



Addendum to
OSPAR Publication number 594/2013

Implementation of OSPAR Recommendation
2006/3 on Environmental Goals for the Discharge
by the Offshore Industry of Chemicals that Are,
or Which Contain Substances Identified as
Candidates for Substitution, 2012

United Kingdom

Note:

At OIC 2015, the UK presented document OIC 15/4/Info.1, which updated the 2012 assessment submitted to OIC 2013 on implementation of OSPAR Recommendation 2006/3, to align with submissions provided by other Contracting Parties. OIC agreed that the update submitted by the UK should be published as an Addendum to the 2013 overview assessment of the implementation of OSPAR Recommendation 2006/3.

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OSPAR Convention

The Convention for the Protection of the Marine Environment of the North-East Atlantic (the “OSPAR Convention”) was opened for signature at the Ministerial Meeting of the former Oslo and Paris Commissions in Paris on 22 September 1992. The Convention entered into force on 25 March 1998. The Contracting Parties are Belgium, Denmark, the European Union, Finland, France, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Convention OSPAR

La Convention pour la protection du milieu marin de l'Atlantique du Nord-Est, dite Convention OSPAR, a été ouverte à la signature à la réunion ministérielle des anciennes Commissions d'Oslo et de Paris, à Paris le 22 septembre 1992. La Convention est entrée en vigueur le 25 mars 1998. Les Parties contractantes sont l'Allemagne, la Belgique, le Danemark, l'Espagne, la Finlande, la France, l'Irlande, l'Islande, le Luxembourg, la Norvège, les Pays-Bas, le Portugal, le Royaume-Uni de Grande Bretagne et d'Irlande du Nord, la Suède, la Suisse et l'Union européenne.

Implementation report concerning OSPAR Recommendation 2006/3 on environmental goals for the discharge by the offshore industry of chemicals that are, or contain substances that are, identified as ‘Candidates for Substitution’

Year of Report:

Country:

Reservation applies

Is measure applicable in your country?

If not applicable, then state why not (e.g. no relevant uses or discharges of candidates for substitution)

Means of Implementation of the measure in § 3.1 of the Recommendation (phase-out of discharge of candidates for substitution):

by legislation	by administrative action	by negotiated agreement
No	Yes	Yes

Candidates for substitution that have been substituted

See attached report.

Candidates for substitution where the relevant regulatory authority is satisfied that there is currently no suitable alternative, including justification

See attached report.

Measures taken to reduce use or discharge of chemicals with no suitable alternative

See attached report

Please provide information on:

- a. Specific measures taken to give effect to this measure;

The UK publishes a list of all offshore chemicals currently registered for use on the UKCS, which confirms whether the products are, or contain, a Candidate for Substitution. Operators intending to use offshore chemicals on the UKCS are additionally provided with a template that also confirms whether the product is, or contains, a Candidate for Substitution. The UK has produced a National Plan for the reduction of the use and discharge of all offshore chemicals that have been assigned a substitution warning, and details of the plan were included in the UK paper submitted to OIC 2007 (OIC 07/3/6-E). The UK National Plan encourages operators to phase out the use and discharge of specific Candidates for Substitution in accordance with a timetable, initially concentrating on substances that are highly persistent, bioaccumulating and toxic. To demonstrate progress against the UK National Plan, operators must submit an annual report to DECC providing details of all use and discharge of offshore chemicals that are, or contain, a Candidate for Substitution, and provide a justification for the continued use and/or discharge of such chemicals. Further information is included in the attached report.

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- b. Any special difficulties encountered, such as practical or legal problems, in the implementation of this measure;

No special difficulties have been encountered.

- c. Any reasons for not having fully implemented this measure should be spelt out clearly and plans for full implementation should be reported.

The measure has been fully implemented, and progress is summarised in the attached report.

Please provide information on:

- a. Any programme of review of authorisations for the discharge of candidates for substitution, and the progress of such reviews;

In addition to the measures introduced to support the UK National Plan, all authorisations for chemical use and discharge (UK 'Chemical Permits') must be supported by an annual report detailing the Candidates for Substitution that are still in use, any trials that have been undertaken to seek replacements and any Candidates for Substitution that have been replaced. These reports are reviewed on an annual basis to inform discussion of the phase-out of offshore chemicals that are, or contain, Candidates for Substitution.

