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 STATUTORY INSTRUMENTS
 

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1990 No. 2604

**MARINE POLLUTION**

**The Merchant Shipping (Control of Pollution by  
Noxious Liquid Substances in Bulk) (Amendment)  
Regulations 1990**

*Made - - - -*

*19th December 1990*

*Coming into force*

*1st January 1991*

The Secretary of State for Transport, in exercise of the powers conferred on him by article 3 of the Merchant Shipping (Prevention and Control of Pollution) Order 1987<sup>(a)</sup> and of all other powers enabling him that behalf, hereby makes the following Regulations:

1. These Regulations may be cited as the Merchant Shipping (Control of Pollution by Noxious Liquid Substances in Bulk) (Amendment) Regulations 1990 and shall come into force on 1st January 1991.

2. The Merchant Shipping (Control of Pollution by Noxious Liquid Substances in Bulk) Regulations 1987<sup>(b)</sup> are hereby amended as follows:

- (i) in regulation 1(2)—
  - (a) in the definition “BCH Code” replace “(1986 Edition)” by “(1990 Edition)”;
  - (b) in the definition “BCH Code Regulations” after “the Merchant Shipping (BCH Code) Regulations 1987(a)” add “as amended”<sup>(c)</sup>;
  - (c) in the definition “class-approved” in sub-paragraph (a) delete the words “Table 3 of Merchant Shipping Notice No. M.1270” and replace by “Schedule 4 hereto”;
  - (d) in the definition “IBC Code” replace “(1986 Edition)” by “(1990 Edition)”;
  - (e) in the definition “IBC Code Regulations” after “the Merchant Shipping (IBC Code) Regulations 1987(b)” add “as amended”<sup>(d)</sup>;
  - (f) in the definition “MARPOL 73/78” after “as amended (a)” add “and as further amended by amendments adopted on 17th March 1989 by the Marine Environment Protection Committee of the International Maritime Organization”;
- (ii) in regulation 30 after “the Merchant Shipping (Prevention of Pollution by Noxious Liquid Substances in Bulk) Regulations 1987” add “as amended”;
- (iii) replace Schedule 1 by the following—

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<sup>(a)</sup> S.I. 1987/470, amended by S.I. 1990/2595.    <sup>(b)</sup> S.I. 1987/551.    <sup>(c)</sup> S.I. 1987/550, as amended by S.I. 1990/2603.  
<sup>(d)</sup> S.I. 1987/549, as amended by S.I. 1990/2602.

## "SCHEDULE 1 Regulations 1(2), 2 to 13, 16, 17 and 28

## LIST OF NOXIOUS LIQUID SUBSTANCES CARRIED IN BULK

Substance	UN Number I	Pollution Category for operational discharge		Residual Concentration (percent by weight)	
		II	III Outside special areas	IV Within special areas	
Acetaldehyde	1089	C			
Acetic acid	2789*	D			
Acetic anhydride	1715	D			
Acetone cyanohydrin	1541	A	0.1	0.05	
Acrylamide solution (50% or less)	2074	D			
Acrylic acid	2218	D			
Acrylonitrile	1093	B			
Adiponitrile	2205	D			
Alcohol (C12—C15) poly(1-3) ethoxylates		A	0.1	0.05	
Alcohol (C12—C15) poly(3-11) ethoxylates		A	0.1	0.05	
Alcohol (C6-C17)(secondary) poly(3-6) ethoxylates		A	0.1	0.05	
Alcohol (C6-C17)(secondary) poly(7-12) ethoxylates		B			
Alkyl acrylate-vinyl pyridine copolymer in toluene		C			
Alkyl (C9-C17) benzenes		D			
Alkyl benzene sulphonic acid	2584, 2586	C			
Alkyl benzene sulphonic acid, sodium salt solution		C			
Allyl alcohol	1098	B			
Allyl chloride	1100	B			
Aluminium chloride (30% or less)/Hydrochloric acid (20% or less) solution		D			
Aluminium sulphate solution		D			
2-(2-Aminoethoxy) ethanol	3055	D			
Aminoethyl ethanolamine		D			
N-Aminoethylpiperazine	2815	D			
2-Amino-2-methyl-1-propanol (90% or less)		D			
Ammonia aqueous (28% or less)	2672**	C			
Ammonium nitrate solution (93% or less)		D			
Ammonium sulphate solution		D			
Ammonium sulphide solution (45% or less)	2683	B			
Ammonium thiocyanate (25% or less)/Ammonium thiosulphate (20% or less) solution		C			
Ammonium thiosulphate solution (60% or less)		C			
n-Amyl acetate	1104	C			
sec-Amyl acetate	1104	C			
Amyl acetate, commercial	1104	C			
n-Amyl alcohol	1105	D			
sec-Amyl alcohol	1105	D			

