normally recommended for wells within 500 m safety zones. Can SPE confirm that the well heads are designed to be 'fishing friendly'? It is noted that anchors and chains will now be wet stored for a period of up to two months. It is not clear from the application whether guard vessel provision is proposed for this and it is advised that this is discussed further with SFF to ensure that the pre-laid anchors and chains to not pose a hazard to other sea users.

It is noted that this application now includes a 25 km fibre optic cable from the FPSO to the SHEFA-2 cable. The environmental data presented does not appear to provide coverage of the proposed installation route and MSS advise this is considered further. MSS advise the route of the proposed cable is shown in a Figure. It is understood that the cable will be laid directly on the seabed. Will the cable be stable on the seabed and protected from any fishing interactions? Is any protective material for this cable envisaged?

MSS notes that the produced water (PW) management option chosen for the development is overboard discharge with an oil content of 15 mg/l or less measured on a monthly average basis. It is highlighted that the base case for any new developments in line with OSPAR 2001/1 should zero discharge of oil in PW, however, it is acknowledged that issues with reservoir souring and weak rock formations are provided in this case as justification for overboard discharge. It is advised the Department satisfy themselves with the technical justification provided and that all alternative options have been explored. MSS welcome that all discharges will be maintained within regulatory limits and that the Risk Based Approach (RBA) threshold for PW is likely to be met.

The full assessment of the chemicals to be used in the well completion, future drilling and any pipeline commissioning is, correctly, deferred until the production of the relevant permit submissions. However, a high level overview of the proposed chemical use is provided.

Decommissioning is discussed at a fairly high level. MSS advise that the application specifically demonstrates whether 'in theory' a 10" concrete coated pipeline could be removed, should this be the preferred outcome of the comparative assessment.

The non-technical summary is well written for the non-technical reader and is logically presented.

Environmental Description

The environmental section is of a good standard and is supported by up-to-date (2019), good quality, intelligently designed, site survey information and use of other historical site specific surveys and regional site surveys. A summary is provided of the survey methods used and design of the surveys, which is welcomed, with the location of environmental sampling stations clearly shown on a map. Good use has been made of images and figures throughout the document. As mentioned above, further consideration of available environmental data is advised in support of the fibre optic cable installation.

Significant parts of the physical environment are, as would be expected, described on the basis of generic data. MSS are satisfied that the plankton, benthos and fish spawning / nursery information sections are adequately constructed with good use of photographs and figures and information from the Marine Scotland National Marine Plan interactive.

The commercial fisheries section is well constructed and makes good use of figures, however, tabulated data in addition to the Figures are advised for clarity. 'Within year' seasonality of fishing effort (by month) is also advised as this may highlight additional mitigation opportunities, particularly with regards to timing of pipelaying operations in shallower waters.

Other sea users and oil and gas infrastructure are identified and information in these sections is well presented. MSS welcome that an updated Vessel Traffic Study is proposed in support of future permit applications. The EMODNET Human Activities data portal now contains useful up to date shipping information based on the

Automatic Identification System (AIS). Further information is available here: https://www.emodnet-humanactivities.eu/view-data.php.

Conservation areas both offshore and onshore appear to be correctly identified with a useful description provided of the conservation interest in each area. Some errors are present regarding the distances to protected areas which is highlighted below.

Environmental Impact Assessment Process

MSS agree with the list of potential impacts and pathways identified in this ES and the assessment process is defined, logical and well presented. MSS welcome the level of consultation that has been held regarding this project and that an ENVID workshop has been conducted. Appendix 4 summarises issues raised by stakeholders which is very useful and details how any concerns have been addressed.

The physical presence, atmospheric emissions, discharges to sea, and accidental events sections are considered to be appropriately constructed. MSS welcome the engagement that the operator has had with the SFF and the site specific fishing intensity study conducted in 2019.

MSS welcome that an approved Offshore Pollution Emergency Plan (OPEP) / Temporary Operations Oil Pollution Emergency Plan (TOOPEP) will be in place prior to any development commencing.

The potential cumulative and transboundary impacts are identified in each section which is deemed adequate for the purposes of this ES.

General comments

Section 3.6.1 (Trees, Jumpers and Manifolds) – Table 3.9 – The table refers to the footprint of 'associated protection'. Should the table therefore include the footprint associated with the worst case rock dump and mattress protection?

Section 3.7.2. (Mooring and installation) – Figure 3.8 - MSS advise that the 500 m safety zone in place at the WOSPS tie in point is also shown in the Figure as this is not clear from the application.

Section 3.7.9. (Sand production and disposal) – Can SPE detail what quantities of sand are likely to be discharged? Will this be discharged at the water surface from the FPSO?

Section 4.3.3. (Fish and shellfish) – It is highlighted that ICES 49E6 is also recognised as a low intensity cod spawning area by Ellis *et al*, 2012.

MSS advise reference to the following paper (José M. González-Irusta, Peter J. Wright; Spawning grounds of Atlantic cod (*Gadus morhua*) in the North Sea, ICES Journal of Marine Science, Volume 73, Issue 2, 1 February 2016, Pages 304–315, https://doi.org/10.1093/icesjms/fsv180) which provides an update to the cod spawning areas and describes the area as an 'unfavourable' cod spawning area.

Section 4.5.2. (Offshore conservation areas) – At its closest point (the WOSPS tie in point) the proposed pipeline route appears to be located only 55 km from the West Shetland Shelf MPA and some 63 km from the North-West Orkney MPA. Distances from the development to all SAC's described appear to be incorrect.

The text in this section still refers to the Seas off Foula as a proposed SPA, however, this is now designated.

Section 4.6.1. (Other Users of the Sea) - MSS advise that references to the work by 'Kafas *et al,* 2012' are now replaced with a visual representation of the new aggregated VMS fishing effort data sets for 2009 - 2016 which are available on the National Marine Plan Maps interactive web site (NMPi). The data are split into three groups of fishing method: bottom trawls, dredges and crustaceans caught by bottom trawl (i.e. *Nephrops*). The *Nephrops* and crustaceans layer is a subset of the dredges layer but also includes data for 2017. Further information may be obtained here http://marine.gov.scot/node/12832.

In addition, MSS advise visual representation of the recently added nine new spatial layers to the National Marine Plan interactive (NMPi) showing changes over the last five years of published statistics for:

1. tonnage for demersal, pelagic and shellfish species;
2. value (£) for demersal, pelagic and shellfish species;
3. effort (days) (by UK vessels >10m length) for demersal active (bottom trawls, dredges etc.); pelagic active (pelagic trawls, purse seines etc.); and passive (pots/creels, gillnets etc.).

Further details are available here: http://marine.gov.scot/node/12674

The 2009 - 2016 VMS fishing effort data set and the statistics map layers (1, 2 and 3 above) may be viewed on the NMPi web site: https://marinescotland.atkinsgeospatial.com/nmpi/.