- b. Where the phasing-out of such offshore chemicals is being achieved in some other way, the nature of those other means, and the progress with them.

See attached report.

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OSPAR Recommendation 2006/3 on environmental goals for the discharge by the offshore industry of chemicals that are, or contain substances that are, identified as 'Candidates for Substitution'

Report Aims:

- 1) *To identify candidates for substitution that have been replaced*
- 2) *To identify candidates for substitution that have been replaced for some operations*
- 3) *To identify candidates for substitution where the regulatory authority is currently satisfied that there are no suitable alternatives*
- 4) *To identify trials being undertaken to replace additional candidates for substitution*
- 5) *To identify progress in reducing the total use and/or discharge of candidates for substitution*

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Introduction

Following the adoption of Recommendation 2006/3, the UK developed a national plan for the phase-out of offshore chemicals that are, or contain, candidates for substitution, or the reduction and phase-out of discharges of those chemicals. The UK also implemented a new annual reporting requirement, requiring operators to provide details of all the offshore chemicals that are, or contain, candidates for substitution that are still in use, those that have been phased-out and those where trials have been, or are being, undertaken to seek alternatives. Operators are also required to provide technical justifications for all the offshore chemicals that are, or contain, candidates for substitution that are still in use.

Marine Scotland was contracted to review the annual reports, to assess progress against the recommendation. This report relates to the period up to the end of 2011 (annual reports received in Q1 2012) and updates the report OIC 13 04/04 submitted to OIC 2013.

Wherever possible, errors in the annual reports (e.g. product name spellings and syntax) have been corrected by Marine Scotland, and the comparatively small number of errors that could not be resolved are considered unlikely to have a significant impact on the conclusions of the report.

Progress during period covered by the report

At the time of adoption of Recommendation 2006/3, a total of 433 products carrying substitution warnings were being used on the UK Continental Shelf (UKCS).

In 2011 a total 418 products carrying substitution warnings were used on the UKCS. By the end of 2011, 39 of the 418 products had been phased out completely; 85 had been phased out for specific functions, applications and/or sites, but were still in use for other functions, applications and/or sites; and 294 had not been phased-out for any functions, applications and/or sites, Table 1.

Many of the substitution warnings relate to single components within a product, and those components can be present in more than one product. For the purpose of identifying the specific chemicals that have been phased-out, it is therefore necessary to consider the components, rather than the products. The summary table below details the numbers of products and their substitution components that were phased-out during the period of this report.

Table 1 – Products and Substituted Components Phased-Out in 2011

	Products	Components
Phased-Out Completely:	39 (9.5%)	24 (7%)
Phased-Out for Some Applications	85 (20.5%)	108 (32%)
Not Phased-Out:	294 (70%)	207 (61%)
Total:	418 (100%)	339 (100%)

Candidates for substitution that have been phased-out completely: A number of the substitution components that were phased-out completely were common to a number of products, as the removal of 39 products only resulted in the removal of 24 substitution components. A list of those components is provided in Appendix 1.

Candidates for substitution that have been phased-out for some functions, applications and/or sites: More than one substitution component was phased-out when alternatives were identified for some functions, applications and/or sites, as the removal of 85 products resulted in the removal of 108 components. A list of those components is provided in Appendix 2.

Candidates for substitution that have not been phased-out: There are a number of common substitution components in the products that have not been phased-out for any functions, applications and/or sites, as the 294 products still in use contain 207 substitution components. A list of those components is provided in Appendix 3.

Note: Where the component name would identify the proprietary name of an offshore chemical and/or the supplier or manufacturer of that chemical, the relevant information has been replaced with a code name.

Trials being undertaken to replace additional candidates for substitution

In addition to the research and development undertaken by chemical manufacturers, chemical suppliers and offshore operators to identify potential alternatives to candidates for substitution, it is often necessary to undertake onshore and offshore trials to determine the suitability and efficacy of the replacement product. In some cases these trials can just involve removal of the substitution component in a product, to determine if there is a significant adverse effect on performance.