\*UN number 2789 refers to more than 80% acid by mass

\*\*UN number refers to 10-35%

SCHEDULE 1: - *continued*

<i>Substance</i>	<i>UN Number</i>	<i>Pollution Category for operational discharge</i>		<i>Residual Concentration (percent by weight)</i>	
		<i>I</i>	<i>II</i>	<i>III Outside special areas</i>	<i>IV Within special areas</i>
Amyl alcohol, primary	1105		D		
Aniline	1547		C		
Animal and fish oils, n.o.s. including:			D		
Cod liver oil					
Sperm oil					
Aviation alkylates (C8 paraffins and iso-paraffins BPT 95—120 C)			C		
Benzene and mixtures having 10% benzene or more	1114*		C		
Benzene sulphonyl chloride	2225		D		
Benzyl acetate			C		
Benzyl alcohol			C		
Benzyl chloride	1738		B		
Brake fluid base mix: (Poly(2-8) alkylene(C2-C3) glycols/Polyalkylene(C2-C10) glycols monoalkyl(C1-C4) ethers and their borate esters			D		
Butene oligomer			B		
n-Butyl acetate	1123		C		
sec-Butyl acetate	1123		D		
n-Butyl acrylate	2348		B		
Butylamine (all isomers)			C		
Butylbenzenes (all isomers)	2709		A	0.1	0.05
Butyl benzyl phthalate			A	0.1	0.05
n-Butyl butyrate			C		
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture			D		
Butylene glycol			D		
1,2-Butylene oxide	3022		C		
n-Butyl ether	1149		C		
Butyl lactate			D		
Butyl methacrylate			D		
n-Butyraldehyde	1129		B		
Butyric acid	2820		D		
gamma-Butyrolactone			D		
Calcium alkyl salicylate			C		
Calcium hydroxide slurry			D		
Calcium hypochlorite solution (15% or less)			C		
Calcium hypochlorite solution (more than 15%)			B		
Calcium naphthenate in mineral oil			A	0.1	0.05
Camphor oil	1130		B		
epsilon-Caprolactam (molten or aqueous solutions)			D		
Carbolic oil			A	0.1	0.05
Carbon disulphide	1131		B		
Carbon tetrachloride	1846		B		
Cashew nut shell oil (untreated)			D		
Chlorinated paraffins (C10-C13)			A	0.1	0.05

\* UN number 1114 applies to Benzene

## SCHEDULE 1: - continued

<i>Substance</i>	<i>UN Number I</i>	<i>Pollution Category for operational discharge II</i>	<i>Residual Concentration (percent by weight)</i>	
			<i>III Outside special areas</i>	<i>IV Within special areas</i>
Chloroacetic acid (80% or less)	1750	C		
Chlorobenzene	1134	B		
Chloroform	1888	B		
Chlorohydrins (crude)		D		
o-Chloronitrobenzene	1578	B		
2- or 3-Chloropropionic acid		C		
Chlorosulphonic acid	1754	C		
m-Chlorotoluene	2238	B		
o-Chlorotoluene	2238	A	0.1	0.05
p-Chlorotoluene	2238	B		
Chlorotoluenes (mixed isomers)	2238	A	0.1	0.05
Choline chloride solutions		D		
Citric acid		D		
Coal tar		A	0.1	0.05
Coal tar naphtha solvent		B		
Coal tar pitch (molten)		D		
Cobalt naphthenate in solvent naphtha		A	0.1	0.05
Coconut oil fatty acid		C		
Coconut oil fatty acid methyl ester		D		
Creosote (coal tar)		A	0.1	0.05
Creosote (wood)		A	0.1	0.05
Cresols (all isomers)	2076	A	0.1	0.05
Cresylic acid, sodium salt solution		A	0.1	0.05
Crotonaldehyde	1143	B		
Cycloheptane	2241	C		
Cyclohexane	1145	C		
Cyclohexanol		C		
Cyclohexanone	1915	D		
Cyclohexyl acetate		B		
Cyclohexylamine	2357	C		
1,3-Cyclopentadiene dimer (molten)		B		
Cyclopentane	1146	C		
Cyclopentene		B		
p-Cymene	2046	C		
Decahydronaphthalene	1147	D		
Decanoic acid		C		
Decene		B		
Decyl acrylate		A	0.1	0.05
Decyl alcohol (all isomers)		B		
Decylbenzene		D		
Diacetone alcohol	1148	D		
Dialkyl (C7-C13) phthalates		D		
Dibutylamine		C		
Dibutyl phthalate		A	0.1	0.05
Dichlorobenzenes (all isomers)	1592	B		
1,1-Dichloroethane	2362	B		
Dichloroethyl ether	1916	B		
1,6-Dichlorohexane		B		
2,2'-Dichloroisopropyl ether	2490	C		
Dichloromethane	1593	D		