It is not clear why 2012 data is specifically referred to when discussing foreign fishing vessel activity.

The section describes the total effort of all three types of gears within the study area between 2015 and 2019 to be 5,805 days, however, MSS calculate this to be 5,817 days.

Figures 4.33, 4.34, 4.36 and 4.37 appear to show *total* figures for the period 2015 to 2019 not *average* figures as the chart titles suggest.

MSS calculate the combined pelagic sales value from all ICES rectangles considered between 2015 and 2019 to be £12,020,796 not £12,021,909. Likewise, MSS calculate the shellfish sales value from within 50E6, 49E5 and 49E6 to be £550,922 not £551,102.

Section 4.6.2. (Aquaculture) – The section states that in 2019 no shellfish were produced. MSS advise this should read "no oysters and scallops were produced".

Figure 4.38 - MSS recommend removal of all categories from this map with the exception of 'Active seawater finfish', 'Active shellfish' and 'Shellfish Water Protected Areas'. The remaining categories are either inactive / deregistered or located in freshwaters and therefore not likely to be impacted.

Section 4.6.4. (Shipping) – Should Figure 4.40 refer to the 2019 Anatec report?

Section 6.3. (Assessment of effects and their significance) – Citations included in this section are not listed in the references section.

Section 7.1.2. (Infield infrastructure and associated risers, umbilicals and flowlines) – It is not clear to MSS how SPE have arrived at a figure of 600 m^3 for the bottom chain disturbance. If 120 m of bottom chain disturbs a 10 m corridor should this not equate to 1,200 m^2 per chain?

Seabed take – the section states "..once the Cambo Field is decommissioned, all subsea infrastructure placed on the seabed will be removed again, after which habitats and associated communities will recover over time". Does this include protective materials such as rock dump?

Section 7.1.3. (Potential effects on seabed communities) – It would be useful for the section to define what is meant by 'siltation changes 'light'. FEAST provides a definition of this.

Section 8.3. (Wider scale impacts) – Should annual flaring from the proposed Development (2,340 tonnes of CO_2 equivalents per year on average over the life of field) not account for 0.078% rather than 0.082% of the overall flaring on the UKCS?

Section 9.2.1. (Physical extent of discharges) – The section highlights differences between the cuttings generated from this operation and the SERPENT study at the Rosebank location, but it not clear how these differ.

The section would also benefit from detailing what volumes of cement were discharged in association with the Cambo 4 well, where cement deposition was observed within 50 m of the well.

Section 11.1.5. (Underwater sound from piling during installation of the Cambo tie-in structure) – A citation for 'Betke (2008)' is not listed in the references section.

Section 11.1.6. (Underwater sound generated by the FPSO) A citation for 'Erbe *et al*, (2013)' is not listed in the references section.

Section 14.1. (Physical presence) – The section still refers to consideration of sonar reflectors for the polyester mooring ropes, which should now be updated.

Survey requests

MSS would like to request a copy of the following surveys / reports cited in this submission for our archive. Please note that survey reports held by Marine Scotland may be made publicly available and published on the Marine Scotland website:

- MMT, 2019. *Cambo Field development survey. Geophysical, benthic and geotechnical site and route survey. August-September 2018.* Report to Siccar Point Energy.
- Xodus, 2019. *Cambo fishing intensity study (Phase I).* Report No: L-100528-S00-REPT-001. Rev 02, 9 January 2019.

Please do not hesitate to contact MS.PON15@gov.scot should anything in this response be unclear.

[redacted]

[redacted]

Marine Environmental Advisor / Offshore Energy Environmental Advice
Marine Scotland - Science

16/7/21

marinescotland

[redacted]
MS.PON15@gov.scot

Scottish Government
Riaghaltas na h-Alba
gov.scot

EMT
BEIS
Aberdeen

MARINE SCOTLAND SCIENCE RESPONSE

DRA-877
DR-2155-0 (Version 1)
PETROFAC Screening Direction(s) to Undertake Drilling Operations 204/10a-P1 planned well Cambo

Marine Scotland Science (MSS) do not object to a Screening Direction being issued to install the CAN-Ductor for the 204/10a-P1 well. Noting that no drilling will take place.

MSS would like to request a copy of the following survey(s) / report (s) cited in this submission for our archive. Please note that survey reports held by MSS may be made publicly available and published on the Marine Scotland website:

- MMT (2019). Cambo Field Development Survey. Geophysical, Benthic and Geotechnical Site and Route Survey. August to September 2018. Report to Siccar Point Energy. MMT Sweden AB, 102998-MMT-SPE-REP-ENVIRO, Revision B March 2019;
- FSLTD (2011). Hess Cambo Environmental Survey UKCS Block 204/5. Fugro Survey Ltd Report NO 00650V2.0;
- Roterman C & Jones D (2009). Rosebank Visit Report Including Cambo Sediment Analysis. June and July 2009. SERPENT Project Report;
- Gardline (2001). UKCS 204/10 Site Survey Report. Report to Amerada Hess Ltd. November 2001.

General comments:

The application would benefit from a contents page.

Section 3.1.1. (Summary of site and environmental surveys) – MSS advise that the output from the side scan sonar would be a useful addition to demonstrate the location of any significant seabed features.

MSS advise that Figure 3.2 and 3.3 are labelled with the environmental sampling station number to allow cross reference with the images provided in Figure 3.4.

Section 3.5.4. (Mariculture) – MSS advise that the location of Shellfish Water Protected areas is also highlighted and any potential impacts on these discussed. Further information on Shellfish Water Protected Areas is available here: (https://www.gov.scot/policies/water/protected-waters/). MSS advise that the location of aquaculture sites and Shellfish Water Protected Areas are shown on a map.

Section 4.1. (Background) – In accordance with Oil and Gas Marine Planning Policy 1, MSS advise the application specifically states whether the operation will be conducted in accordance with the principles of Best Environmental Practice (BEP) and Best Available Technology (BAT).

Section 4.2.3. (CAN-Ductor and transponders on the seabed) - It is highlighted that Under Regulation (EU) 2016/2336, bottom trawling in waters deeper than 800 m is prohibited in international waters of the Northeast

Atlantic. Fishing activity from foreign fishing fleets may still be take place at depths greater than 800 m where specific species are being targeted by other fishing methods. It is advised this is highlighted.

Section 4.2.4. (Mitigation measures) – MSS welcome use of the CAN-Ductor technology and that the operator has engaged with fishing representatives who raised no objection to this operation. For clarity were these discussions with the Scottish Fishermen's Federation (SFF)? It is understood that there may be a lag between notification of the infrastructure to Kingfisher / Fish Safe and this information being available to mariners. Has this risk also been considered?