A total of 870 reports were received from operators in relation to the 294 products that are still in use. Trials of potential alternative products were identified for 74 of the products covering 64 substitution components. Operators confirmed that trials had not been initiated for 255 of the products, and no information was provided for 10 of the products. The responses are summarised in the Table 2 below.

Table 2 – Number of Trials Initiated and Not Initiated in 2011

	Operator Reports	Products	SUB Components
	870	294	258
Trials Initiated	126	74	64
No Trials	732	270	189
Not Specified	12	10	5

It should be noted that the number of products and substitution components detailed in the operator reports do not equate to the number of products or substitution components that have not been phased-out for any functions, applications and/or sites, as some operators confirmed that they were trialling replacements for a particular product, but other operators confirmed that they were not undertaking trials in relation to the same product.

Total use and discharge of candidates for substitution

Total use and discharge of substitution components in 2006 were 7 718 194 kg and 2 195 753 kg respectively. Total use and discharge of substitution components in 2011 were 5 568 562 kg and 1 114 435 kg respectively. Although comparison of the data for the two years does not take account of differences in the levels of offshore activity, the data indicates a 28% reduction in the use of substitution components and a 49% reduction in the discharge of substitution components.

Comparison of 2009 and 2011 data

The number of products phased-out completely and products phased-out for some applications by 2011 appeared to be less than reported for the period up to 2009. This was confirmed to relate to products that had been approved for use in a particular calendar year, but had not been used or discharged and were therefore reported as phased-out completely or phased out for some functions or sites. The products were then used in a subsequent calendar year, indicating that phase-out was

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still outstanding. The reporting system has therefore been amended to eliminate this anomaly in future reports.

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Appendix 1 – SUB Components Phased-Out/Replaced Completely in 2011

SUB Components Phased-Out Completely
(C25P1) (C25)
1-Propanaminium, 3,3',3''-[phosphinylidynetris(oxy)]tris[N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-, N,N',N''-tri-C6-18 acyl derivs. Trichlorides
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs, inner salts
2-(2-Aminoethoxy)ethanol
2,5-Furandione, polymer with 1-octadecene
4-(Trifluoromethyl) benzoic acid
Alkylene oxide Block Polymer (C10)
Anhydride Polyamine reaction product
Aromatic solvent containing 93.5% solvent naphta and 6.5% 1,2,4-Trimethylbenzene
C9-C11 Fatty Acid (6 mole EO)
Cocoamido propyl amine
Diethylamine
Ethoxylated C11 linear / branched alcohols
Ethylenediaminetetraacetic acid, sodium salt of
Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, dinonylphenol, nonylphenol and oxirane
Phenolic novolac resin
Phenolphthalein, disodium salt
Poly (oxy(methyl-1,2-ethanediyl)), alpha butyl-omega-hydroxy
Polyethylene Hexene Copolymer
Polyolefin ester in mineral oil (C15P2)
Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, salts with bentonite
Quaternary ammonium compounds, benzyl-C10-21-alkyldimethyl, chlorides
Sodium salt of polyacrylic acid
Vinylidene chloride/methyl acrylate copolymer

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Appendix 2 - Candidates for Substitution that have been Phased-Out for some Functions, Applications and/or Sites in 2011