SCHEDULE 1: - *continued*

<i>Substance</i>	<i>UN Number</i>	<i>Pollution Category for Operation discharge</i>		<i>Residual Concentration (percent by weight)</i>	
		<i>I</i>	<i>II</i>	<i>III Outside special areas</i>	<i>IV Within special areas</i>
2,4-Dichlorophenol	2021		A	0.1	0.05
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution			A	0.1	0.05
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution (70% or less)			A	0.1	0.05
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution			A	0.1	0.05
1,1-Dichloropropane			B		
1,2-Dichloropropane	1279		B		
1,3-Dichloropropane			B		
1,3-Dichloropropene	2047		B		
Dichloropropene/Dichloropropane mixtures			B		
2,2-Dichloropropionic acid			D		
Diethylamine	1154		C		
Diethylaminoethanol	2686		C		
Diethylbenzene	2049		C		
Diethylene glycol butyl ether acetate			D		
Diethylene glycol dibutyl ether			D		
Diethylene glycol ethyl ether acetate			D		
Diethylene glycol methyl ether			C		
Diethylene glycol methyl ether acetate			D		
Diethylenetriamine	2079		D		
Di-(2-ethylhexyl) adipate			D		
Di-(2-ethylhexyl) phosphoric acid	1902		C		
Diethyl phthalate			C		
Diethyl sulphate	1594		B		
Diglycidyl ether of bisphenol A			B		
Diglycidyl ether of bisphenol F			B		
Di-n-hexyl adipate			B		
1,4-Dihydro-9,10-dihydroxy anthracene, disodium salt solution			D		
Diisobutylamine	2361		C		
Diisobutylene	2050		B		
Diisobutyl ketone	1157		D		
Diisobutyl phthalate			B		
Diisodecyl phthalate			B		
Diisononyl adipate			D		
Diisopropanolamine			C		
Diisopropylamine	1158		C		
Diisopropylbenzene (all isomers)			A	0.1	0.05
Diisopropyl naphthalene			D		
N,N-Dimethylacetamide solution (40% or less)			D		

## SCHEDULE 1: - continued

<i>Substance</i>	<i>UN Number I</i>	<i>Pollution Category for operational discharge II</i>	<i>Residual Concentration (percent by weight)</i>	
			<i>III Outside special areas</i>	<i>IV Within special areas</i>
Dimethyl adipate		B		
Dimethylamine solution (45% or less)	1160	C		
Dimethylamine solution (greater than 45% but not greater than 55%)	1160	C		
Dimethylamine solution (greater than 55% but not greater than 65%)	1160	C		
N,N-Dimethylcyclohexylamine	2264	C		
Dimethylethanolamine	2051	D		
Dimethylformamide	2265	D		
Dimethyl glutarate		C		
Dimethyl octanoic acid		C		
Dimethyl phthalate		C		
212-Dimethylpropane-1,3-dio l		D		
Dimethyl succinate		C		
Dinitrotoluene (molten)	1600	B		
Dinonyl phthalate		D		
1,4-Dioxane	1165	D		
Dipentene	2052	C		
Diphenyl		A	0.1	0.05
Diphenyl/Diphenyl ether mixtures		A	0.1	0.05
Diphenyl ether		A	0.1	0.05
Diphenyl ether/Diphenyl phenyl ether mixture		A	0.1	0.05
Diphenylmethane	2489	B		
diisocyanate				
Diphenylol propane-epichlorohydrin resins		B		
Di-n-propylamine	2383	C		
Dipropylene glycol methyl ether		D		
Ditridecyl phthalate		D		
Diundecyl phthalate		D		
Dodecene (all isomers)		B		
Dodecyl succinic acid, dipotassium salt solution		D		
Dodecyl alcohol		B		
Dodecyl diphenyl ether disulphonate solution		B		
Dodecyl phenol		A	0.1	0.05
Drilling brines, containing Zinc salts		A	0.1	0.05
Epichlorohydrin	2023	C		
Ethanolamine	2491	D		
2-Ethoxyethanol	1171	D		
2-Ethoxyethyl acetate	1172	C		
Ethyl acetate	1173	D		
Ethyl acetoacetate		D		
Ethyl acrylate	1917	A	0.1	0.05
Ethylamine	1036	C		
Ethylamine solutions (72% or less)	2270	C		

