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

.....

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

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

25th June 2020

Dear Sir/Madam,

As you are aware Siccar Point Energy E&P Ltd (SPE) as Licence Operator, in conjunction with co-venturer Shell UK Limited, are planning to 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). A letter of application for consent was submitted to the Oil and Gas Authority in respect of the above named project, which was supported by an Environmental Statement (ES) (D/4240/2019) that was submitted to the Department for Business, Energy and Industrial Strategy on 29th October 2019 and was subject to public notice on 8th November 2019.

Under Regulation 10(2) of the Offshore EIA Regulations, SPE has been requested by the Department to provide additional information in relation to the Cambo Field Development ES. SPE is required to serve the additional information on the authorities on which the ES was originally served pursuant to Regulation 9(2)(a)(ii); this includes the Joint Nature Conservation Committee, Marine Scotland Science and the Navigation Safety Branch of the Maritime and Coastguard Agency.

A copy of the public notice and additional information is attached for your review. Consultees have until 25th July 2020 to make representations to the Secretary of State relating to the letter of application for consent, the Environmental Statement and the additional information. All correspondence should refer to D/4240/2019 and may be sent by letter or email to:

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

Should you have any questions in connection with the Environmental Statement or any other aspect of the proposed operations, please do not hesitate to contact me.

Yours sincerely

[redacted]

HSE Manager

[redacted]

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,

Chief Executive Officer, Siccar Point Energy E&P Limited

From: [redacted]
To: MS PON15
Cc: [redacted]
Subject: Cambo Phase 1 Field Development Environmental Statement - D/4240/2019 - Additional Information
Date: Thursday, 25 June 2020 16:45:37
Attachments: Cambo ES_D-4240-2019_Marine Scotland.pdf
Cambo ES (D-4240-2019) Additional Information.pdf

Good afternoon,

Under Regulation 10(2) of the Offshore EIA Regulations, Siccar Point Energy E&P Limited (SPE) has been requested by BEIS to provide additional information in relation to the Cambo Field Development Environmental Statement (ES Ref: D/4240/2019). SPE is required to serve Marine Scotland Science with a copy of the additional information.

Please find attached a cover letter detailing the timeline for the consultation and another file containing the public notice and additional information.

Kind regards,

[redacted]

[redacted]
HSE Advisor

Siccar Point Energy Limited
3rd Floor, H1
Hill of Rubislaw
Anderson Drive
Aberdeen, AB15 6BY

Switch: 01224 678008
Mobile: [redacted]

From: [redacted]
Cc:
Subject: Cambo Phase 1 Field Development Environmental Statement - D/4240/2019
Date: Tuesday, 29 October 2019 15:07:04

Good afternoon,

Siccar Point Energy E&P Limited has submitted a letter of application to the Oil and Gas Authority in relation to the proposed Cambo Field Development. The application is supported by an Environmental Statement which has been submitted to BEIS OPRED. An acknowledgement has been received from BEIS OPRED and SPE is required to serve you with a copy of their notice, letter of application to the OGA and a copy of the ES.

Before the necessary arrangements are made please can you confirm your preferred format for transmission of the information i.e. hard copy of the ES and/or electronic copy?

I look forward to hearing from you in due course.

Kind regards,

[redacted]
HSE Advisor

Siccar Point Energy Limited
3rd Floor, H1
Hill of Rubislaw
Anderson Drive
Aberdeen, AB15 6BY

Direct: [redacted]
Switch: 01224 678008
Mobile: [redacted]

www.siccarpointenergy.co.uk

From: [redacted]
To: MS PON15
Cc: [redacted]
Subject: Cambo Phase 1 Field Development Environmental Statement - D/4261/2021
Date: Friday, 4 June 2021 16:04:14
Attachments: Marine Scotland Science Cover Letter_Cambo ES D-4261-2021.pdf
Cambo ES D-4261-2021_Notice Under Regulation 11(1).pdf
Cambo Field Development (D-4261-2021)_Summary of the Project.pdf

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Good afternoon,

Under Regulation 11(3)(a) of the Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020, Siccar Point Energy E&P Limited (SPE) has been requested by BEIS OPRED to provide Marine Scotland Science with a copy of the Cambo Field Development Environmental Statement (ES Ref: D/4261/2021) and supporting information. The ES will be delivered to you in due course via a secure file transfer process, from our consultants at Fugro.