SUB Component Phased-Out in Some Circumstances (Functions, Applications or Sites)
(C21P1)
(C3P1) Amine Acetate
(C3P2) Phosphate Ester
(C63P1) (reaction product of decanoic acid, 12-hydroxystearic acid and 1,2-ethandiamine (mol ratio 1:2:1))
(C7P3), Diamine/triamine ethoxylate (10EO)
1,2-Ethanediamine, polymer with methyloxirane and oxirane
1-Decene, homopolymer, hydrogenated
1H-imidazole-1-ethanamine,4,5-dihydro-,2-nortall-oil alkyl derivatives
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., inner salts (sodium salts)
1-propanesulphonic acid, 2-methyl-2-(1-oxo-2-propenyl)amino-, monosodium salt, polymer with 2-propenamide
2,4-difluorobenzoic acid
2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 1-ethenyl-4-methylbenzene, 2-ethylhexyl 2-propenoate and 2-methylpropyl 2-methyl-2-propenoate
2-Propenoic acid, homopolymer, sodium salt
3-[(2-Aminoethyl)amino]propionitrile polymer
4-Fluorobenzoic acid
4-Nonylphenol formaldehyde resin ethyleneoxide condensate
5-Chloro-2-methyl-3(2H)-Isothiazolone and 2-methyl-3(2H)-isothiazolone methyl-3(2H)-isothiazolone
Acrylic resin
Alcohols, C9-11, ethoxylated
Alkyl trimethyl ammonium methyl sulphate
Alkylaryl sulphonate
Amino based fatty acids
Aramid fibres
Benzenesulfonic acid, C10-14-alkyl derivs, sodium salts
Butanedioic acid, methylene-, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propane sulphonic
C10/12, 16 alcohol ethoxylated, propoxylated, 8 EO, 2 PO
C12-C15 Ethoxylated alcohol with 7.25 mols EO +/- 0.5 mol weight 203 - (C19P1) / Surfactant
C12-C16 Alkyl dimethyl benzyl quaternary ammonium chloride
C9-C11 Fatty alcohol ethoxylate (4 mole EO)
C9-C11 primary alkylalcohol ethoxylate
Cocoalkylamine/Beta-alanine, N-(2-carboxyethyl)-,N-coco alkyl derivs.
Cocoalkylamino propionic acid
Cocodimethyl benzyl ammonium chloride
Coconut diethanolamide
Copolymer of acrylic acid and mono-/diacrylate ester derived from mixed ethylene oxide/propylene oxide block copolymer

SUB Component Phased-Out in Some Circumstances (Functions, Applications or Sites)
Decanoic acid, compd. with N-butyl-1-butanamine (1:1)
D-Glucopyranose, oligomeric, C10-16-alkyl glycosides
D-Glucopyranose, oligomeric, C9-11 alkyl glycosides with water.
Diethylene triamine pentakis methylene phosphonic acid, disodium salt
Dihydrogenated Tallow dimethyl ammonium chloride
Dimerised C18 unsaturated fatty acids, with residual monomeric acids
Distillates (petroleum), hydrotreated heavy paraffinic
Dithiocarbamate - hexanedinitrile, hydrogenated, high boiling fraction, reaction products with epichlorohydrin-glycerol polymer, N-(dithiocarboxy)derivatives-potassium salts
Epoxy Adduct Proppant Resin
Ethoxylated Coco Fatty Acid
Ethylene Dichloride-ammonia polymer, Reaction product with carbon disulphide and sodium hydroxide
Ethylene oxide / Propylene oxide copolymer
Ethylene oxide/propylene oxide block copolymer
Ethylene oxide/propylene oxide condensate of a long chain fatty alcohol
Ethylenediaminetetraacetic acid, tetrapotassium salt
Fatty acid amide
Fatty acids, C18 unsaturated dimers, ethoxylated propoxylated (100 mole EO/PO)
Fatty acids, coco, reaction products with ethanolamine
Fatty acids, coco, reaction products with ethanolamine, ethoxylated
Fatty acids, tall-oil, reaction products with diethylenetriamine, acetates
Fatty alkyl amidopropyl betaine
Fluorescein
Grafted Humic Acid/2-Acrylamido-2-methyl propane Sulphonic Acid
Hexamethylene tetramin, compound with 1-chloro-2,3-epoxypropane
Hydrogenated styrene-isoprene block polymer - (C22P1) / Viscosifier
Hydroxyethyl cellulose vinyl phosphonic acid
Isopropylamine alkyl benzene sulphonate
Isopropylamine salt of DDBSA
Lead
Liquid alkyl thiourea
Lubricating greases
Molybdenum, bis(O,O-bis(2-ethylhexyl) phosphorodithioato- S,S')dioxodi-mu-thioxodi-, (Mo-Mo)
Morpholine derivative residues - aliphatic and heterocyclic mono and diamines
N,N,N-polyoxyethylene(12)-N-tallow-1,3-diaminopropane
N-coco alkyl trimethyl diamine
Nonanoic acid, 2-ethyl-2-(((1-oxononyl)oxy)methyl)-1,3-propanediyl ester
Nylon 6/12 [Poly(hexamethylene dodecanediamide)]
Octadecanoic acid, 12-hydroxy-, homopolymer, octadecanoate
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts
Poly (olefin ester) - (C41P1)

