

Marine Scotland - Licensing Operations Team ("MS-LOT")	
Non Compliance Report	
Breach of Marine Licence Conditions	
<p>Offshore Wind Farm (OWF) Licence Number : 04462/18/1  <a href="https://www.gov.scot/Topics/marine/Licensing/marine/scoping/Beatrice/mlvariedapril2018">https://www.gov.scot/Topics/marine/Licensing/marine/scoping/Beatrice/mlvariedapril2018</a></p> <p>Offshore Transmission Works (OTW) Licence Number: 04461/18/1  <a href="https://www.gov.scot/Topics/marine/Licensing/marine/scoping/Beatrice/transmissionmlvariedapril2018">https://www.gov.scot/Topics/marine/Licensing/marine/scoping/Beatrice/transmissionmlvariedapril2018</a></p>	
<p>Licence Holder:  <b>Beatrice Offshore Windfarm Limited</b>  <b>1 Waterloo Street</b>  <b>Glasgow</b>  <b>G2 6AY</b></p>	
<p><b>Decision: No further action required</b></p> <p>MS-LOT has given due consideration to the breach of conditions 3.1.7 and 3.1.8 of the Offshore Wind Farm ("OWF") Marine Licence (number: 04462/18/1) and condition 15 of the section 36 consent granted to Beatrice Offshore Windfarm Limited ("BOWL") on 19 March 2014.</p> <p>MS-LOT is satisfied that BOWL has taken sufficient actions to prevent this type of event occurring again.</p>	
<b>Status: Closed</b>	<b>Reason: to assess for further breaches of chemical utilisation</b>
<p>Details:</p> <p>Beatrice offshore windfarm is a development in the Moray Firth consisting of 84 wind turbines and associated offshore transmission works.</p> <p>Full information on the project can be found here:  <a href="http://www.gov.scot/Topics/marine/Licensing/marine/scoping/Beatrice">http://www.gov.scot/Topics/marine/Licensing/marine/scoping/Beatrice</a></p> <p>As part of conditions 3.1.7 and 31.8 OWF Marine Licence (number: 04462/18/1) and part of condition 15 of the section 36 consent, it is BOWL's responsibility to ensure that all chemicals which are to be utilised in the wind farm have been <i>'approved in writing by the Licensing Authority prior to use, that all substances and objects deposited are inert (or appropriately coated or protected so as to be rendered inert) and do not contain toxic elements which may be harmful to the marine environment, the living resources which it supports or human health and take action for the pollution prevention and for environmental management during construction period'</i>.</p> <p>MS-LOT received notification from BOWL's Ecological Clerk of Works ("ECoW") on 30 July 2018 stating that on 2 July 2018 BOWL utilised approximately 1 litre (diluted with fresh water</p>	

at a ratio of 1:5 ) of an unapproved cleaning detergent, Citra Clean Concentrate, to remove bird guano from two wind turbine generator (“WTG”) substructures. In addition, the Safety Data Sheet for Citra Clean Concentrate classifies the chemical as harmful to aquatic life with long lasting effects (classification code H412 - chronic hazard, category 3) and states that release into the environment should be avoided (classification code P273).

BOWL submitted to MS-LOT the ECoW Non-Compliance Report for the Citra Clean Concentrate which confirmed that no significant effects on the environment are anticipated as a result of the release of the detergent. It also described in detail all the action taken by BOWL’s ECoW, by BOWL’s Client Representative and all corrective measures and recommendations.