Please find attached a cover letter detailing the fact that SPE has submitted an application for consent to the Oil and Gas Authority in relation to the proposed Cambo Field Development. Also attached is a copy of the Regulation 11(1) Notice and a copy of the Summary of the Project notification letter submitted to OPRED.

If you can acknowledge receipt of the ES once downloaded this would be much appreciated.

Many thanks.

Kind regards,

[redacted]
HSE Advisor
Siccar Point Energy Limited
3rd Floor, H1
Hill of Rubislaw
Anderson Drive
Aberdeen, AB15 6BY
Direct: [redacted]
Switch: 01224 678008
Mobile: [redacted]
www.siccarpointenergy.co.uk

From:	[redacted] MARLAB) on behalf of MS Chemicals
To:	[redacted]
Cc:	"BST"
Subject:	D/4240/2019 - SICCAR - Cambo Environmental Statement - Additional Information - MSS Response 01/07
Date:	Wednesday, 1 July 2020 15:19:00
Attachments:	D_4240_2019 - SICCAR - Cambo Environmental Statement - Additional Information - MSS Response 01_07.doc

Good Afternoon,

Please see attached MSS response to the Cambo Environmental Statement additional information.

Kind regards,

[redacted]
Offshore Environmental and Chemical Coordinator
Marine Scotland - Science

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

Tel: [redacted]
S/B: +44 (0) 131 244 2500

[redacted]
0131 244 4335
MS.PON15@gov.scot

EMT
BEIS
Aberdeen

MARINE SCOTLAND SCIENCE RESPONSE

Siccar Point Energy E&P Limited - Cambo Field Development - (D/4240/2019) – Additional information

Marine Scotland welcome the additional information document provided.

Marine Scotland have reviewed the information and have no further comments on the points taken forward by the Department or the associated responses.

Marine Scotland refer the Department to the original Marine Scotland response for all other comments.

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
1 July 2020

LETTER

Harmful algal blooms in the Eastern North Atlantic Ocean

Paul Dees[a,1], Eileen Bresnan[b], Andrew C. Dale[a], Martin Edwards[c], David Johns[c], Beth Mouat[d], Callum Whyte[a], and Keith Davidson[a]

Applying a mathematical model to the period 1982–2016, in PNAS Gobler et al. (1) propose that ocean warming has expanded the niche for harmful algal blooms (HABs) of the species *Dinophysis acuminata* and *Alexandrium fundyense*, which can generate shellfish toxicity and pose risks to human health. The authors' model predicts an increase in the growth rate and in the duration of the bloom season for these species, with a "hot spot" being the North Eastern Atlantic (NEA) and North Sea (NS) waters surrounding the United Kingdom. Using ships of opportunity, the Continuous Plankton Recorder (CPR) has surveyed offshore phytoplankton populations (including *Dinophysis*, but not *Alexandrium*) in this region since 1958 (2). We used *Dinophysis* spp. data to evaluate the model's predictions, as species data were not available before 2004.

Growth rate is not easily calculated from in situ data, but one might reasonably expect enhanced growth to lead to increased cell abundance. We therefore determined the annual mean CPR surveyed *Dinophysis* concentration in the NEA and NS. Using the modified Chelton method to remove serial autocorrelation (3), we found that over the modeled period (1982–2015) and the whole CPR time series (1958–2015) there was no statistically significant positive relationship between *Dinophysis* abundance and sea-surface temperature (4) in the modeled area over either the whole year or the April to September growth season, a result consistent with a previous study (5).

