### MS.MarineRenewables@gov.scot



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Our Ref: 018/OW/AOWFL - 9

18<sup>th</sup> April 2018

Dear Ms Villoria,

### MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

### **Condition 3.1.6 Chemical Usage**

Thank you for your correspondence dated 16<sup>th</sup> April 2018 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: 04309/18/1).

You have provided a list of chemicals which are proposed to be used on the vessel Olympic Delta, contracted by Boskalis. The majority of the chemicals on the list are going to be used within closed systems or for maintenance reasons. Chemicals in "closed systems" where periodic refill is not needed are not covered by the Harmonised Mandatory Control System ("HMCS") under OSPAR Decision 2000/2 and 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 (as amended 2011).

MS-LOT, on behalf of the Scottish Ministers, can confirm agreement with the list of chemicals proposed to be used by Olympic Delta to operate the ROV during foundation works, submitted on the 16<sup>th</sup> April 2018. Annex 1 has been now updated to include these chemicals.

Concerning maintenance chemicals. These are not covered by the Offshore Chemicals Regulations 2002 (as amended 2011) because they are identified to be low risk due to their purposes (for example anti-corrosion paints). Please note that these chemicals are different from chemicals that are used for maintenance operations, the use of which is not addressed in this letter. Under normal circumstances maintenance chemicals do not need to be submitted to the Scottish Ministers for approval, however, MS-LOT do require formal notification of these chemicals for recording purposes.

You have also provided details on the grease Castrol Biotac MP proposed to be used, offshore, on the deck, crane and umbilical winch of the ROV. Since the chemical is ranked in the Offshore Chemicals Notification Scheme ("OCNS") list as non-charmable product, of group A and carries a substitution warning, MS-LOT asked AOWFL to confirm the reasons for choosing that specific type of grease and if any alternatives had been under considered. AOWFL notified MS-LOT on the 17<sup>th</sup> April 2018 that Boskalis proposed using a different product instead of the Castrol Biotac MP;







LanoPro Wire Oil 30 EAL (("Environmentally Acceptable Lubricant") under the US EPA 2013 Vessel General Permit ("VPG")). This chemical has been tested in Norway following the OSPAR harmonised Offshore Chemical Notification Format ("HOCNF") and it has been deemed to be "minimally toxic".

MS-LOT has undertaken research and has obtained advice from an Offshore Chemical Risk Assessor within the Offshore Energy Environmental Advice Group department of Marine Scotland Science, in addition to assessing the details of the LanoPro Wire Oil 30 EAL that AOWFL forwarded.

For the reasons as outlined above, MS-LOT can, on behalf of the Scottish Ministers, approve the use of LanoPro Wire Oil 30 EAL, and the chemicals used within closed systems and as maintenance chemicals on the Olympic Delta, in accordance with condition 3.1.6, 'Chemical Usage', of the Marine Licence for EOWDC (Licence Number: 04309/18/1).

Yours sincerely,

Jessica Drew Marine Scotland Licensing Operations Team

## Annex 1

Chemicals to be used during the backhoe dredger and cable installation works.

Name of Chemicals	Function	Estimated quantity of product to be used (I)	Where used	Closed system Y/N
Mobilgear 600 XP 150	Gear oil	20 I	Trenchformer vehicle	Y
Mobil EAL 46	Hydraulic fluid	500 I	Trenchformer vehicle	Υ
Zitrec FC	Antifreeze / coolant	125 l	Trenchformer vehicle	Υ
Castrol Molub- Alloy 936 SF Super Heavy	Grease	190 kg	Excavator on Backhoe Dredger	N
Panolin HLP Synth	Hydraulic fluid	6000 I	Excavator on Backhoe Dredger	Y
Panolin HLP Synth	Hydraulic fluid	208 I	Elevated Excalator Snijder	Y
Mobil Coolant Ready Mixed - 36C	Cooling fluid	400 I	Excavator and Generator on Backhoe Dredger	Y
MGO	Fuel	33cbm	Excavator and Generator on Backhoe Dredger	Y
Mobil Delvac MX 15w-40	Engine Oil	2130	Excavator and Generator on Backhoe Dredger	Y
Mobil Gear 600 XP 150	Gear Oil	350 I	Excavator and Generator on Backhoe Dredger	Y
Mobil Gear 600 XP 220	Gear Oil	450 l	Excavator and Generator on Backhoe Dredger	Y
Castrol Molub- Alloy 777	Grease	7680 g	Excavator on Backhoe Dredger	N
Mobil xhp 222	Grease	36 Kg	Elevated Excavator Snijder	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
Fluorescent Dye (RX-9022)	Coloring Agent	500 L	Grouting Mixing System	N
Silicone 71	Lubricant	4400ml	Suction Pump	Υ