MSS advise that a conclusion is provided which summarises the document and clarifies whether overall the environmental risks are deemed acceptable.

For future applications:

It is advised that references to the work by 'Kafas et al, 2012' are now replaced with a visual representation of new aggregated VMS fishing effort data sets for 2009 - 2016 which are now available on the National Marine Plan Maps interactive web site (NMPi). The data are split into three groups of fishing method: bottom trawls, dredges and crustaceans caught by bottom trawl (i.e. Nephrops). The Nephrops and crustaceans layer is a subset of the dredges layer but also includes data for 2017. Further information may be obtained here http://marine.gov.scot/node/12832.

The assessment of this application was conducted by [redacted]. Any correspondence should be sent by email to MS.PON15@gov.scot.

Regards

[redacted]
Offshore Environmental and Chemical Coordinator
26 July 2021

From:	ukop@ogauthority.co.uk
To:	MS PON15
Subject:	UKOP: DRA/877 DR/2155/0 (Version 1) Folder Ref: 01.01.01.01-4785U, Screening direction(s) under the EIA regulations Screening direction for drilling operations: Full Review Delivery
Date:	16 July 2021 14:09:19

Oil and Gas Authority (OGA)

UKOP: UK Energy Portal

For the attention of: FRS Generic Account, [redacted]

Subject: UKOP: DRA/877 DR/2155/0 (Version 1) Folder Ref: 01.01.01.01-4785U, Screening direction(s) under the EIA regulations Screening direction for drilling operations: Full Review Delivery

A full review requiring your response has recently been delivered to your workbasket. Use the URL below to login to your workbasket. There you will be able to manage and respond to this review.

Use the following URL **https://itportal.ogauthority.co.uk** to visit the UKOP (UK Energy Portal) login page.

For assistance or support email: ukop@ogauthority.co.uk or telephone 0300 067 1682.

From: [redacted] (MARLAB) on behalf of MS PON15
To: [redacted] (MARLAB); [redacted]
Subject: "DRA-878 DR-2157-0 (Version 1) PETROFAC Screening Direction(s) to Undertake Drilling Operations 204/10a-P10 planned well Cambo EA Justification (EAJ) (MAT)" (A34164342), "DRA-878 DR-2157-0 (Version 1) PETROFAC Screening Direction(s) t
Date: 29 July 2021 14:27:28
Attachments: ObjRef.obr

Due 19/08

On access :)

marinescotland

[redacted]
MS.PON15@gov.scot

Scottish Government
Riaghaltas na h-Alba
gov.scot

EMT
BEIS
Aberdeen

MARINE SCOTLAND SCIENCE RESPONSE

DRA-878
DR-2157-0 (Version 1)
PETROFAC Screening Direction(s) to Undertake Drilling Operations 204/10a-P10 planned well Cambo

Marine Scotland Science (MSS) do not object to a Screening Direction being issued to install the CAN-Ductor for the 204/10a-P10 well. Noting that no drilling will take place.

MSS would like to request a copy of the following survey(s) / report (s) cited in this submission for our archive. Please note that survey reports held by MSS may be made publicly available and published on the Marine Scotland website:

- MMT (2019). Cambo Field Development Survey. Geophysical, Benthic and Geotechnical Site and Route Survey. August to September 2018. Report to Siccar Point Energy. MMT Sweden AB, 102998-MMT-SPE-REP-ENVIRO , Revision B March 2019;
- FSLTD (2011). Hess Cambo Environmental Survey UKCS Block 204/5. Fugro Survey Ltd Report NO 00650V2.0;
- Roterman C & Jones D (2009). Rosebank Visit Report Including Cambo Sediment Analysis. June and July 2009. SERPENT Project Report;
- Gardline (2001). UKCS 204/10 Site Survey Report. Report to Amerada Hess Ltd. November 2001.

General comments:

The application would benefit from a contents page.

Section 3.1.1. (Summary of site and environmental surveys) – MSS advise that the output from the side scan sonar would be a useful addition to demonstrate the location of any significant seabed features.

Section 3.5.4. (Mariculture) – MSS advise that the location of Shellfish Water Protected areas is also highlighted and any potential impacts on these discussed. Further information on Shellfish Water Protected Areas is available here: (https://www.gov.scot/policies/water/protected-waters/). MSS advise that the location of aquaculture sites and Shellfish Water Protected Areas are shown on a map.

MSS advise that a conclusion is provided which summarises the document and clarifies whether overall the environmental risks are deemed acceptable.

For future applications:

It is advised that references to the work by 'Kafas et al, 2012' are now replaced with a visual representation of new aggregated VMS fishing effort data sets for 2009 - 2016 which are now available on the National Marine Plan Maps interactive web site (NMPi). The data are split into three groups of fishing method: bottom trawls, dredges and crustaceans caught by bottom trawl (i.e. Nephrops). The Nephrops and crustaceans layer is a

subset of the dredges layer but also includes data for 2017. Further information may be obtained here http://marine.gov.scot/node/12832.

The assessment of this application was conducted by [redacted]. Any correspondence should be sent by email to MS.PON15@gov.scot.

Regards

[redacted]
Offshore Environmental and Chemical Coordinator
05 August 2021

From:	ukop@ogauthority.co.uk
To:	MS PON15
Subject:	UKOP: DRA/878 DR/2157/0 (Version 1) Folder Ref: 01.01.01.01-4808U, Screening direction(s) under the EIA regulations Screening direction for drilling operations: Full Review Delivery
Date:	29 July 2021 09:31:31

Oil and Gas Authority (OGA)

UKOP: UK Energy Portal

For the attention of: FRS Generic Account, [redacted]

Subject: UKOP: DRA/878 DR/2157/0 (Version 1) Folder Ref: 01.01.01.01-4808U, Screening direction(s) under the EIA regulations Screening direction for drilling operations: Full Review Delivery

A full review requiring your response has recently been delivered to your workbasket. Use the URL below to login to your workbasket. There you will be able to manage and respond to this review.

Use the following URL **https://itportal.ogauthority.co.uk** to visit the UKOP (UK Energy Portal) login page.

For assistance or support email: ukop@ogauthority.co.uk or telephone 0300 067 1682.

marinescotland

[redacted]
MS.PON15@gov.scot

Scottish Government
Riaghaltas na h-Alba
gov.scot

EMT
BEIS
Aberdeen

MARINE SCOTLAND SCIENCE RESPONSE

DRA-879
DR-2158-0 (Version 1)
PETROFAC Screening Direction(s) to Undertake Drilling Operations 204/10a-P11 planned well Cambo

Marine Scotland Science (MSS) do not object to a Screening Direction being issued to install the CAN-Ductor for the 204/10a-P11 well. Noting that no drilling will take place.