Dinophysis-generated shellfish toxicity is related to short-term "bloom" events of elevated abundance. Harm from *Dinophysis* could therefore increase despite annual abundance decreases, should more frequent or larger blooms occur. Fig. 1 shows that, while there have been periods of large *Dinophysis* blooms in the region, these mostly occurred during the early 1970s and the late 1980s, and have been followed by a period of briefer bloom events from the mid-2000s until 2014. In Fig. 2, by calculating the percentage of days per year that *Dinophysis* abundance was greater than two SDs above the mean of the whole series, we also show that there is no increasing trend in number or annual duration of blooms.

Understanding the long-term trends of *Dinophysis* concentrations is important in NEA waters as significant increases in shellfish aquaculture are planned in the region. The work of Gobler et al. (1) is valuable in demonstrating the potential for increasing water temperature to increase the associated HAB risk. However, our data indicate that the modeled increases in *D. acuminata* growth rate are not evident in terms of increases in the annual mean, number of *Dinophysis* blooms, or their duration. Gobler et al. used empirical laboratory evidence of increasing *D. acuminata* growth rate with increasing temperature to parameterize an individual-based model. *Dinophysis* populations exist within a complex planktonic food web and are often comprised of more than one species, with different environmental preferences. Our results suggest that other factors, such as prey availability, predation, or ecological interactions are currently limiting any temperature-driven increase in *Dinophysis* in the region. It will be necessary to incorporate these factors within models to fully evaluate climate-driven HAB risk.

Acknowledgments

This work was accomplished as part of a PhD studentship funded by the European Social Fund and Scottish Funding Council, which is part of Developing Scotland's Workforce in the Scotland 2014–2020 European Structural and Investment Fund Programme.

[a]Scottish Association for Marine Science, Scottish Marine Institute, Oban PA37 1QA, United Kingdom; [b]Marine Scotland Science, Marine Laboratory, Aberdeen AB11 9DB, United Kingdom; [c]Sir Alister Hardy Foundation for Ocean Science, Citadel Hill Marine Laboratory, Plymouth PL1 2PB, United Kingdom; and [d]NAFC Marine Centre, Scalloway, Shetland ZE1 0UN, United Kingdom

Author contributions: P.D. and K.D. performed research; P.D. and K.D. designed research; and P.D., E.B., A.C.D., M.E., D.J., B.M., C.W., and K.D. wrote the paper.

The authors declare no conflict of interest.

[1]To whom correspondence should be addressed. Email: paul.dees@sams.ac.uk.

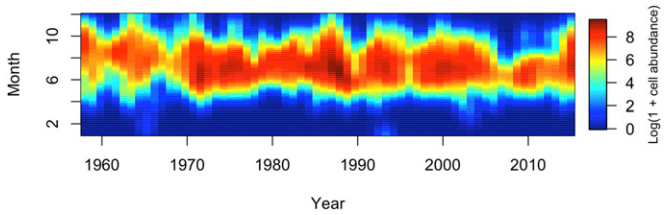

Fig. 1. Heatmap of periods of large *Dinophysis* blooms in the modeled region by month and year.

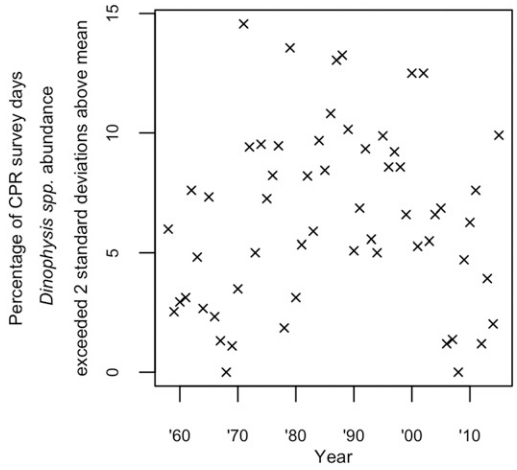

Fig. 2. The percentage of days in each year that the abundance of *Dinophysis* spp., as detected by the CPR in the modeled region, was greater than two SD above the mean.