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SUB Component Phased-Out in Some Circumstances (Functions, Applications or Sites)
Poly(oxy-1,2-ethanediol)-alpha,-hydro-.omega.-hydroxy, mono-C10-16 alkylethers, phosphates
Poly(oxy-1,2-ethanediyl),alpha-octadecyl-omega-hydroxy-(9Cl)
Polyacrylic acid
Polyalkylene glycol
Polydimethylsiloxane
Polyolefin amide alkeneamine reacted in aliphatic hydrocarbon solvent
Polyoxyethylene (12eo) tallow diamine
Polyoxyethylene (15) tallow amine
Polypropylene
Polypropylene glycol (MW 400)
Quaternary ammonium compounds, benzylcoco alkylbis - (hydroxyethyl), chlorides
Quaternary ammonium compounds, benzl hydrogenated tallow alkyl dimethyl, chloridess compounds with Bentonite
Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides
Quaternary Ammonium Salt (as 50% Aqueous solution)
Reaction product of ethylenediamine with a bisphenol A-epichlorohydrin epoxy resin
Reaction product of tall oil fatty acid, diethylene triamine and maleic anhydride
Silicone fluid (fluorosilicon polymers) component B-53,000-59,000
Silicone fluid (fluorosilicone polymers) (component A-4600)
Siloxanes and silicones, di-Me, 3-hydroxypropyl Me, ethoxylated propoxylated
Sodium chlorite
Solvent naphtha (petroleum), light arom.
Sorbitan stearate
Sulphurous acid, monosodium salt polymer with formaldehyde and acetone
Tall oil diethylene triamine imidazoline
Tall oil polybasic acid
Thiourea/formaldehyde polymer (~50% in TOFA2 solvent)
Trifluoropropylmethyl siloxane
Trisodium nitrilotriacetate
Undecyl alcohol ethoxylate (5 moles ethylene oxide)
Undecyl alcohol ethoxylate (7 moles ethylene oxide)
Vinyl acrylate copolymer (pre-crosslinked)
Wattlebark tannin

Appendix 3 - Candidates for Substitution that have Not Been Phased-Out in 2011

SUB Components Not Phased-Out
(C78) North American asphaltum
(C7P1) - Alkyl tetrahydro imidazoline ethoxylate
(Nitrilotris(methylene))triphosphonic acid
[[[(phosphonomethyl)imino]bis[ethylenenitrilobis(methylene)]]tetrakisphosphonic acid, ammonium salt
1, 4 Dibromobenzene
1,2-Ethanediamine, N-(2-aminoethyl)-, ethoxylated propoxylated
1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with oxirane
1,2-ethanediaminium, N,N'-bis-[2-[bis(2-hydroxyethyl) methyl ammonio] ethyl]-N,N'-bis(2-hydroxyethyl)-N,N'-dimethyl-tetrachloride
1,3,5,-triphenylbenzene [C24H18]
1H-Benzotriazole, 4(or 5)-methyl-
1H-Imidazole-1-ethanamine, 4,5-dihydro-2-undecyl-
1H-Imidazoledipropanoic acid, 4,5-dihydro-1-(2-hydroxyethyl)-, 2-norcoco alkyl derivs., disodium salts
1-hydroxyethylidene (1,1-diphosphonic acid)
2,2,3,3,3-Pentafluoro-1-propanol
2,2,3,4,4,4-Hexafluoro-1-butanol
2,3,4-Trifluorobenzoic acid
2,4,5-Trifluorobenzoic acid
2,5-difluorobenzoic acid
2,5-Furandione, 3-(hexadecenyl)dihydro-
2,6-difluorobenzoic acid
2-ethylhexyl molybdenum dithiophosphate
2-Fluorobenzoic acid
2-Heptadec-8-enyl-4,5-dihydro-1H-imidazole-1-ethylamine monocitrate
2-Hydroxyethyliminobis (methylenephosphonic acid) (C44P1)
2-methyl-1,3-butadiene-ethenylbenzene, hydrogenated polymer (Organophyllic viscosifying polymer)
2-phosphino-1,2,4 butane tricarboxylic acid sodium salt
2-Propanol, 1-(2-butoxy-1-methylethoxy)-
2-propenoic acid polymer with 2-methyl-2-[(1-oxo-2-propenyl) amino]-1-propane sulphonic acid monosodium salt & sodium phosphonite
2-Propenoic acid, 2-methyl-, telomer with 2-propenoic acid and sodium hydrogen sulfite, sodium salt (9Cl) (C4H6O2.C3H4O2)x.H2O3S.xNa)
2-propenoic acid, polymer with 2-propenamide
2-trifluoromethylbenzoic acid
3-Fluorobenzoic acid
3-trifluoromethylbenzoic acid
6,6,6-(1,3,5-triazine-2,4,6-triyltriimino) trishexanoic acid
9 Bromoanthracene
9 Bromophenanthrene