## SCHEDULE 1: - continued

<i>Substance</i>	<i>UN Number I</i>	<i>Pollution Category for operational discharge II</i>	<i>Residual Concentration (percent by weight)</i>	
			<i>III Outside special areas</i>	<i>IV Within special areas</i>
Ethyl amyl ketone	2271	C		
Ethylbenzene	1175	C		
N-Ethylbutylamine		C		
Ethyl butyrate	1180	C		
Ethylcyclohexane		C		
N-Ethylcyclohexylamine		D		
Ethylene chlorohydrin	1135	C		
Ethylene cyanohydrin		D		
Ethylenediamine	1604	C		
Ethylenediamine tetraacetic acid, tetrasodium salt solution		D		
Ethylene dibromide	1605	B		
Ethylene dichloride	1184	B		
Ethylene glycol		D		
Ethylene glycol acetate		D		
Ethylene glycol butyl ether acetate		C		
Ethylene glycol diacetate		C		
Ethylene glycol isopropyl ether		D		
Ethylene glycol methyl butyl ether		D		
Ethylene glycol methyl ether	1188	D		
Ethylene glycol methyl ether acetate	1189	D		
Ethylene glycol phenyl ether		D		
Ethylene glycol phenyl ether/Diethylene glycol phenyl ether mixture		D		
Ethylene oxide/Propylene oxide mixture with an Ethylene oxide content of not more than 30% in weight	2983	D		
2-Ethylhexanoic acid		D		
2-Ethylhexyl acrylate		B		
2-Ethylhexylamine	2276	B		
Ethylidene norbornene		B		
Ethyl methacrylate	2277	D		
o-Ethylphenol		A	0.1	0.05
Ethyl propionate	1195	D		
2-Ethyl-3-propylacrolein		B		
Ethyltoluene		B		
Ferric chloride solutions	2582	C		
Ferric hydroxyethyl ethylenediamine triacetic acid, trisodium salt solution		D		
Ferric nitrate/Nitric acid solution		C		
Formaldehyde solutions (45% or less)	1198 2209	C		
Formamide		D		
Formic acid	1779	D		
Fumaric adduct of rosin, water dispersion		B		

## SCHEDULE 1: - continued

<i>Substance</i>	<i>UN Number</i>	<i>Pollution Category for operational discharge</i>	<i>Residual Concentration (percent by weight)</i>	
			<i>III Outside special areas</i>	<i>IV Within special areas</i>
Furfural	1199	C		
Furfuryl alcohol	2874	C		
Glutaraldehyde solutions (50% or less)		D		
Glycidyl ester of C10 trialkylacetic acid		B		
Glyoxal solution (40% or less)		D		
Heptane (all isomers)	1206	C		
n-Heptanoic acid		D		
Heptanol (all isomers)		C		
Heptene (all isomers)		C		
Heptyl acetate		B		
Hexamethylenediamine adipate (50% in water)		D		
Hexamethylenediamine solution	1783	C		
Hexamethyleneimine	2493	C		
Hexamethylenetetramine solutions		D		
Hexane (all isomers)	1208	C		
Hexanoic acid		D		
Hexanol	2282	D		
Hexene (all isomers)		C		
Hexyl acetate	1233	B		
Hydrochloric acid	1789	D		
Hydrogen peroxide solutions (over 8% but not over 60%)	2014, 2984	C		
Hydrogen peroxide solutions (over 60% but not over 70%)	2015	C		
2-Hydroxyethyl acrylate		B		
N-(Hydroxyethyl) ethylenediamine triacetic acid, trisodium salt solution		D		
Isoamyl acetate	1104	C		
Isoamyl alcohol	1105	D		
Isobutyl acetate	1213	C		
Isobutyl acrylate	2527	B		
Isobutyl formate	2393	D		
Isobutyraldehyde	2045	C		
Isophorone		D		
Isophoronediamine	2289	D		
Isophorone diisocyanate	2290	B		
Isoprene	1218	C		
Isopropanolamine		C		
Isopropylamine	1221	C		
Isopropylbenzene	1918	B		
Isopropylcyclohexane		C		
Isopropyl ether	1159	D		
Isovaleraldehyde	2058	C		
Lactic acid		D		
Lactonitrile solution (80% or less)		B		
Latex (ammonia inhibited)		D		
Lauric acid		B		
Maleic anhydride	2215	D		