1 Gobler CJ, et al. (2017) Ocean warming since 1982 has expanded the niche of toxic algal blooms in the North Atlantic and North Pacific oceans. *Proc Natl Acad Sci USA* 114:4975–4980.

2 Edwards M, Johns DG, Leterme SC, Svendsen E, Richardson AJ (2006) Regional climate change and harmful algal blooms in the northeast Atlantic. *Limnol Oceanogr* 51:820–829.

3 Pyper BJ, Peterman RM (1998) Comparison of methods to account for autocorrelation in correlation analyses of fish data. *Can J Fish Aquat Sci* 55:2127–2140.

4 Rayner NA, et al. (2003) Global analyses of sea surface temperature, sea ice, and night marine air temperature since the late nineteenth century. *J Geophys Res Atmos* 108:4407.

5 Hinder SL, et al. (2012) Changes in marine dinoflagellate and diatom abundance under climate change. *Nat Clim Chang* 2:271–275.

From: [redacted] (MARLAB)
To: [redacted]@siccarpointenergy.co.uk
Subject: FW: Cambo Field - Query re. seawater quality
Date: Wednesday, 9 September 2020 07:55:00
Attachments: image002.png
image003.jpg
Dees et al 2017 PNAS.pdf

Hi [redacted],

Hope you are well? I had a chat with our plankton ecologist [redacted] regarding your query and have summarised her response below.

[redacted] was of the opinion that the term HAB was being used in the wrong context in the e-mail forwarded. A high particle count does not equal a high phytoplankton cell count. The UK published a response to the Gobler paper you referred to in your original e-mail as there were concerns regarding the method and conclusion drawn. I have attached the response for your reference. It is important to note that phytoplankton which produce shellfish toxins occur in very low abundance and are not high biomass HABs. Marine Scotland do not hold data for the west of Shetland, but [redacted] advises that 'particle count' should not assume a phytoplankton count and highlights that phytoplankton are controlled by multiple factors and not just temperature (which is the crux of the concern associated with the Gobler paper in that such an approach may not capture the growth of phytoplankton accurately). In addition, the Gobler paper focuses on one specific genus of phytoplankton and there are many hundreds of these in the Atlantic all occupying different niches at the same time.

I trust this provides some clarity over the concerns raised.

Regards

[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 |

(Please note that I do not work on Mondays)

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] SiccarPointEnergy.co.uk>

Sent: 07 September 2020 14:09
To: [redacted] gov.scot>; [redacted] (MARLAB) [redacted] gov.scot>; [redacted] gov.scot>
Cc: [redacted] siccarpointenergy.co.uk>; [redacted] @siccarpointenergy.co.uk>
Subject: RE: Cambo Field - Query re. seawater quality

Good afternoon,

I hope you are all keeping well.

I am just following up on the e-mail communication below from last December regarding potential for harmful algal blooms (HABs) West of Shetland and whether Marine Scotland have any knowledge / experience of HABs west of Shetland?

While project planning has progressed somewhat since, the potential issue associated with any HABs has once again come into focus and the project team are trying to ascertain whether the data on high level fouling in the seawater around Cambo based on spot samples is correct / justified.

If you have any experience or knowledge of HABs that you are able to share with SPE that would be much appreciated. If you would like further information on the background to our query please do not hesitate to get in touch. I could perhaps set up a Teams meeting with relevant parties in the project if you think this would be beneficial?

I look forward to hearing from you.

Kind regards,

[redacted]

From: [redacted] @gov.scot [redacted] @gov.scot>
Sent: 05 December 2019 14:38
To: [redacted] @SiccarPointEnergy.co.uk>
Cc: [redacted] @gov.scot; [redacted] @gov.scot
Subject: RE: Cambo Field - Query re. seawater quality

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi [redacted]

Please see the query below from [redacted] at Siccar Point Energy. Are you able to help with [redacted] query at all?