WD-40	Lubricant	1800ml	Suction Pump	Υ
Ultra Clean	Degreaser	1000ml	Suction Pump	Υ
Chetra N.A.S.	Lubricant	900ml	Suction Pump	Υ
White Spirit	Solvent	400ml	Suction Pump	Υ
Molykote C111	Lubricont	400ml	Cuetien Dumen	Υ
Compound	Lubricant	400Mi	Suction Pump	
Loctite® 243				Υ
Threadlocker	Sealant	310ml	Suction Pump	
Medium Strength			•	
Loctite® 542	Sealant	560ml	Suction Pump	Υ
Bechem			1	Υ
Hydrostar HEP	Hydraulic oil	120L	Suction Pump	
46 EEL	,	-		
Cepsa Mistral 46		0=0.1:	EDT Hercules	Υ
oil	Hydraulics	250 ltr.	Offshore Crane	
Mobilus EP2			EDT Hercules	Υ
grease	Lubrication	5 kg.	Offshore Crane	•
•			EDT Hercules	Υ
Texaco Texclad 2	Lubrication	5 kg.	Offshore Crane	•
Seaocean Bio			EDT Hercules	Υ
Rope Guard	Lubrication	30 ltr.	Offshore Crane	•
•			Corrosion	N
Interbond 201	Paint and anti-	20	protection:	11
(Part A)	corrosion	20	outside	
			Corrosion	N
Interbond 201	Paint and anti-	20	protection:	IN
(Part B)	corrosion	20	outside	
			Corrosion	N
Interthane 990	Paint and anti-	10	protection:	IN
(Part A)	corrosion	10	outside	
			Corrosion	N
Interthane 990	Paint and anti-	10	protection:	IN
(Part B)	corrosion	10	outside	
			Corrosion	N
Interzinc 553	Paint and anti-			IN
		48 Ltrs	protection: bolt holes interface	
Grey Green	corrosion			
			flange	N.I.
INTERSEAL 670	Paint and anti-	400   400	Corrosion	N
HS (part A)	corrosion	120 Ltrs	protection: repair	
\(\frac{1}{2}\)			galvanised parts	N.1
INTERSEAL 670	Paint and anti-	00.14	Corrosion	N
HS (part B)	corrosion	22 Ltrs	protection: repair	
· · · /			galvanised parts	N1
Intergard 405 red	Paint and anti-	4001	Corrosion	N
(part A)	corrosion	120 Ltrs	protection: sealer	
(P	33.133.311		coat	
Intergard 405	Paint and anti-		Corrosion	N
Red (part B)	corrosion	120 Ltrs	protection: sealer	
	3311331311		coat	
Interthane 990	Paint and anti-	_	Corrosion	N
Aerosol	corrosion	60 Ltrs	protection:	
. 1010001	3311331311		markings	
Interzone 954	Paint and anti-		Corrosion	N
(Part A)	corrosion	160 Ltrs	protection:	
(I all A)	COTTOSIOTI		outside	
Interzone 954	Paint and anti-		Corrosion	N
(Part B)	corrosion	40 Ltrs	protection:	
(1 a1 t D)	COLLOSIOLI		outside	







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)

# Chemicals to be used on the Olympic Delta (ROV)

Name of Chemicals	Function	Estimated quantity of product to be used (I)	Where used	Closed system Y/N
Royal Purple MARINE HYDRAULIC OIL 22	Hydraulic oil	100 l	ROV/Olympic Delta	Y
LanoPro Wire Oil 30 EAL	Grease	2 Kg	Offshore crane 80 T, ROV umbilical winch, sidegates in hangar, ROV hangar cranes	N