MSS would like to request a copy of the following survey(s) / report (s) cited in this submission for our archive. Please note that survey reports held by MSS may be made publicly available and published on the Marine Scotland website:

- MMT (2019). Cambo Field Development Survey. Geophysical, Benthic and Geotechnical Site and Route Survey. August to September 2018. Report to Siccar Point Energy. MMT Sweden AB, 102998-MMT-SPE-REP-ENVIRO , Revision B March 2019;
- FSLTD (2011). Hess Cambo Environmental Survey UKCS Block 204/5. Fugro Survey Ltd Report NO 00650V2.0;
- Roterman C & Jones D (2009). Rosebank Visit Report Including Cambo Sediment Analysis. June and July 2009. SERPENT Project Report;
- Gardline (2001). UKCS 204/10 Site Survey Report. Report to Amerada Hess Ltd. November 2001.

General comments:

The application would benefit from a contents page.

Section 3.1.1. (Summary of site and environmental surveys) – MSS advise that the output from the side scan sonar would be a useful addition to demonstrate the location of any significant seabed features.

Section 3.5.4. (Mariculture) – MSS advise that the location of Shellfish Water Protected areas is also highlighted and any potential impacts on these discussed. Further information on Shellfish Water Protected Areas is available here: (https://www.gov.scot/policies/water/protected-waters/). MSS advise that the location of aquaculture sites and Shellfish Water Protected Areas are shown on a map.

MSS advise that a conclusion is provided which summarises the document and clarifies whether overall the environmental risks are deemed acceptable.

For future applications:

It is advised that references to the work by 'Kafas et al, 2012' are now replaced with a visual representation of new aggregated VMS fishing effort data sets for 2009 - 2016 which are now available on the National Marine Plan Maps interactive web site (NMPi). The data are split into three groups of fishing method: bottom trawls, dredges and crustaceans caught by bottom trawl (i.e. Nephrops). The Nephrops and crustaceans layer is a

subset of the dredges layer but also includes data for 2017. Further information may be obtained here http://marine.gov.scot/node/12832.

The assessment of this application was conducted by [redacted]. Any correspondence should be sent by email to MS.PON15@gov.scot.

Regards

[redacted]
Offshore Environmental and Chemical Coordinator
05 August 2021

From:	ukop@ogauthority.co.uk
To:	MS PON15
Subject:	UKOP: DRA/879 DR/2158/0 (Version 1), Screening direction(s) under the EIA regulations Screening direction for drilling operations: Full Review Delivery
Date:	29 July 2021 09:18:16

Oil and Gas Authority (OGA)

UKOP: UK Energy Portal

For the attention of: FRS Generic Account, [redacted]

Subject: UKOP: DRA/879 DR/2158/0 (Version 1), Screening direction(s) under the EIA regulations Screening direction for drilling operations: Full Review Delivery

A full review requiring your response has recently been delivered to your workbasket. Use the URL below to login to your workbasket. There you will be able to manage and respond to this review.

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For assistance or support email: ukop@ogauthority.co.uk or telephone 0300 067 1682.

From: [redacted]
To: [redacted]
Subject: FW: MSS Hot Topics w/c 16 August
Date: 13 August 2021 15:43:37
Attachments: MSSB Hot Topics - 16 August 2021.docx

Hi there,
For information, MSSB hot topics for the coming week attached. I will endeavour to email these on to you every Friday/ early Monday.

[redacted]

[redacted]

[redacted]

[redacted]

From: [redacted]gov.scot>
Sent: 13 August 2021 13:39
To: [redacted]gov.scot>; [redacted]@gov.scot>; Director of Marine Scotland Mailbox <Directormarinescotland@gov.scot>; [redacted]gov.scot>; [redacted]@gov.scot>; [redacted]gov.scot>; [redacted]gov.scot>; [redacted]@gov.scot>; [redacted]gov.scot>; [redacted]gov.scot>; [redacted]@gov.scot>
Cc: [redacted] (MARLAB) [redacted]gov.scot>; [redacted]gov.scot>; [redacted] (MARLAB) [redacted]@gov.scot>; [redacted] (MARLAB) [redacted]@gov.scot>; [redacted] (MARLAB) [redacted]@gov.scot>; [redacted] (MARLAB) [redacted]@gov.scot>; [redacted] (MARLAB) [redacted]@gov.scot>; [redacted] (MARLAB) [redacted]@gov.scot>; [redacted] (MARLAB) [redacted]@gov.scot>; [redacted]
Subject: MSS Hot Topics w/c 16 August

Dear all,

Please find attached next week’s forward look and hot topics for MSS.

Kind regards

[redacted]

Hot Topics (w/c 16th August 2021)

Who	Subject	Issue	Next Steps
[redacted]			
	[redacted]	[redacted]	[redacted]
			[redacted]
			[redacted]
[redacted]	[redacted]	[redacted]	
		[redacted]	
		[redacted]	[redacted]
		[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	Provision of scientific/ technical advice to BEIS on Cambo oil field environmental impact assessment [redacted]	Advice part of routine advice provision to BEIS. Energy Directorate made aware of this specific advice due to current media/ stakeholder attention. Also assisting DECC with FOI on Cambo [redacted]	Continue comms with Energy Directorate. [redacted]
[redacted]	[redacted]	[redacted]	[redacted]

	[redacted]	[redacted]	[redacted]
[redacted]			
	[redacted]	[redacted]	[redacted]
[redacted]			

[redacted]

From: [redacted] (MARLAB)
To: [redacted]
Cc: [redacted]
Subject: RE: cambo
Date: 13 July 2021 13:18:00

Yes if you can let me know s soon as you can [redacted] that would be great.

Thanks

[redacted]

Please contact by email. Currently working from home until further notice

[redacted] B.Tech, PIEMA I Offshore Energy Environmental Advice (OEEA) Marine Environmental Advisor I Marine Scotland I

Scottish Government I Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

T: [redacted]
S/B: +44 (0)131 244 2500
www.gov.scot/marinescotland

SUPPORTING 20/21 COASTS & WATERS

From: [redacted]@gov.scot>
Sent: Tuesday, 13 July 2021 09:50
To: [redacted]@gov.scot>
Subject: RE: cambo

Morning [redacted]

Not sure how busy I'll be I guess it just depends on what comes in, I'm doing a big drilling application currently so will let you know where I'm at once its finished ☺

Thanks,

[redacted]

From: [redacted] gov.scot>
Sent: 08 July 2021 16:00
To: [redacted] @gov.scot>
Cc: [redacted] MARLAB) [redacted] @gov.scot>; [redacted] @gov.scot>
Subject: RE: cambo

Hi [redacted]

No problem at all. I managed to have a brief look at it whilst on the boat too. I was hoping it would be a carbon copy of the last one, but I see there are a quite a few changes. I'll try to combine all of our comments next week. Thanks for having a look at it for me.

