

Ms Esther Villoria
Aberdeen Offshore Wind Farm
3rd Floor, The Tun Building
4 Jackson's Entry
Holyrood Road
Edinburgh
EH8 8PJ

Our Ref: 018/OW/AOWFL - 9

21st December 2017

Dear Ms Villoria,

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

Condition 3.1.6 Chemical Usage

Thank you for your correspondence dated 28th November 2017 requesting that Marine Scotland Licensing Operations Team ("MS-LOT") confirms Aberdeen Offshore Windfarm Limited's ("AOWFL's) compliance with condition 3.1.6, '*Chemical Usage*', of the Marine Licence for the European Offshore Wind Deployment Centre ("EOWDC") (Licence Number: 04309/17/0).

You have provided details of the chemicals which are proposed to be used during the trenchformer and cable installation and foundation installation works. A list of these chemicals can be found in Annex 1.

In your email of 29th November 2017 you confirmed that all chemicals in your original correspondence are to be used in closed systems (with the exception of two grouting materials Grout cement (Portland cement), and Sodium Silicate). In your email of 4th December 2017 you confirmed that the paint and anti-corrosion chemicals listed at Annex 1 will be not be used in closed systems.

Any chemical used in "closed systems", where periodic refill is not needed, is not covered by the Harmonised Mandatory Control System ("HMCS") under the Oil Spill Prevention, Administration and Response ("OSPAR") Decision 2000/2. Therefore, Marine Scotland Licensing Operations Team ("MS-LOT"), on behalf of the Scottish Ministers, can confirm that the chemicals detailed in Annex 1 which are used in closed systems proposed to be used during the trenchformer and cable installation and foundation installation are exempt from the requirement of being in the List of Notified Chemicals assessed for use by the offshore Oil & Gas industry under the Offshore Chemicals Regulations 2002.

The Offshore Chemicals Notification Scheme ("OCNS") [list of chemicals] uses the OSPAR Harmonised Mandatory Control Scheme ("HMCS"), which was developed through the OSPAR Decision 2000/2, on a harmonised mandatory control system for the use and discharge of offshore chemicals (as amended by OSPAR Decision 2005/1) and its supporting recommendations. This ranks chemical products according to a Hazard Quotient ("HQ"), which is calculated using the Chemical Hazard and Risk Management ("CHARM") model.

The HQ is given a color banding with Gold and Silver products being the lowest potential environments hazard and products rated White, Blue or Orange being of increasing hazard and Purple being the greatest potential environmental hazard.

Products not applicable to the CHARM model are assigned an OCNS grouping, A - E. Group A includes products considered to have the greatest potential environmental hazard and Group E the least.

In addition, OSPAR has designated some substances as those which Pose Little or No Risk ("PLONOR") to the Environment.

In your email of 4th December 2017 you confirmed that the two grouting materials to be used; Grout cement (Portland cement) and Sodium Silicate are both present on the OCNS list. Grout cement and Sodium Silicate Solution are detailed as being products Posing Little Or No Risk ("PLONOR") are in ONCS grouping 'E' which are products considered to have the least potential environmental hazard risk.

Condition 3.1.6 requires that all chemicals utilised in the Works must be selected from the OCNS list unless otherwise approved in writing by MS-LOT. The paint and anti-corrosion chemicals (including those supplied in aerosol cans) listed at Annex 1 are not classed as 'operational chemicals' under the OSPAR Convention (see further, '*Common Interpretation on which Chemicals are Covered and not Covered by the Harmonised Mandatory Control System under OSPAR Decision 2000/2*' – Reference Number: 2002-6) and are therefore exempt from HMCS. In your correspondence of 4th December 2017 you provided the MSDS for the paint and anti-corrosion chemicals and confirmed that these chemicals will be used for maintenance and repair of the jackets' paint or coating. Whilst MS-LOT must be supplied with the name, quantities and safety information for all chemicals to be utilised during the Works, non-operational chemicals do not require formal approval from MS-LOT. Please note, however, that all operational chemicals to be utilised which are not included on the ONCS list will still require formal approval from MS-LOT.

Having assessed the chemicals forwarded (Annex 1) and taking into account the information as detailed above, MS-LOT on behalf of the Scottish Ministers, can approve the list of chemicals as detailed in Annex 1 and can also confirm that this notification is sufficient to confirm that AOWFL is in compliance with condition 3.1.6, '*Chemical Usage*', of the Marine Licence for EOWDC (Licence Number: 04309/17/0).

Yours sincerely,

Roger May
Marine Scotland Licensing Operations Team

Annex 1

Chemicals to be used during the trenchformer and cable installation works.

Name of Chemicals	Function	Estimated quantity of product to be used (l)	Where used	Closed system Y/N
Mobil EAL 46	Hydraulic fluid	500 l	Trenchformer vehicle	Y
Mobilgear 600 XP 150	Gear oil	20 l	Trenchformer vehicle	Y
Zitrec FC	Antifreeze / coolant	125 l	Trenchformer vehicle	Y

Chemicals to be used during the foundation works.

Name of Chemicals	Function	Estimated quantity of product to be used	Where used	Closed system Y/N
Cepsa Mistral 46 oil	Hydraulics	250 ltr.	EDT Hercules Offshore Crane	Y
Mobilus EP2 grease	Lubrication	5 kg.	EDT Hercules Offshore Crane	Y
Texaco Texclad 2	Lubrication	5 kg.	EDT Hercules Offshore Crane	Y
Seaocean Bio Rope Guard	Lubrication	30 ltr.	EDT Hercules Offshore Crane	Y
Interbond 201 (Part A)	Paint and anti-corrosion	20	Corrosion protection: outside	N
Interbond 201 (Part B)	Paint and anti-corrosion	20	Corrosion protection: outside	N
Interthane 990 (Part A)	Paint and anti-corrosion	10	Corrosion protection: outside	N
Interthane 990 (Part B)	Paint and anti-corrosion	10	Corrosion protection: outside	N
Interzinc 553 Grey Green	Paint and anti-corrosion	48 Ltrs	Corrosion protection: bolt holes interface flange	N
INTERSEAL 670 HS (part A)	Paint and anti-corrosion	120 Ltrs	Corrosion protection: repair galvanised parts	N
INTERSEAL 670 HS (part B)	Paint and anti-corrosion	22 Ltrs	Corrosion protection: repair galvanised parts	N
Intergard 405 red (part A)	Paint and anti-corrosion	120 Ltrs	Corrosion protection: sealer	N

			coat	
Intergard 405 Red (part B)	Paint and anti-corrosion	120 Ltrs	Corrosion protection: sealer coat	N
Interthane 990 Aerosol	Paint and anti-corrosion	60 Ltrs	Corrosion protection: markings	N
Interzone 954 (Part A)	Paint and anti-corrosion	160 Ltrs	Corrosion protection: outside	N
Interzone 954 (Part B)	Paint and anti-corrosion	40 Ltrs	Corrosion protection: outside	N
Bio Hydraulic Oil	Hydraulic fluid	100 L	Hydraulic system	Y
GB Unibio EP1	Lubricant	2 kg	General application to moving parts	Y

Name of Chemicals	Function	Estimated quantity of product to be used	Where used	OCNS group/HQ
Grout cement (Portland cement)	Grouting Material	484 000 KG / 1263.17m3	Grouting Mixing System	E/None (Non-Charmable)
Sodium Silicate	Grouting Material	193 000 KG	Grouting Mixing System	E/None (Non-Charmable)