SCHEDULE 1: - *continued*

<i>Substance</i>	<i>UN Number I</i>	<i>Pollution Category for operational discharge</i>		<i>Residual Concentration (percent by weight)</i>	
		<i>II</i>	<i>III Outside special areas</i>	<i>IV Within special areas</i>	
Mercaptobenzothiazol, sodium salt solution		B			
Mesityl oxide	1229	D			
Metam sodium solution		A	0.1	0.05	
Methacrylic acid	2531	D			
Methacrylic resin in 1,2-Dichloroethane solution		B			
Methacrylonitrile	3079	B			
3-Methoxybutyl acetate	2708	D			
Methyl acetoacetate		D			
Methyl acrylate	1919	B			
Methylamine solutions (42% or less)	1235	C			
Methylamyl acetate	1233	C			
Methylamyl alcohol	2053	C			
Methyl amyl ketone	1110	C			
Methyl butenol		D			
Methyl tert-butyl ether	2398				
Methyl butyl ketone		D			
Methyl butynol		D			
Methyl butyrate	1237	C			
Methylcyclohexane	2296	C			
Methylcyclopentadiene dimer		B			
2-Methyl-6-ethyl aniline		C			
2-Methyl-5-ethyl pyridine	2300	B			
Methyl formate	1243	D			
Methyl heptyl ketone		B			
Methyl isobutyl ketone	1245	D			
Methyl methacrylate	1247	D			
Methylnaphthalene		A	0.1	0.05	
2-Methyl-1-pentene	2288	C			
Methyl propyl ketone		D			
2-Methylpyridine	2313	B			
4-Methylpyridine	2313	B			
N-Methyl-2-pyrrolidone		B			
Methyl salicylate		B			
alpha-Methylstyrene	2303	A	0.1	0.05	
Morpholine	2054	D			
Motor fuel anti-knock compounds	1649	A	0.1	0.05	
Naphthalene (molten)	2304	A	0.1	0.05	
Naphthalene sulphonic acid-formaldehyde copolymer, sodium salt solution		D			
Naphthenic acids		A	0.1	0.05	
Neodecanoic acid		C			
Nitrating acid (mixture of sulphuric and nitric acids)	1796	C			
Nitric acid (less than 70%)	2031	C			
Nitric acid (70% and over)	2031, 2032	C			
Nitrilotriacetic acid, trisodium salt solution		D			
Nitrobenzene	1662	B			
o-Nitrophenol (molten)	1663	B			
1- or 2-Nitropropane	2608	D			

## SCHEDULE 1: - continued

<i>Substance</i>	<i>UN Number</i>	<i>Pollution Category for operational discharge</i>	<i>Residual Concentration (percent by weight)</i>	
			<i>III Outside special areas</i>	<i>IV Within special areas</i>
Nitropropane (60%)/Nitroethane (40%) mixture		D		
o- or p-Nitrotoluenes	1664	C		
Nonane (all isomers)	1920	C		
Nonanoic acid (all isomers)		D		
Nonene		B		
Nonyl alcohol (all isomers)		C		
Nonyl methacrylate monomer		D		
Nonylphenol		A	0.1	0.05
Nonyl phenol poly(4-12) ethoxylates		B		
Octane (all isomers)	1262	C		
Octanoic acid (all isomers)		D		
Octanol (all isomers)		C		
Octene (all isomers)		B		
n-Octyl acetate		D		
Octyl aldehydes		B		
Octyl nitrates (all isomers)		A	0.1	0.05
Olefin mixtures (C5-C7)		C		
Olefin mixtures (C5-C15)		B		
alpha-Olefins (C6-C18) mixtures		B		
Oleic acid		D		
Oleum	1831	C		
Palm nut oil fatty acid		C		
Palm oil fatty acid methyl ester		D		
Palm stearin		D		
Paraldehyde	1264	C		
Pentachloroethane	1669	B		
1,3-Pentadiene		C		
Pentaethylenhexamine		D		
Pentane (all isomers)	1265	C		
Pentanoic acid		D		
Pentene (all isomers)		C		
Perchloroethylene	1897	B		
Phenol	2312	B		
1-Phenyl-1-xylyl ethane		C		
Phosphoric acid	1805	D		
Phosphorus, yellow or white	1381, 2447	A	0.01	0.005
Phthalic anhydride (molten)	2214	C		
Pinene	2368	B		
Polyalkylene glycol butyl ether		D		
Polyethylene polyamines	2734 2735	C		
Polyferric sulphate solution		C		
Polymethylene polyphenyl isocyanate	2207	D		
Polypropylene glycol		D		
Potassium hydroxide solution	1814	C		
n-Propanolamine		C		
beta-Propiolactone		D		

SCHEDULE 1: - *continued*

<i>Substance</i>	<i>UN Number</i>	<i>Pollution Category for operational discharge</i>	<i>Residual Concentration (percent by weight)</i>	
			<i>III Outside special areas</i>	<i>IV Within special areas</i>
Propionaldehyde	1275	D		
Propionic acid	1848	D		
Propionic anhydride	2496	C		
Propionitrile	2404	C		
n-Propyl acetate	1276	D		
n-Propylamine	1277	C		
n-Propylbenzene	2364	C		
n-Propyl chloride		B		
Propylene dimer		C		
Propylene glycol ethyl ether		D		
Propylene glycol methyl ether		D		
Propylene glycol monoalkyl ether		D		
Propylene oxide	1280	D		
Propylene tetramer	2850	B		
Propylene trimer	2057	B		
Pyridine	1282	D		
Rosin		B		
Rosin soap (disproportionated) solution		B		
Silicon tetrachloride		D		
Sodium aluminate solution		C		
Sodium borohydride (15% or less)/Sodium hydroxide solution		C		
Sodium carbonate solution		D		
Sodium dichromate solution (70% or less)		C		
Sodium hydrogen sulphite solution (35% or less)	2693	D		
Sodium hydrosulphide/Ammonium sulphide solution		B		
Sodium hydrosulphide solution (45% or less)	2949	B		
Sodium hydroxide solution	1824	D		
Sodium hypochlorite solution (15% or less)	1791	C		
Sodium nitrite solution		B		
Sodium silicate solution		D		
Sodium sulphide solution		B		
Sodium sulphite solution		C		
Sodium thiocyanate solution (56% or less)		B		
Styrene monomer	2055	B		
Sulpholane		D		
Sulphuric acid	1830	C		
Sulphuric acid, spent	1832	C		
Tall oil (crude and distilled)		B		
Tall oil fatty acid (resin acids less than 20%)		C		
Tall oil soap (disproportionated) solution		B		