Many thanks

[redacted]

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

(Please note that I do not work on Mondays)

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]SiccarPointEnergy.co.uk>
Sent: 05 December 2019 14:34
To: [redacted](MARLAB) [redacted]@gov.scot>
Cc: [redacted]siccarpointenergy.co.uk>
Subject: Cambo Field - Query re. seawater quality

Hi [redacted]

I hope you are keeping well.

I have a query re seawater quality west of Shetland, and in particular the area in / around the Cambo field, which I am hoping Marine Scotland may be able to help with.

The Cambo project is currently approaching vendors for the supply of a sulphate removal unit on the FPSO, including ultra-filtration upstream of the unit. There has been some discussion between the project and one of the vendors relating to the predicted seawater quality at the operational site supporting the Ultra Filtration membrane flux specification.

The following published data was brought to the attention of the project:

"Applying a mathematical model to the period 1982–2016, in PNAS Gobler et al. (1) propose that ocean warming has expanded the niche for harmful algal blooms (HABs) of the species Dinophysis acuminata and Alexandrium fundyense, which can generate shellfish toxicity and pose risks to human health. The authors' model predicts an increase in the growth rate and in the duration of the bloom season for these species, with a "hot spot" being the North Eastern Atlantic (NEA) and North Sea (NS) waters surrounding the United Kingdom."

The vendor has taken this published data, along with the results of some analysis (of particle counts) that was undertaken of a single spot sample of water in a nearby field, and concluded that the *"Cambo seawater will be a high fouling water with high total suspended particle (TSS) particle plus high TOC organic carbon load, therefore a conservative UF design flux is mandatory to ensure water injection can be sustained, particularly during winter storm conditions when maintenance is extremely challenging"*.

I understand this to mean that they are unlikely to be able to provide the SRU package being requested by the project due to the high level of 'fouling' in the seawater.

Does Marine Scotland have any knowledge / experience of HABs west of Shetland? The project is trying

to ascertain whether the data on high level fouling in the seawater around Cambo based on spot samples is correct / justified.

I did e-mail Xodus to see if they had any experience in this, but they were unable to help. However, it was suggested that perhaps Marine Scotland may be able to provide some insight and [redacted] name was provided. However, I don't have his contact details so thought I would contact you in the first instance.

I look forward to hearing from you in due course.

Kind regards,

[redacted]

[redacted]
HSE Advisor

Siccar Point Energy Limited
3rd Floor, H1
Hill of Rubislaw
Anderson Drive
Aberdeen, AB15 6BY

Direct: [redacted]
Switch: 01224 678008
Mobile: [redacted]

www.siccarpointenergy.co.uk

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]

HSE Manager

[redacted]

From: [redacted]
To: [redacted] (MARLAB); [redacted] (MARLAB); [redacted] (MARLAB)
Cc: [redacted]
Subject: RE: Cambo Field - Query re. seawater quality
Date: Monday, 7 September 2020 14:09:40

Good afternoon,

I hope you are all keeping well.

I am just following up on the e-mail communication below from last December regarding potential for harmful algal blooms (HABs) West of Shetland and whether Marine Scotland have any knowledge / experience of HABs west of Shetland?

While project planning has progressed somewhat since, the potential issue associated with any HABs has once again come into focus and the project team are trying to ascertain whether the data on high level fouling in the seawater around Cambo based on spot samples is correct / justified.

If you have any experience or knowledge of HABs that you are able to share with SPE that would be much appreciated. If you would like further information on the background to our query please do not hesitate to get in touch. I could perhaps set up a Teams meeting with relevant parties in the project if you think this would be beneficial?

I look forward to hearing from you.

Kind regards,

[redacted]

From: [redacted]@gov.scot
Sent: 05 December 2019 14:38
To: [redacted]
Cc [redacted]@gov.scot; [redacted]@gov.scot
Subject: RE: Cambo Field - Query re. seawater quality

Hi [redacted]

Please see the query below from [redacted] at Siccar Point Energy. Are you able to help with [redacted] query at all?