Actions Taken by BOWL as pre the description in the ECoW non-compliance report:

*“Further corrective measures and recommendations:*

- 1. BOWL Fabrication Manager & Engineering Coordinator to amend LF000005-MS-477 ‘Cleaning bird guano’ to remove any reference to the use of detergent and to reflect the use of power wash using only fresh water as the method specified.*
- 2. BOWL BoP Lead Technician to dispose of any remaining Citra Clean Concentrate in accordance with the Safety Data Sheet and LF000005-MS-477 BOWL Environmental Management Plan.*
- 3. BOWL Fabrication Manager & Engineering Coordinator to ensure that BOWL documentation control procedure, as set out in LF000005-PR-049, followed by BOWL BoP team (specific the approach to ‘check and approval stage’)*
- 4. BOWL Fabrication Manager & Engineering Coordinator to ensure that BOWL BoP team highlight any ‘non-routine’ cargo (which includes any chemicals) to BOWL Marine Coordinator for inclusion on cargo manifest (to be provided to the vessel) prior the departure*
- 5. BOWL Fabrication Manager & Engineering Coordinator to ensure that any further BOWL RAMS are issued to BOWL Consents and Licensing Team for review prior to approval.*
- 6. BOWL Handover and Compliance Manager to send reminder to BOWL personnel highlighting key elements of LF000005-PR-049 including the issue of all documents via Conject (not via email) and the need to obtain signatures on approved documentation*
- 7. BOWL Handover and Compliance Manager and BOWL Quality Manager to undertake Conject audit”.*

The actions and the agreed corrective measures and recommendations BOWL undertook were approved by the ECoW and are described in detail in the Beatrice ECoW Non-compliance report attached in Appendix A of this document.

## Appendix A – BOWL Non-compliance report

From: [REDACTED] gov.scot>  
Sent: 07 August 2018 12:24  
To: [REDACTED] @sse.com>  
Cc: [REDACTED] @gov.scot>; BOWL ECOW <[BOWL.ECOW@sse.com](mailto:BOWL.ECOW@sse.com)>; [REDACTED] @sse.com>; [REDACTED] sse.com>  
Subject: RE: 20180730 - LF000005 - Beatrice - ECoW Non-Compliance Report: Use of unapproved chemical (cleaning detergent)

Dear [REDACTED]

Thank you for the non-compliance report. MS-LOT acknowledge receipt and will respond in due course.  
Best regards,

[REDACTED]

From: [REDACTED] sse.com>  
Sent: 30 July 2018 17:03  
To: MS Marine Renewables <[MS.MarineRenewables@gov.scot](mailto:MS.MarineRenewables@gov.scot)>  
Cc: [REDACTED] @gov.scot>; [REDACTED] @gov.scot>; [REDACTED] ov.scot>; BOWL ECOW <[BOWL.ECOW@sse.com](mailto:BOWL.ECOW@sse.com)>; [REDACTED] @sse.com>; [REDACTED] sse.com>  
Subject: 20180730 - LF000005 - Beatrice - ECoW Non-Compliance Report: Use of unapproved chemical (cleaning detergent)

Dear Madame

Please find attached LF000005-REP-2433 ECoW Non-Compliance Report: Use of unapproved chemical (cleaning detergent).

The report relates to the non-compliance event notified to Marine Scotland (verbally) by [REDACTED] in the afternoon of the 3<sup>rd</sup> July 2018.

**Non-compliance event relates to:** Section 36 Condition 15 (Environmental Management Plan), Wind Farm Marine Licence Condition 3.1.7 (Chemical Usage), and Condition 3.1.8 (Environmental Protection).

**Summary of non-compliance event:** BOWL utilised approximately 1 litre (diluted with fresh water at a ratio of 1:5 ) of an unapproved cleaning detergent, Citra Clean Concentrate, to remove bird guano from two wind turbine generator (WTG) substructures. The Safety Data Sheet for Citra Clean Concentrate classifies the chemical as harmful to aquatic life with long lasting effects (classification code H412 - chronic hazard, category 3) and states that release into the environment should be avoided (classification code P273).

**Location:** Beatrice Offshore Wind Farm, substructures BE-J5 and BE-H5.

**Non-compliance event date:** 02/07/2018.

If you have any queries on the report please let me know and I will add discussion on the incident and corrective measures to the agenda of our next ECoW Progress Meeting.

Please acknowledge receipt of the attached and confirm if you will be providing a formal response.