[redacted]

[redacted]

[redacted]Please contact by email. Currently working from home until further notice*

[redacted] PIEMA | Offshore Energy Environmental Advice (OEEA) Marine Environmental Advisor | Marine Scotland |

Scottish Government | Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

T: [redacted]
S/B: +44 (0)131 244 2500
www.gov.scot/marinescotland

SUPPORTING 20/21 COASTS & WATERS

From: [redacted]@gov.scot>
Sent: Thursday, 8 July 2021 15:53
To: [redacted] (MARLAB) [redacted]@gov.scot>
Subject: RE: cambo

H[redacted]

[redacted]

I had a go at comparing the new and the old application but didn't realise it was 500 pages long, [redacted] had said that [redacted] had told her it was a half day of work but it definitely wasn't [redacted] it's quite difficult to compare two pdfs at a time but I got about 100 pages in with the time I had spare but I was also super busy when you were away so that's all I managed I'm afraid, sorry! I've saved what I've done so far on eRDM though.

Thanks,

[redacted]

From: [redacted] (MARLAB) [redacted] @gov.scot>
Sent: 08 July 2021 15:19
To: [redacted] @gov.scot>
Subject: cambo

Hi [redacted]

[redacted] I just wanted to touch base with you to see how you got on with the Cambo application whilst I was away?

Cheers

[redacted]

Please contact by email. Currently working from home until further notice

[redacted] B.Tech, PIEMA | Offshore Energy Environmental Advice (OEEA) Marine Environmental Advisor | Marine Scotland |

Scottish Government | Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

T: +[redacted]
S/B: +44 (0)131 244 2500
www.gov.scot/marinescotland

SUPPORTING 20/21 COASTS & WATERS

From: [redacted]
To: [redacted]
Cc: [redacted] (MARLAB); [redacted] (Energy)
Subject: RE: Cambo oil field environmental statement - copy of MSS comments.
Date: 12 August 2021 12:31:20

Much appreciated [redacted]

We may come back to you if we require further information on this.

[redacted]
Head of Oil and Gas
Oil and Gas

Please note that I am now working from home and available via mobile [redacted]

From: [redacted]gov.scot>
Sent: 12 August 2021 12:30
To: [redacted]gov.scot>
Cc: [redacted]@gov.scot>
Subject: RE: Cambo oil field environmental statement - copy of MSS comments.

Sorry [redacted] sent a link to the old version.

Correct version here if you need it. D-4261-2021-Cambo ES (1) - Siccar Point Energy - Marine Scotland Comments (A34041317)

From: [redacted]
Sent: 12 August 2021 11:57
To: [redacted]@gov.scot>
Cc: [redacted] (MARLAB)[redacted]@gov.scot>
Subject: Cambo oil field environmental statement - copy of MSS comments.

Hi [redacted]

[redacted]

Since there is a bit of media attention around the Cambo oil field at the moment, I just wanted to flag to you that the Environmental Impact Assessment for field development was recently reviewed by our group and we have submitted a response to the consultation has been sent on to BEIS.

A copy of the response that [redacted] (cc'd) put together is here:
D/4240/2019 - SICCAR - Cambo Environmental Statement - Marine Scotland Comments (A26499557)

There have been a few further emails/correspondence which we can share if of use/interest.

Best wishes,

[redacted]

From: [redacted] (MARLAB)
To: [redacted]
Cc: [redacted] (MARLAB); [redacted]
Subject: RE: cambo
Date: 08 July 2021 16:00:01

Hi [redacted],

No problem at all. I managed to have a brief look at it whilst on the boat too. I was hoping it would be a carbon copy of the last one, but I see there are a quite a few changes. I'll try to combine all of our comments next week. Thanks for having a look at it for me.

[redacted]

Please contact by email. Currently working from home until further notice
[redacted] B.Tech, PIEMA | Offshore Energy Environmental Advice (OEEA) Marine Environmental Advisor | Marine Scotland |
Scottish Government | Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
T: [redacted]
S/B: +44 (0)131 244 2500
www.gov.scot/marinescotland

SUPPORTING 20/21 COASTS & WATERS

From: [redacted] gov.scot>
Sent: Thursday, 8 July 2021 15:53
To: [redacted] (MARLAB) [redacted] @gov.scot>
Subject: RE: cambo

Hi [redacted]

I had a go at comparing the new and the old application but didn't realise it was 500 pages long, [redacted] had said that [redacted] had told her it was a half day of work but it definitely wasn't [redacted] it's quite difficult to compare two pdfs at a time but I got about 100 pages in with the time I had spare but I was also super busy when you were away so that's all I managed I'm afraid, sorry! I've saved what I've done so far on eRDM though.

Thanks,

[redacted]

From: [redacted] @gov.scot>
Sent: 08 July 2021 15:19
To: [redacted] @gov.scot>
Subject: cambo

Hi [redacted]

[redacted] I just wanted to touch base with you to see how you got on with the Cambo application whilst I was away?

Cheers

[redacted]
Please contact by email. Currently working from home until further notice
[redacted] B.Tech, PIEMA | Offshore Energy Environmental Advice (OEEA) Marine Environmental Advisor | Marine Scotland |
Scottish Government | Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
T: [redacted]
S/B: +44 (0)131 244 2500
www.gov.scot/marinescotland

SUPPORTING 20/21 COASTS & WATERS

From: [redacted]
To: [redacted] (MARLAB)
Subject: RE: Enviro statement checking
Date: 11 June 2021 13:24:00

Sounds good.

From: [redacted] MARLAB) [redacted] @gov.scot>
Sent: 11 June 2021 13:23
To: [redacted] @gov.scot>
Subject: RE: Enviro statement checking

Hiya,

I might send [redacted] the Cambo ES's for verification checks if that OK with her. She could just get as much or as little as she could done.

[redacted]

Please contact by email. Currently working from home until further notice
[redacted] B.Tech, PIEMA | Offshore Energy Environmental Advice (OEEA) Marine Environmental Advisor | Marine Scotland |
Scottish Government | Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
T: [redacted]
S/B: +44 (0)131 244 2500
www.gov.scot/marinescotland

SUPPORTING 20/21 COASTS & WATERS

From: [redacted] @gov.scot>
Sent: 11 June 2021 13:10
To: [redacted] (MARLAB) [redacted] @gov.scot>
Subject: Enviro statement checking

Sounds like [redacted] should be ok to do the verification for you if the deadline is the 5th July. If you could just put a note in the email that you send her asking to make sure that she has got the ok from [redacted]

Thanks,

[redacted]

From: [redacted] (MARLAB)
To: [redacted]
Subject: RE: Enviro statement checking
Date: 11 June 2021 13:23:13

Hiya,

I might send [redacted] the [redacted] Cambo ES's for verification checks if that OK with her. She could just get as much or as little as she could done.