## SCHEDULE 1: - continued

Substance	UN Number I	Pollution Category for Operation discharge II	Residual Concentration (percent by weight)	
			III Outside special areas	IV Within special areas
Tallow		D		
Tallow fatty acid		D		
Tetrachloroethane	1702	B		
Tetraethylene pentamine	2320	D		
Tetrahydrofuran	2056	D		
Tetrahydronaphthalene		C		
1,2,3,5-Tetramethylbenzene		C		
Titanium tetrachloride	1838	D		
Toluene	1294	C		
Toluenediamine	1709	C		
Toluene diisocyanate	2078	C		
o-Toluidine	1708	C		
Tributyl phosphate		B		
1,2,4-Trichlorobenzene	2321	B		
1,1,1-Trichloroethane	2831	B		
1,1,2-Trichloroethane		B		
Trichloroethylene	1710	B		
1,2,3-Trichloropropane		B		
1,1,2-Trichloro-1,2,2-tri- fluoroethane		C		
Tricresyl phosphate (containing less than 1% ortho-isomer)		A	0.1	0.05
Tricresyl phosphate (containing 1% or more ortho-isomer)	2574*	A	0.1	0.05
Triethanolamine		D		
Triethylamine	1296	C		
Triethylbenzene		A	0.1	0.05
Triethylene glycol ethyl ether		D		
Triethylene glycol methyl ether		D		
Triethylenetetramine	2259	D		
Trimethylacetic acid		D		
Trimethylamine		C		
Trimethyl benzenes (all isomers)		B		
Trimethylhexamethylenediamine (2,2,4- and 2,4,4- isomers)	2327	D		
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4- isomers)	2328	B		
Trimethylol propane polyethoxylate		D		
2,2,4-Trimethyl-1,3-pentane diol-1-isobutyrate		C		
Tripropylene glycol methyl ether		D		
Trixylyl phosphate		A	0.1	0.05
Turpentine	1299	B		
Undecanoic acid		C		
1-Undecene		B		
Undecyl alcohol		B		

\* UN number 2574 applies to Tricresyl phosphate containing more than 3% ortho-isomer.

SCHEDULE 1: - *continued*

<i>Substance</i>	<i>UN Number I</i>	<i>Pollution Category for Operation discharge II</i>	<i>Residual Concentration (percent by weight)</i>	
			<i>III Outside special areas</i>	<i>IV Within special areas</i>
Urea/Ammonium mono- and di-hydrogen phosphate/Potassium chloride solution		D		
Urea/Ammonium nitrate solution		D		
Urea/Ammonium nitrate solution (containing aqua Ammonia)		C		
Urea/Ammonium phosphate solution		D		
n-Valeraldehyde	2058	D		
Vegetable oil, n.o.s., including:		D		
Castor oil				
Coconut oil				
Corn oil				
Cottonseed oil				
Groundnut oil				
Linseed oil				
Olive oil				
Palm nut oil				
Palm oil				
Rape seed oil				
Rice bran oil				
Safflower oil				
Sesame oil				
Soya bean oil				
Sunflower oil				
Tung oil				
Vinyl acetate	1301	C		
Vinyl ethyl ether	1302	C		
Vinylidene chloride	1303	B		
Vinyl neodecanoate		B		
Vinyltoluene	2618	A	0.1	0.05
White spirit, low (15-20%) aromatic	1300	B		
Xylenes	1307	C		
Xylenol	2261	B		

”;