Many thanks

[redacted]

gov.scot

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

(Please note that I do not work on Mondays)

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] SiccarPointEnergy.co.uk>
Sent: 05 December 2019 14:34
To: [redacted] gov.scot>
Cc: [redacted] siccarpointenergy.co.uk>
Subject: Cambo Field - Query re. seawater quality

Hi [redacted]

I hope you are keeping well.

I have a query re seawater quality west of Shetland, and in particular the area in / around the Cambo field, which I am hoping Marine Scotland may be able to help with.

The Cambo project is currently approaching vendors for the supply of a sulphate removal unit on the FPSO, including ultra-filtration upstream of the unit. There has been some discussion between the project and one of the vendors relating to the predicted seawater quality at the operational site supporting the Ultra Filtration membrane flux specification.

The following published data was brought to the attention of the project:

"Applying a mathematical model to the period 1982–2016, in PNAS Gobler et al. (1) propose that ocean warming has expanded the niche for harmful algal blooms (HABs) of the species Dinophysis acuminata and Alexandrium fundyense, which can generate shellfish toxicity and pose risks to human health. The authors' model predicts an increase in the growth rate and in the duration of the bloom season for these species, with a "hot spot" being the North Eastern Atlantic (NEA) and North Sea (NS) waters surrounding the United Kingdom."

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I did e-mail Xodus to see if they had any experience in this, but they were unable to help. However, it

was suggested that perhaps Marine Scotland may be able to provide some insight and [redacted] name was provided. However, I don't have his contact details so thought I would contact you in the first instance.

I look forward to hearing from you in due course.

Kind regards,

[redacted]

[redacted]
HSE Advisor

Siccar Point Energy Limited
3rd Floor, H1
Hill of Rubislaw
Anderson Drive
Aberdeen, AB15 6BY

Direct: [redacted]
Switch: 01224 678008
Mobile: [redacted]

www.siccarpointenergy.co.uk

From: [redacted]
To: [redacted] (MARLAB)
Subject: RE: Cambo Field - Query re. seawater quality
Date: Wednesday, 9 September 2020 09:24:33
Attachments: image001.png
image002.jpg

H[redacted]

Thank you very much for getting back to me and for the reference material. It really is appreciated. Thanks also to [redacted] for her input.

My understanding of this topic is a lot clearer now and I know that the project team will very much welcome this feedback.

[redacted]

Best regards,

[redacted]

From [redacted]@gov.scot
Sent: 09 September 2020 07:55
To: [redacted]
Subject: FW: Cambo Field - Query re. seawater quality

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi[redacted],

Hope you are well? I had a chat with our plankton ecologist, [redacted] regarding your query and have summarised her response below.

[redacted] was of the opinion that the term HAB was being used in the wrong context in the e-mail forwarded. A high particle count does not equal a high phytoplankton cell count. The UK published a response to the Gobler paper you referred to in your original e-mail as there were concerns regarding the method and conclusion drawn. I have attached the response for your reference. It is important to note that phytoplankton which produce shellfish toxins occur in very low abundance and are not high biomass HABs. Marine Scotland do not hold data for the west of Shetland, but [redacted] advises that 'particle count' should not assume a phytoplankton count and highlights that phytoplankton are controlled by multiple factors and not just temperature (which is the crux of the concern associated with the Gobler paper in that such an approach may not capture the growth of phytoplankton accurately). In addition, the Gobler paper focuses on one specific genus of phytoplankton and there are many hundreds of these in the Atlantic all occupying different niches at the same time.

I trust this provides some clarity over the concerns raised.