[redacted]

Please contact by email. Currently working from home until further notice
[redacted] B.Tech, PIEMA | Offshore Energy Environmental Advice (OEEA) Marine Environmental Advisor | Marine Scotland |
Scottish Government | Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
T: [redacted]
S/B: +44 (0)131 244 2500
www.gov.scot/marinescotland

SUPPORTING 20/21 COASTS & WATERS

From: [redacted] @gov.scot>
Sent: 11 June 2021 13:10
To: [redacted] (MARLAB) [redacted] @gov.scot>
Subject: Enviro statement checking

Sounds like [redacted] should be ok to do the verification for you if the deadline is the 5th July. If you could just put a note in the email that you send her asking to make sure that she has got the ok from [redacted]

Thanks,

[redacted]

From: [redacted] (MARLAB)
To: [redacted]
Subject: RE: [redacted]
Date: 16 August 2021 08:06:36

[redacted]

[redacted]

Caught snippets of the Cambo discussions whilst we have been away and I see you sent my comments on to [redacted] which is good. If you want to talk through any of it please shout.

[redacted]

Please contact by email. Currently working from home until further notice

[redacted] B.Tech, PIEMA I Offshore Energy Environmental Advice (OEEA) Marine Environmental Advisor I Marine Scotland I

Scottish Government I Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

T: [redacted]
S/B: +44 (0)131 244 2500
www.gov.scot/marinescotland

SUPPORTING 20/21 COASTS & WATERS

[redacted]

[redacted]

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marinescotland

Scottish Government
Riaghaltas na h-Alba
gov.scot

[redacted]
MS.PON15@gov.scot

EMT
BEIS
Aberdeen

MARINE SCOTLAND SCIENCE RESPONSE

SA-1452
GS-1264-0 (Version 1)
SICCAR: Consent to Undertake Geophysical Survey, Cambo, Shallow Drilling Operation

Marine Scotland Marine Laboratory has reviewed the information included in the above submission. There are no fish spawning sensitivities in the area of the shallow drilling operation, which is scheduled to last for 22 days between July and September 2021 and therefore Marine Scotland has no objection to the operation going ahead.

The assessment of this application was conducted by [redacted]. Any correspondence should be sent by email to MS.PON15@gov.scot.

Regards

[redacted]
Offshore Environmental and Chemical Coordinator
28 June 2021

[redacted] **(MARLAB)**

From: ukop@ogauthority.co.uk
Sent: 24 June 2021 08:14
To: MS PON15
Subject: UKOP: SA/1452 GS/1264/0 (Version 1) Folder Ref: 01.01.01.01-4737U, Application to carry out a Marine Survey Apply for Consent to Undertake a Geophysical Survey: Full Review Delivery

Oil and Gas Authority (OGA)

UKOP: UK Energy Portal

For the attention of: FRS Generic Account, [redacted]

Subject: UKOP: SA/1452 GS/1264/0 (Version 1) Folder Ref: 01.01.01.01-4737U, Application to carry out a Marine Survey Apply for Consent to Undertake a Geophysical Survey: Full Review Delivery

A full review requiring your response has recently been delivered to your workbasket. Use the URL below to login to your workbasket. There you will be able to manage and respond to this review.

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For assistance or support email: ukop@ogauthority.co.uk or telephone 0300 067 1682.

3rd Floor, H1
Hill of Rubislaw, Anderson Drive
Aberdeen, AB15 6BY
Tel: 01224 678008
info@siccarpointenergy.co.uk
www.siccarpointenergy.co.uk

SICCAR POINT ENERGY

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

4th June 2021

Dear Sir/Madam,

Siccar Point Energy E&P Ltd (SPE) as Licence Operator, in conjunction with co-venturer Shell UK Limited, are planning develop the Cambo Oil Field in Blocks 204/4a, 204/5a, 204/9a and 204/10a, in the West of Shetland region of the United Kingdom Continental Shelf (UKCS). SPE has submitted an application for consent to the Oil and Gas Authority in relation to the proposed Cambo Field Development.

In support of the planned offshore operations an environmental impact assessment was undertaken (in line with the Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020) and the findings presented in the Cambo Environmental Statement (ES) (D/4261/2021). Under Regulation 11(3)(a) SPE is required to serve you with a copy of the ES. The ES will be delivered to you via a secure file transfer process, from our consultants at Fugro.

This ES was submitted to the OPRED on 31st May 2021, and a submission notice was received on 2nd June 2021. Consultees have until 10th July 2021 to make representations regarding the application to the Secretary of State for Business, Energy and Industrial Strategy. All correspondence should refer to D/4261/2021. Comments on the statement may be sent in by letter or email and should be marked for the attention of:

Business Support Team
Department for Business, Energy and Industrial Strategy
Offshore Petroleum Regulator for Environment & Decommissioning
AB1 Building
Crimon Place
Aberdeen, AB10 1BJ
E-mail : BST@beis.gov.uk

Notice of the decisions of the Secretary of State and OGA decisions for the project will be published at: https://www.gov.uk/guidance/the-2020-eia-regulations#environmental-impact-assessments-eia where information on the Secretary of State's decision to agree to or refuse to agree to the grant of consent will also be made available.

Also, under Regulation 11(3)(a), SPE is obliged to serve you with the following documentation: a copy of the Regulation 11(1) Notice and a copy of the Summary of the Project notification letter submitted to OPRED. Please see attached.

Yours sincerely

[redacted]

[redacted]

HSE Manager

[redacted]@siccarpointenergy.co.uk)

THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020

NOTICE UNDER REGULATION 11(1)

Siccar Point Energy E&P Limited
Cambo Phase 1 Field Development
Environmental Statement dated 31 May 2021
D/4261/2021
02 June 2021

The Secretary of State for Business, Energy and Industrial Strategy ("the Secretary of State") hereby gives notice to Siccar Point Energy E&P Limited that the Secretary of State considers the following authorities to be likely to be interested in the project identified above due to their particular environmental responsibilities or their local or regional competence:

1. Joint Nature Conservation Committee
   Inverdee House
   Baxter Street
   Aberdeen
   AB11 9QA

   OIA@jncc.gov.uk.

2. Marine Scotland Science, Scottish Government
   Marine Laboratory
   375 Victoria Road
   Aberdeen
   AB11 9DB

   MS.PON15@gov.scot

3. Maritime and Coastguard Agency (Navigation Safety Branch)

   Bay 2/25
   Spring Place
   105 Commercial Road
   Southampton
   SO15 1EG

   Navigationsafety@mcga.gov.uk

4. Defence Infrastructure Organisation, Offshore Safeguarding (Safeguarding Team)

Building 49
Defence Infrastructure Organisation
Kingston Road
Sutton Coldfield
B75 7RL

DIO-Safeguarding-Offshore@mod.gov.uk

5. The Northern Lighthouse Board (Navigation Manager)

84 George Street
Edinburgh
EH2 3DA

navigation@nlb.org.uk

For and on behalf of the Secretary of State

[redacted]

.....