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SUB Components Not Phased-Out
9, 10 dibromoanthracene
9-Octadecen-1-ol, (9Z)-, phosphate
Acrolein
acrylamide/tertiarybutylacrylate copolymer
Acrylamido Methyl Propane Sulphonic acid / Alkyl acrylamide copolymer
Acrylic acid polymer
Acrylic Polymer:p(AA, 59.5/AMPS, 27.6/tBAM, 7.8 /NaHSO3, 5.2)Na Salt
acrylonitrile-butadiene copolymer
Acylated condensed alkanolamines
Alcohols, C9-11-branched and linear, C10-rich
Alkoxyated polyacrylate capped with Phenol-formaldehyde resin -60% active in Alkyl Benzenes C9-10 and xylene
Alkyl dimethyl benzyl ammonium chloride
Alkyl tetrahydro imidazoline ethoxylate (C7P1)
Alkylphenol/formaldehyde resins alkoxyate (493)
Amine alkoxyate
Amine alkoxyate 2
Amines, coco alkyl, acetates
Amines, N-coco alkyltrimethylene di, acetates
Amines, polyethylenepoly-, triethylenetetramine fraction
Ammonium AHPS VIMA Acrylamide Terpolymer
Benzene sulfonic acid, mono-C10-C14 alkyl derivs
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs
Benzenesulfonic acid, C10-16-alkyl derivatives with impurities (C27P1)
Benzenesulfonic acid, dodecyl- (8Cl, 9Cl)
Benzenesulfonic acid, dodecyl-, branched, calcium salts
Benzoic acid, 3,5-difluoro-
Benzoquinone
Benzyl chloride quaternary ammonium salt
Benzyl-(C12-C16 Linear Alkyl)-Dimethyl-Ammonium Chloride
Block alkoxyate
Butylated hydroxytoluene
C11-C14 Ethoxylated branched alcohols (C13 rich), sulphated, sodium salt
C12-C14 alcohol ethoxylate (11-12 mole EO)
C2-C18 Alkyl, C6 Aryl Ether Phosphate Ester
Calcium Dinonylnaphthalenesulfate
Calcium dodecyl benzene sulphonate
Castor oil, hydrogenated
Coco alkyl dimethyl benzyl ammonium chloride (80% active, also contains 6.5 % Propan-2-ol CAS 67-63-0 and 13.5 % water)
Cocoalkyldimethyl benzyl ammonium chloride
Cocobenzyl dimethyl ammonium chloride