Regards

[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

(Please note that I do not work on Mondays)

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

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

From: [redacted] SiccarPointEnergy.co.uk>
Sent: 07 September 2020 14:09
To: [redacted] (MARLAB) <[redacted] @gov.scot>; [redacted] (MARLAB) [redacted] gov.scot>; [redacted] (MARLAB) [redacted] @gov.scot>
Cc: [redacted] siccarpointenergy.co.uk>; [redacted] [redacted] @siccarpointenergy.co.uk>
Subject: RE: Cambo Field - Query re. seawater quality

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Kind regards,

[redacted]

From: [redacted]@gov.scot <[redacted]@gov.scot>
Sent: 05 December 2019 14:38
To: [redacted]SiccarPointEnergy.co.uk>
Cc: [redacted]@gov.scot; [redacted]@gov.scot
Subject: RE: Cambo Field - Query re. seawater quality

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Hi [redacted]

Please see the query below from [redacted] at Siccar Point Energy. Are you able to help with [redacted] query at all?

Many thanks

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

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T: [redacted]
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From: [redacted]SiccarPointEnergy.co.uk>
Sent: 05 December 2019 14:34
To: [redacted] (MARLAB) [redacted]@gov.scot>
Cc: [redacted]siccarpointenergy.co.uk>
Subject: Cambo Field - Query re. seawater quality

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Hill of Rubislaw
Anderson Drive
Aberdeen, AB15 6BY

Direct: [redacted]
Switch: 01224 678008
Mobile: [redacted]

www.siccarpointenergy.co.uk

From: [redacted] (MARLAB)
To: [redacted]
Subject: RE: Cambo Field - Query re. seawater quality
Date: Thursday, 10 September 2020 12:03:00
Attachments: image001.png
image002.jpg

No Problem [redacted].

Hopefully it is of some help.

[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 |

(Please note that I do not work on Mondays)

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

T: +[redacted]
S/B: +44 (0)131 244 2500
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HSE Advisor

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Aberdeen, AB15 6BY

Direct: [redacted]
Switch: 01224 678008
Mobile: [redacted]

www.siccarpointenergy.co.uk

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Communications with the Scottish Government may be monitored or recorded in order to secure the effective operation of the system and for other lawful purposes. The views or opinions contained within this e-mail may not necessarily reflect those of the Scottish Government.
****

From: [redacted]
To: MS PON15
Cc: [redacted]
Subject: RE: Cambo Phase 1 Field Development Environmental Statement - D/4240/2019 - Additional Information
Date: Tuesday, 30 June 2020 13:53:13
Attachments: Cambo ES (D-4240-2019) Additional Information.pdf

Good afternoon,

Further to my e-mail below, the additional information document in relation to the Cambo Field Development Environmental Statement (ES Ref: D/4240/2019) has been amended slightly following recent communications with BEIS OPRED.

Please find this amended additional information attached. The minor amendments relate to responses made by SPE to the following comments: 5, 7(iii), 7(iv), 8(i), 68(i), 80(iv) and accurately reflect responses made directly to BEIS OPRED.

Please note that with the additional information document being updated and re-issued, Marine Scotland now has until the 30th July to make representations to the Secretary of State.

Kind regards,

[redacted]

From: [redacted]
Sent: 25 June 2020 16:45
To: MS.PON15@gov.scot
Cc: [redacted]@siccarpointenergy.co.uk>
Subject: Cambo Phase 1 Field Development Environmental Statement - D/4240/2019 - Additional Information

Good afternoon,

Under Regulation 10(2) of the Offshore EIA Regulations, Siccar Point Energy E&P Limited (SPE) has been requested by BEIS to provide additional information in relation to the Cambo Field Development Environmental Statement (ES Ref: D/4240/2019). SPE is required to serve Marine Scotland Science with a copy of the additional information.

Please find attached a cover letter detailing the timeline for the consultation and another file containing the public notice and additional information.

Kind regards,

[redacted]

[redacted]
HSE Advisor

Siccar Point Energy Limited

3rd Floor, H1
Hill of Rubislaw
Anderson Drive
Aberdeen, AB15 6BY

Switch: 01224 678008
Mobile: [redacted]