[redacted]
Environmental Manager
The Offshore Petroleum Regulator for Environment and Decommissioning
The Department for Business, Energy and Industrial Strategy

SICCAR POINT ENERGY

3rd Floor, H1
Hill of Rubislaw, Anderson Drive
Aberdeen, AB15 6BY
Tel: 01224 678008
info@siccarpointenergy.co.uk
www.siccarpointenergy.co.uk

Environmental Management Team
Offshore Petroleum Regulator for Environment & Decommissioning
AB1 Building
Wing C
Crimon Place
Aberdeen
AB10 1BJ

31st May 2021
BEIS ES reference Number: D/4261/2021

Dear Sir/Madam,

THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020 – Regulation 11

Summary of the project: Petroleum Production Licences P.1028 and P.1189: Cambo Field Development

I refer to the above-mentioned licence(s) and the potential field development mentioned above.

An application for consent has been submitted to the Oil and Gas Authority (OGA) for the above project on 25/10/2019. The summary of the project is accompanied by a copy of the Environmental Statement (ES) for the Cambo Field Development.

The primary nature of this project will be for the development of the Cambo oil and gas field and a summary of the project is provided below.

Location

- The Cambo oil field lies within UKCS Blocks 204/4a, 204/5a, 204/9a and 204/10a, in the West of Shetland region.
- The proposed Development footprint is situated at water depths of between 1,050 m in the southeast to 1,100 m in the northwest within the Faroe-Shetland Channel, with the Gas Export Pipeline route situated at water depths of 1,085 m to 190 m.
- The nearest coast line is the Shetland Islands, located approximately 125 km to the east.
- The proposed Development lies adjacent to the UK/Faroe Island transboundary line.

Proposed activities

- The proposed activities relate to a new project.
- The concept for the Cambo Project is for a dedicated, moored Floating Production, Storage and Offloading (FPSO) vessel to produce hydrocarbons from two drill centres. Oil will be exported via shuttle tanker. Gas will be exported via a gas export pipeline extending 70 km to the southeast of the Cambo field, and will terminate at the West of Shetland Pipeline (WOSPS) Pipeline End Manifold (PLEM) tie-in.

- It is proposed that eight new production wells and four water injection wells will be drilled in the Cambo field. Additionally, the Cambo 204/10a-5Y well, drilled as an appraisal well in 2018, will also be completed for production.

Timeline

- The Cambo field is expected to produce oil and gas for approximately 25 years.
- Offshore development activities are currently due to commence at the Cambo field in 2021, with first drilling operation currently planned in 2022. First oil is expected in 2025.

Yours faithfully,

[redacted]

[redacted]
Chief Executive Officer, Siccar Point Energy E&P Limited

From: [redacted] on behalf of MS PON15
To: "BST"
Subject: Siccar Point Energy - Cambo Phase 1 Field Development Environmental Statement - D-4240-2019 -
Date: 26 June 2020 08:54:00

Dear EMT,

Marine Scotland have received additional information directly from the operator -Siccar Point Energy in association with the Cambo Phase 1 Field Development Environmental Statement (D-4240-2019).

Could you please advise if you require a response from Marine Scotland and whether this should be forward to the Department in the usual manner.

Kind Regards

[redacted]

To provide further information on the Cambo Field which is now in the final stages of its consenting process, with a Final Investment Decision expected this year. This update also includes information on the offshore regulatory processes.

Page 4 of this note also provides one option for further strengthening SG's policy position on this issue.

The Cambo Field

- Siccar Point Energy and Shell want to open the new field containing more than 800 million barrels of oil (of which between 178-255 million barrels are estimated to be recoverable), which will produce fossil fuels until 2050.

- Whilst this has been reported as generating an "increase in production", it is already factored into the long-term projections for North Sea production (e.g. this size of development has been modelled in already and as such is not an increase in what was expected).

- If approved, the Cambo oil field project would be 70% owned by Siccar Point Energy and 30% by Shell. It is located 125km north west of Shetland.

- According to Siccar Point Energy, the project is in the final stages of pre-sanction and has been subject to extensive liaison with the Regulatory Authorities. As it is a brand new FPSO development, it has been designed with the most modern equipment and processes to design-out, monitor and reduce emissions as far as possible. This means that in early life it will produce less than half the amount of CO2 for each barrel produced than the average field on the UKCS.

- The Cambo project will not be covered by the UK Government's "climate checkpoint" which determines if new oil fields are compatible with climate change objectives as it was originally licensed for exploration in 2001 and 2004.

- The decision to approve the Cambo field development plan is the responsibility of the UK Oil & Gas Authority (OGA).

Expected Economic Impact

- The Cambo field has the potential to produce up to 255 million barrels of oil over its 25 year lifetime. The UK overall production is currently 1 million barrels per day, therefore, average additional production in across its lifetime will be roughly around 2.7%[1]. If sold at the average oil price over the past five financial years ($56.31) this would result in an estimate of $14.7 billion undiscounted value added from oil sold.

- Siccar Energy have stated that Cambo will make a significant economic impact creating over 1,000 direct UK jobs and helping to sustain thousands more in the supply chain, with a total investment cost of around £1.9 billion and over 50%

[1] Assuming equal production each year. Likely this will vary somewhat as production scales up.

local content. A further £140 million has already been invested by the Cambo owners in appraising and preparing the field for development.

- The production of 255 million barrels will generate an undiscounted revenue of around $15bn for the UK economy.[2] According to a Wood Mackenzie report on the Cambo field this will generate an undiscounted tax of around £1.3bn for the UK treasury or £52m per year.[3] This would amount to around a 5%-9% increase in UK Oil and Gas tax revenues and a 0.006% increase in total UK tax revenue.[4] Although this is also heavily dependent on the price of oil and lifetime of the reserves.

[REDACTED]

OGA Regulatory Process

- Licences do not convey permission for development activities including drilling: these still require further consents from the OGA.

- Field licensees would still need consent to a **field development plan** to allow for necessary infrastructure and future production to commence.

- Drilling activity, or subsequent development, is subject to other assessments. All Activities undertaken in connection with UK offshore hydrocarbon exploration and production are subject to an environmental assessment prior to consent.

- The OGA's revised Strategy places an obligation on the oil and gas industry to meet the UK Government's net zero carbon by 2050, the Strategy came into force in February 2021. The Strategy sets out the UK oil and gas sectors role as a key enabler in the transition to a low carbon economy. It puts the onus on operators to ramp up efforts to slash emissions from existing and new production, as well as to support carbon capture and storage projects and to help unlock clean hydrogen. On top of the net zero obligations, the revised strategy also requires industry to stimulate collaboration with the supply chain.