SUB Components Not Phased-Out
Cocobetaine
Cocodiamine acetate
Complex mixture of amines, containing primarily cis- and trans- cyclohexanediamine, piperazineethanol and other amines as acetate salts
Copolymer of ethylene oxide and propylene oxide (50/50 w/w mix) initiated using 1,4-butanediol (XZ96120)
Copolymer of styrene-divinyl benzene
D-glucopyranose oligomers, monosulfosuccinate coc alkyl glycosides, sodium salts
Di-(2-EthylHexyl) sodium sulphosuccinate 66% & Monopropylene glycol 13% & water 21%
Diamine/Triamine ethoxylate (4305)
Diaminopolypropylene glycol
Diethylene triamine pentaacetic acid
Dimethyl siloxanes and silicones
Dimethylamine epichlorohydrin ammonia terpolymer
Dimethylamine epichlorohydrin ethylene diamine polymer
Dipentene-rich turpentine oil
Dipropylene glycol initiated ethylene oxide / propylene oxide co-block polymers (68%PO:32%EO)
Dithiocarbamate
Edetate dipotassium anhydrous
EO/PO Block Copolymer in Xylene
Epoxy resin
Ethoxylated phenolic resin in solvent (C14P2)
Ethoxylated propoxylated 4-nonylphenol-formaldehyde resin
Ethylene Diamine Tetraacetic Acid Ferric Potassium Complex
Ethylene oxide adduct of a fatty amine (Ethoxylated amine) (C67)
Ethylene Oxide Propylene Oxide Copolymer 2
Ethylene Oxide Propylene Oxide Copolymer 2 Oxirane, methyl-, polymer with oxirane
Fatty acids, C18-unsatd, dimers
Fatty acids, tall-oil, polymers with diethylenetriamine and fumaric acid
Fatty acids, tall-oil, reaction products with tetraethylenepentamine
Fatty acids,tall-oil, compds. with polyethylenepolamine-tall-oil fatty acid reaction products.
Fatty acids; Tall oil reaction products with diethylenetriamine
Fatty alcohol polyglycoether (2-5 mole EO)
Flouro propyl silicone
Formaldehyde, polymer with N1-(2-aminoethyl)-N2-[2-[2-aminoethyl]amino]ethyl]-1,2ethanediamine, 2,2'-[1,4-butanediylbis(oxymethylenes) bis[oxirane],4,4'-(1-methylethylidene)bis[phenol and 2,2'-[(1-methylethylidene) bis(4,1-phenyleneoxymethylene)bi
Formaldehyde, polymer with nonylphenol
Gilsonite
GILSONITE
HCl Neutralised Poly (oxy(methyl-1,2-ethanediyl)), alpha-(2-aminomethylethyl)omega-(2-

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SUB Components Not Phased-Out
aminomethylethoxy)
Hydroxypropyl acetate, sodium acrylate, acrylic acid copolymer
Imidazolium compounds, 1-(2-(2-carboxyethoxy)ethyl)-1(or 3)-(2-carboxyethyl)-4,5-dihydro-2-norcoco alkyl, hydroxides, disodium salts
Iron (III) chelate of hydroxyethylenediamine triacetic acid
Isotridecanol ethoxylated (C76P1)
Lube oil additive containing polyisobutylene in oil
Maleinised Fatty Acid
Mercaptobenzthiazole
Methyl benzylated polymer / PEG 400-di-methylbenzyl
Methylstyrene/acrylate copolymer (pre-cross-linked)
Modified amidoamine from Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine
N-(2-aminoethyl)-1,2-ethanediamine, tall oil reaction product -Imidazoline derivate
n-benzyl-alkylpyridinium chloride
Nonyl and butyl phenol and paraformaldehyde reacted (catalysed with Sodium hydroxide), ethoxylated (1.6 mole EO)
n-tallow alkyl-1,3-propylenediamine
n-tallow-1,3-diamino-propane
Octadecyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate
Octafluoronaphthalene (C79P1)
Oleoylamidopropyl dimethyl betaine
Organically modified Hectorite clay
Organoclay
Oxirane, methyl polymer with oxirane ether 1,2,3-propanetriol
Paraffin wax
Pentafluoro-(2,2,2-trifluoroethoxy)benzene
Perfluoromethylcyclohexane (PMCH)
Phenol Formaldehyde Polymer
Phenol polymer 2.823-4.704% with formaldehyde 0.168-0.280% and phenol 0.009-0.016% formaldehyde
Phenol,2,4,6[-tris (dimethylamino)methyl]-, reaction products with benzyl chloride
Phenolic Novolak Complex
Pipedope Grease
Poly (lactic acid)
Poly(oxy-1,2-ethanediyl), alpha-(2-ethylhexyl)-omega-hydroxy-
Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-
Poly[oxy(methyl-1-2-ethanediyl)],a-hydro-w-hydroxy
Poly-co-(hexadecyl acrylate-methyl acrylate)
Polydimethylsiloxane (surface active)
Polyester Resin
Polyether polyol (C12)