Best wishes,

[REDACTED]

[REDACTED]

Environmental Clerk of Works  
Beatrice Offshore Windfarm Limited

T: [REDACTED]

M: [REDACTED]

E: [REDACTED]@sse.com

Website: [www.beatricewind.com](http://www.beatricewind.com)






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# Beatrice Offshore Windfarm Limited

Document Title : ECOW Non-Compliance Report

01	30/07/2018	Original draft			
<b>Rev</b>	<b>Date</b>	<b>Reason for Release</b>	<b>Author</b>	<b>Checked</b>	<b>Approved</b>

## ECOW Non-Compliance Report

Date 30/07/2018  
Originator (ECoW)

Compliance Report No. LF000005-REP-2433  
Compliance Report Rev. 01

### 1. Nature of Compliance Issue

Non-compliance event relates to: Section 36 Condition 15 (Environmental Management Plan), Wind Farm Marine Licence Condition 3.1.7 (Chemical Usage), and Condition 3.1.8 (Environmental Protection).

Summary of non-compliance event: BOWL utilised approximately 1 litre (diluted with fresh water at a ratio of 1:5 ) of an unapproved cleaning detergent, Citra Clean Concentrate, to remove bird guano from two wind turbine generator (WTG) substructures. The Safety Data Sheet for Citra Clean Concentrate classifies the chemical as harmful to aquatic life with long lasting effects (classification code H412 - chronic hazard, category 3) and states that release into the environment should be avoided (classification code P273).

Location: Beatrice Offshore Wind Farm, substructures BE-J5 and BE-H5

Non-compliance event date: 02/07/2018

#### Detailed description:

BOWL Risk Assessment and Method Statement (RAMS) associated with the removal of bird guano from WTG structures (BOWL Ref: LF000005-MS-477) was produced but not in accordance with the BOWL Document Control Procedure (BOWL Ref: LF000005-PR-049) which sets out a specific approach to checks and approvals. As a result the RAMS was not reviewed for compliance with consents. The RAMS endorsed the use of a cleaning detergent (non-specific) and was issued for implementation by the BOWL Balance of Plant (BoP) team. The RAMS assessed 'cleaning detergent' as a hazardous material and sets out control measures with regard to human health; no control measures were stated with regard to the environment. Citra Clean Concentrate was procured on the basis that the manufacturer states that it is biodegradable (<http://bio-productions.com/products/citra-clean/>); approximately 1lt was diluted with fresh water at a ratio of 1:5 and sprayed using a hand held sprayer onto stubborn guano on two WTG substructures, before being scrubbed using a hard bristle brush and then jet washed, running down the structure, into the sea. The chemical was not stated on the vessel cargo manifest.

No significant effects on the environment are anticipated as a result of the release of the detergent in this case.



## 2. Actions taken by BOWL's ECoW

29/06/2018 18:40 - Seaway Heavy Lifting Health, Safety, Environment (HSE) Manager emailed ECoW to query use of cleaning detergent specified within BOWL RAMS (BOWL Ref: LF000005-MS-477) as previous discussions between ECoW and Seaway Heavy Lifting highlighted that cleaning detergents were not to be applied unless approved by Marine Scotland prior to use.

02/07/2018 - ECoW reviewed BOWL RAMS and undertook document control background checks.

02/07/2018 16:58 - ECoW contacted Project SHE Manager to highlight concern that RAMS had been developed outwith document control procedure and to ascertain if RAMS had been implemented.

02/07/2018 17:20 - Project SHE Manager confirmed with ECoW that RAMS had been implemented by BOWL BoP Team, including the use of a cleaning detergent.

02/07/2018 17:47 - BOWL BoP Lead Technician confirmed with ECoW that Citra Clean Concentrate had been used to clean two WTG substructures and issued Safety Data Sheet (<http://bio-productions.com/wp-content/uploads/CITRA-CLEAN-CONCENTRATE.pdf>) to ECoW.

02/07/2018 18:03 - ECoW confirmed with Project SHE Manager that Citra Clean Concentrate is unapproved and that Safety Data Sheet states that chemical is harmful to aquatic life and should not be released into the environment.

02/07/2018 18:04 - Project SHE Manager issues 'all-stop'.

02/07/2018 - ECoW discussed incident with BOWL Consents Advisor and BOWL Package Manager.