(iv) replace Schedule 2 by the following—

## "SCHEDULE 2

Regulations 1(2) and 15

## LIST OF NON-POLLUTING LIQUID SUBSTANCES CARRIED IN BULK

<i>Substance</i>	<i>UN Number</i>
Acetone	1090
Acetonitrile	1648
Alcoholic beverages, n.o.s.	
Alcohols (C13 and above)	
Aminoethyldiethanolamine/Amino ethylethanolamine solution	
2-Amino-2-hydroxymethyl-1,3 propanediol solution (40% or less)	
tert-Amyl alcohol	1105
Apple juice	
Behenyl alcohol	
Benzene tricarboxylic acid, trioctyl ester	
n-Butyl alcohol	1120
sec-Butyl alcohol	1120
tert-Butyl alcohol	1120
Butyl stearate	
Calcium carbonate slurry	
Calcium nitrate/Magnesium nitrate/Potassium chloride solution	
Cetyl/Eicosyl methacrylate mixture	
Cetyl/Stearyl alcohol	
Chlorinated paraffins (C14-C17) (with 52% chlorine)	
Clay slurry	
Coal slurry	
Dextrose solution	
Diethanolamine	
Diethyl ether	1155
Diethylene glycol	
Diethylene glycol butyl ether	
Diethylene glycol diethyl ether	
Diethylene glycol ethyl ether	
Diethylenetriamine pentaacetic acid, pentasodium salt solution	
Diheptyl phthalate	
Dihexyl phthalate	
Diisooctyl phthalate	
Dioctyl phthalate	
Dipropylene glycol	
Dodecane (all isomers)	
Dodecyl benzene	
Dodecyl methacrylate	
Dodecyl/Pentadecyl methacrylate mixture	
Drilling brines:	
Calcium bromide solution	
Calcium chloride solution	
Sodium chloride solution	
Ethyl alcohol	1170
Ethylene carbonate	
Ethylene glycol butyl ether	2369
Ethylene glycol tert-butyl ether	

SCHEDULE 2 - *continued*

<i>Substance</i>	<i>UN Number</i>
Ethylene-vinyl acetate copolymer (emulsion)	
Fatty acids (saturated, C13 above)	
Glucose solution	
Glycerine	
Glycerol polyalkoxylate	
Glyceryl triacetate	
Glycine, sodium salt solution	
Hexamethylene glycol	
Hexylene glycol	
Isobutyl alcohol	1212
Isopropyl acetate	1220
Isopropyl alcohol	1219
Kaolin slurry	
Lard	
Latex: Carboxylated styrene-butadiene copolymer	
Latex: Styrene-butadiene rubber	
Lignin sulphonic acid, sodium salt solution	
Magnesium chloride solution	
Magnesium hydroxide slurry	
3-Methoxy-1-butanol	
Methyl acetate	1231
Methyl alcohol	1230
Methyl ethyl ketone	
2-Methyl-2-hydroxy-3-butyne	
3-Methyl-3-methoxy butanol	
3-Methyl-3-methoxy butyl acetate	
Molasses	
Octyl decyl adipate	
alpha-Olefins (C13-C20)	
Olefins (C13 and above, all isomers)	
n-Paraffins (C10-C20)	
Paraffin wax	
Petrolatum	
Polyaluminium chloride solution	
Polybutene	
Polyethylene glycol dimethyl ether	
Polyethylene glycol	
Polypropylene glycol methyl ether	
Polysiloxane	
n-Propyl alcohol	
Propylene glycol	
Propylene-butylene copolymer	
Sodium alumino silicate slurry	
Sodium chlorate solution (50% or less)	2428
Sorbitol solution	
Sulphur (molten)	2448
Tetraethylene glycol	
Tridecane	
Tridecanoic acid	
Triethylene glycol	
Triethylene glycol butyl ether	
Triisopropanolamine	

SCHEDULE 2 – *continued*

<i>Substance</i>	<i>UN Number</i>
Tripropylene glycol	
Urea formaldehyde resin solution	
Urea solution	
Vegetable protein solution (hydrolysed)	
Water	

(v) replace Schedule 3 by the following–

## “SCHEDULE 3

Regulations 1(2), 18 and 28

## OIL-LIKE SUBSTANCES

**Category C substances**

Aviation alkylates  
 Cycloheptane  
 Cyclohexane  
 Cyclopentane  
 p-Cymene  
 Diethylbenzene  
 Dipentene  
 Ethylbenzene  
 Ethylcyclohexane  
 Heptene (all isomers)  
 Hexane (all isomers)  
 Hexene (all isomers)  
 Isopropyl cyclohexane  
 Methyl cyclohexane  
 Nonane (all isomers)  
 Octane (all isomers)  
 Olefin mixtures (C<sub>5</sub>-C<sub>7</sub>)  
 Pentane (all isomers)  
 1-Phenyl-1-xylylethane  
 Propylene dimer  
 Tetrahydronaphthalene  
 Toluene  
 Xylenes

**Category D substances**

Alkyl (C<sub>9</sub>-C<sub>17</sub>) benzenes  
 Diisopropyl naphthalene  
 Dodecane (all isomers)

”;