SUB Components Not Phased-Out
Polyethoxylated Phenol, Phosphate
Polyethylene glycol 8000
Polyethylene imine
Polyethylene polyamine
Polyoxyethylene Polyoxypropylene glycol
Polyphosphoric acids, esters with polyethylene glycol nonylphenyl ther
Polypropylene co-polymer
Polyquarternary - reaction between 2-vinyl pyridine and styrene copolymer, quaternised with dimethylsulphate.
Polyquaternary amine
Polysulphonic/carboxylic acid solution, sodium salt
Polytetrafluoroethylene
Polyvinyl acetate
Polyvinyl alcohol
Polyvinylpyrrolidone
Potassium permanganate
Propoxylated diepoxide reacted with C12-14 alkyl dimethyl betaine and ethoxylated propylene glycol oleate
Pyridium, 1-(phenylmethyl)-,ethyl methyl derivatives, chlorides
Quaternary Ammonium Chloride (coco alkyl dimethyl benzyl ammonium chloride)
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl) dimethyl, chloride with bentonite. Contains max 5% crystalline silica impurity.
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl) dimethyl, chloride with hectorite
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with attapulgite
Quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, chlorides
Reaction Product of alcohol ether sulphate in residual alcohol/water.
Rubber
Silicone fluid, (60,000 cst)
Siloxanes and Silicones, di-Me, Me trifluoropropyl, hydroxy-terminated
Sodium asphalt sulphonate
Sodium EDTMP
Sodium mercaptobenzotriazole
Sodium methyl silicate
Sodium tolutriazole
Sodium tolytriazole
Sodium tridecyl ether sulphate
Stannous sulphate
Styrene-1,3-butadiene copolymer
Sulphonated polymer / P400 di- sodium propane sulphate
Sulphonated polymer / P400 di-sodium butane sulphate / $(\text{CH}_2\text{-CH}_2\text{-O})_n\text{-O}[(\text{CH}_2)_4\text{-SO}_3\text{Na}]_2$ n = 6 – 13 (C80P1)n = 6 - 13
Sulphonated sodium polyacrylate copolymer

Addendum: Implementation of OSPAR Recommendation 2006/3 on Environmental Goals for the Discharge by the Offshore Industry of Chemicals that Are, or Which Contain Substances Identified as Candidates for Substitution – 2012 – United Kingdom

SUB Components Not Phased-Out
Synthetic AMPS copolymer (2-amino-2methyl-1-propanol)
Tall oil diethylene triamine imidazoline acetates
Tall oil fatty acids with ammonia-diethylene glycol reaction products and morpholine derivatives
Tall oil, reaction products with diethylenetriamine
Tall oil/oleyl diethanolamide
t-Butyl benzylated polymer PEG 400-di-t-butyl benzyl / (C ₁₁ H ₁₅)-(O-CH ₂ -CH ₂) _n -O-(C ₁₁ H ₁₅) n = 6 – 13
Tert-butylperbenzoate
Tertiary Butyl hydroperoxide
Tetraethylenepentamine
Thiourea/formaldehyde polymer
TOFA/DETA imidazoline acetate
Tri Sodium Hydroxyethylthylenediamine Triacetate
Tridecanol ethoxylate (CAS 78330-21-9)
Triethanolamine 85%
Trifluoropropyl, methyl and dimethyl siloxane copolymer, trimethyl-terminated
Trifluoropropylmethyl siloxane, trimethyl terminated
Trimethylolpropane, propoxylated, ethoxylated (20%)
Vinyl toluene



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North-East Atlantic used sustainably**

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