03/07/2018 and 04/07/2018 - Support ECoW carried out initial investigations and briefed BOWL Consents Advisor.

03/07/2018 - ECoW arranged incident meeting for 12/07/2018.

12/07/2018 - Incident meeting attended by ECoW, BOWL Fabrication Manager & Engineering Coordinator, BOWL BoP Lead Technician and BOWL Lead Marine Coordinator. Corrective measures identified.

17/07/2018 - ECoW discussed content of non-compliance report with SSE Environmental Advisor.

17/07/2018 - ECoW issued draft non-compliance report to BOWL for review.

30/07/2018 - ECoW issued non-compliance report to Marine Scotland.

## 3. Actions taken by BOWL Client Representative

NOTE: Project SHE Manager not Client Representative as non-compliance relates to BOWL personnel.

02/07/2018 17:20 - Project SHE Manager confirms that RAMS is being utilised by BOWL BoP Team, including the use of a cleaning detergent.

02/07/2018 17:47 - BOWL BoP Lead Technician confirms that Citra Clean Concentrate has been used to clean two WTG substructures and issued Safety Data Sheet to ECoW.

02/07/2018 18:04 - Project SHE Manager issues 'all-stop' on the use of any form of detergent for the cleaning activities on structures.

02/07/2018 18:48 - Project SHE Manager reiterates 'all-stop' and states that 'all stop' will remain in place until incident reporting completed and recommendations prepared and agreed.

03 July 2018 14:26 - BOWL BoP Lead Technician confirms with Seaway Heavy Lifting HSE Manager that BOWL will not be using cleaning detergent as part of their Permit to Work (BOWL require a Permit to Work from Seaway Heavy Lift to access WTG assets under Seaway Heavy Lift ownership).

#### 4. Agreed corrective measures and recommendations

Initial corrective measures, in addition to the measures undertaken by BOWL's ECoW and BOWL HSE Manager:

03/07/2018 13:54 - BOWL Consents Advisor verbally notified Marine Scotland Casework Officer of the non-compliance.

04/07/2018 - BOWL Consents Advisor discussed non-compliance with BOWL Commercial Director (note: BOWL Project Manager on annual leave).

16/07/2018 - BOWL Consents Advisor discussed non-compliance with BOWL Quality Manager and BOWL Marine Package Manager and agreed further corrective measures.

17/07/2018 - BOWL Consents Advisor, ECoW, BOWL Package Manager and BOWL Commercial Director discussed non-compliance and approved further corrective measures.

Further corrective measures and recommendations:

- BOWL Fabrication Manager & Engineering Coordinator to amend LF000005-MS-477 'Cleaning bird guano' to remove any reference to the use of detergent and to reflect the use of power wash using only fresh water as the method specified.
- BOWL BoP Lead Technician to dispose of any remaining Citra Clean Concentrate in accordance with its Safety Data Sheet and LF000005-PLN-144 BOWL Environmental Management Plan.
- BOWL Fabrication Manager & Engineering Coordinator to ensure that BOWL document control procedure, as set out in LF000005-PR-049, followed by BOWL BoP team (specific the approach to 'check and approval stage').
- BOWL Fabrication Manager & Engineering Coordinator to ensure that BOWL BoP team highlight any 'non-routine' cargo (which includes any chemicals) to BOWL Marine Coordinator for inclusion on cargo manifest (to be provided to the vessel) prior to departure.
- BOWL Fabrication Manager & Engineering Coordinator to ensure that any further BOWL RAMS are issued to BOWL Consents and Licensing Team for review prior to approval. This is especially important where the use of chemicals is being proposed.
- BOWL Handover and Completions Manager to send reminder to BOWL personnel highlighting key elements of LF000005-PR-049 including the issue of all documents via Conject (not via email) and the need to obtain signatures on approved documentation.
- BOWL Handover and Completions Manager and BOWL Quality Manager to undertake Conject audit.

Approved by ECoW



Checked by BOWL Consents Advisor

n/a

Signed-off by BOWL Project Manager