(vi) add as Schedule 4 the following—

## "SCHEDULE 4

Regulations 1(2), 28

## CLASSES OF NOT OTHERWISE SPECIFIED (N.O.S.) SUBSTANCES\*

<i>Substance</i>	<i>Pollution Category for operational discharge</i>	<i>Residual concentration (Percent by weight)</i>	
		<i>Outside special areas</i>	<i>Within special areas</i>
Noxious liquid, N.F, (1) n.o.s. (trade name . . . contains . . .) S.T.1, Cat. A	A	0.1	0.05
Noxious liquid, F, (2) n.o.s. (trade name . . ., contains . . .) S.T.1, Cat. A	A	0.1	0.05
Noxious liquid, N.F, (3) n.o.s. (trade name . . ., contains . . .) S.T.2, Cat. A	A	0.1	0.05
Noxious liquid, F, (4) n.o.s. (trade name . . ., contains . . .) S.T.2, Cat. A	A	0.1	0.05
Noxious liquid, N.F, (5) n.o.s. (trade name . . ., contains . . .) S.T.2. Cat. B	B		
Noxious liquid, N.F, (6) n.o.s. (trade name . . ., contains . . .) S.T. 2, Cat. B, mp $\geq 15^{\circ}\text{C}$	B		
Noxious liquid, F, (7) n.o.s. (trade name . . ., contains . . .) S.T.2, Cat. B	B		
Noxious liquid, F, (8) n.o.s. (trade name . . ., contains . . .) S.T.2, Cat. B, mp $\geq 15^{\circ}\text{C}$	B		
Noxious liquid, N.F, (9) n.o.s. (trade name . . ., contains . . .) S.T.3, Cat. A	A	0.1	0.05
Noxious liquid, F, (10) n.o.s. (trade name . . ., contains . . .) S.T.3, Cat. A	A	0.1	0.05
Noxious liquid, N.F, (11) n.o.s. (trade name . . ., contains . . .) S.T.3, Cat. B	B		
Noxious liquid, N.F, (12) n.o.s. (trade name . . ., contains . . .) S.T.3, Cat. B, mp $\geq 15^{\circ}\text{C}$	B		
Noxious liquid, F, (13) n.o.s. (trade name . . ., contains . . .) S.T.3, Cat. B	B		
Noxious liquid, F, (14) n.o.s. (trade name . . ., contains . . .) S.T.3, Cat. B, mp $\geq 15^{\circ}\text{C}$	B		
Noxious liquid, N.F, (15) n.o.s. (trade name . . ., contains . . .) S.T.3, Cat. C	C		

SCHEDULE 4 – *continued*

<i>Substance</i>	<i>Pollution Category for operational discharge</i>	<i>Residual concentration (Percent by weight)</i>	
		<i>Outside special areas</i>	<i>Within special areas</i>
Noxious liquid, F, (16) n.o.s. (trade name . . . , contains . . . ) S.T.3, Cat. C	C		
Noxious liquid, (17) n.o.s. (trade name . . . , contains . . . ) Cat D	D		
Noxious liquid, (18) n.o.s. (trade name . . . , contains . . . ) App. III	III		

## Key to Schedule 4:

\* Where a cargo is assessed as falling within an n.o.s. class, the class including any cargo trade name with the principal component contributing to the pollution category must be provided in the shipping document.

N.F. : Flashpoint exceeding 60°C (closed cup test)  
 F. : Flashpoint not exceeding 60°C (closed cup test)  
 n.o.s. : not otherwise specified  
 S.T. : Ship type when carried in a chemical tanker  
 Cat : Pollution category  
 mp : Melting point  
 App III : Appendix III of MARPOL 73/78 Annex II (a "non-polluting" substance)

Signed by authority of  
 the Secretary of State for Transport  
 19th December 1990

*Patrick McLoughlin*  
 Parliamentary Under Secretary of State,  
 Department of Transport

**EXPLANATORY NOTE**

*(This note is not part of the Regulations)*

These Regulations amend the Merchant Shipping (Control of Pollution by Noxious Liquid Substances in Bulk) Regulations 1987.

They give effect to amendments to Annex II of MARPOL 73/78 adopted by the Marine Environment Protection Committee of the International Maritime Organization. The amendments are largely concerned with changes in lists of substances (the Appendices to Annex II) and consequent changes (mainly additions) to the product lists contained in the bulk chemical codes. New editions of the IBC Code and the BCH Code have been produced by IMO.

The changes in the substance lists arise partly because of additions but some rationalisation of nomenclature has taken place with a number of substances being deleted in favour of the use of generic grouping. Some re-assessment of categorisation has occurred and also some re-evaluation (i.e. some substances which were pollutants have become non-pollutants and vice versa).

The list of oil-like substances has been re-assessed and additions have been made whilst most substances which were "provisionally listed" and the subject of Merchant Shipping Notice M1270 have been consolidated in the schedules which now includes (Schedule 4) the class approved not otherwise specified (n.o.s.) groups.

Copies of IMO amendments and Codes referred to are obtainable from the International Maritime Organization, 4 Albert Embankment, London SE1 7SR.