- The Field Development Plan approval process will be updated shortly to include the net zero requirements from the OGA Strategy refresh. The FDP consenting process also gives consideration to the new Stewardship Expectation which outlines what OGA will consider during each lifecycle phase of a field for net zero purposes.

[2] The average price of a barrel of oil over the last 5 financial years was £56.31
[3] Wood Mackenzie | Cambo
[4] Oil and gas revenues - Office for Budget Responsibility (obr.uk)

Future Licensing Rounds and the introduction of the UKG Climate Compatibility Check Point

- Offshore oil and gas licensing remains reserved to UK Government who have announced that a new Climate Compatibility Checkpoint will be introduced before each future oil and gas licensing round to ensure licences awarded are aligned with wider climate objectives, including net-zero emissions by 2050, and the UK's diverse energy supply. This Checkpoint will use the latest evidence, looking at domestic demand for oil and gas, the sector's projected production levels, the increasing prevalence of clean technologies such as offshore wind and carbon capture, and the sector's continued progress against its ambitious emissions reduction targets.

- The UK government have stated that it is vital that any future licenses are granted to industry only on the basis that they are compatible with the UK's climate change objectives. A dynamic checkpoint enables the assessment of ongoing domestic need for oil and gas, while expecting concrete action from the sector on decarbonisation. If the evidence suggests that a future licensing round would undermine the UK's climate goals or delivery of Net Zero, it will not go ahead. The UK government will design and implement the checkpoint by the end of 2021 through extensive engagement with a wide range of stakeholders

- BEIS have commenced the design of the Climate Compatibility Checkpoint. So far they have focused on considering what the checkpoint will look at. They are considering the carbon impacts of any decision through the lenses of progress in delivering the North Sea Transition Deal and also in terms of taking into account the forecast and expected costs of importing and exporting energy supplies.

- Officials have previously advised that the Scottish Government will look to engage and input into any consultation on the new Climate Compatibility Checkpoint before each future offshore oil and gas licensing rounds to ensure compatibility with Scotland's climate change objectives, recognising that this is reserved to Westminster.

- Officials are engaging with the OGA to understand if there is a further pipeline of Fields that could potentially be reaching Field Development Plan or subsequent approvals that could achieve the same media attention. However it also has to be recognised that this information is commercially sensitive and directly linked with company investment plans and market forces and it is therefore unlikely that this information will be shared on an individual company basis.

Scottish Government policy approach

- The production of fossil fuels in the North Sea is outside of Scottish Government control and sits with the UK Government. The current Scottish Government position is that:

  > *"We are wholly committed to becoming a net-zero economy by 2045 and, whilst this is ultimately a reserved area, any Scottish Government support for oil and gas businesses operating in the North Sea is conditional upon them contributing to a sustainable and inclusive energy transition, and ensuring a secure energy supply."*

- Oil and gas remains an integral part of Scotland's energy system – and will continue to play an important role as we transition to net-zero. Oil accounts for more than half of primary energy (55.2%), with gas making up 35.7% and petroleum products making up 3.0% in 2018.

- The Climate Change Committee net-zero pathway forecasts that demand for oil and gas in 2050 will be around twice the amount of domestic production, meaning an important dependency for the UK of 50% in 2050.

- Domestic production has a lower carbon intensity than a number of potential import substitutes: Production from the North Sea is a highly-regulated industry, with some of the most advanced and comparatively least polluting production methods. For instance, the production of natural gas from the UKCS creates less than half as much greenhouse gas as imported Liquefied Natural Gas (LNG). The OGA have estimated gas extracted from the UKCS has an average emission intensity of 22 kgCO2e/boe; whereas imported LNG has a significantly higher average intensity of 59 kgCO2e/boe.

[REDACTED]

Annex A – Cambo Regulatory Timeline and Approval Authorities

Licence Timeline

Cambo Petroleum Licences

- Cambo "discovery" in Licences P1028 & P1189
- P1028 awarded in 2001 (as part of 19th Licensing Round)
- P1189 awarded in 2004 (as part of 23rd Licensing Round)
- (Note : the 32nd Round was the most recent Licensing Round in 2020)
- Second term of both P1028 & P1189 licences extended by 18 months following application to OGA in May 2020. Company has until 31st March 2022 to achieve Field Development Plan approval

Cambo Field Development process

- Operator submitted proposed field development concept to OGA on 10th June 2019
- OGA response with "no objection" to proposed concept on 27th November 2019

Petroleum Licence & Field Development approval authority

Award of Petroleum Licence

- Energy Act 2016 delegated authority to OGA Chief Executive

Approval of Field Development Plan (FDP) and Consent

- OGA's Director of Operations has authority to approve an FDP in accordance with OGA Decision Making delegations, however,
- Direction required from Minister under Environmental Impact Assessment Regulations 2020 is required (defined for certain types of project). OPRED provide OGA with Minister Direction before OGA has authority to approve an applicable FDP and associated consent

Siccar Point Energy have ensured that significant emissions reductions have been proactively built into the development design and operating philosophy for the Cambo Field, which includes:

- All associated gas from the production process will be recovered - facilities designed to operate without the need for routine flaring or venting of hydrocarbons.
- No routine use of diesel fuel during normal production operations.
- Facilities designed to accommodate the installation of future electrical infrastructure to facilitate potential electrical power import in future from renewable sources.
- Well design, construction and development drilling plans have been developed to reduce rig time and fuel consumption.
- Sevan FPSO hull concept reduces base power demand in comparison to other concepts – no requirement for thrusters for station-keeping.
- Energy generation equipment specified with Dry Low Emissions (DLE) burner technology to reduce emissions, energy efficiency through recovery of waste heat from power generation.
- Specification of variable speed drives where applicable to improve energy efficiency of major energy consumers.
- Fibre optic link to shore planned to provide bandwidth to facilitate cost-effective digitalisation and O&M strategies to reduce GHG emissions.
- Work underway to develop and implement a methane leak detection and repair programme in line with emerging best practice.
- Atmospheric emissions have been assessed to have no impact with nor affect any of the conservation objectives of the Faroe-Shetland Sponge Belt NCMPA or any other sites of conservation importance in the wider area.
- Key contractor selection criteria includes specific requirements to support UK and SPE Net Zero ambitions.
- Emissions monitoring and reduction plans will be developed for the production phase to realise other potential opportunities e.g. collaboration with other upstream oil and gas operators/sectors to reduce emissions from logistics operations.
- Utilisation of low emissions supply/other vessels in support of operations.
- Deployment of emerging technologies for measurement, monitoring and/or reduction of emissions.
- Early field life emissions intensity less than half of UKCS average (8kg CO2 equivalent/boe compared to 21.4kg CO2 equivalent/boe).
- Potential for future electrification from low-carbon energy sources to improve the forecast life of field emissions performance and maintain low carbon intensity.