

**Reprint
as at 1 July 2005**



**Resource Management (Marine
Pollution) Regulations 1998**
(SR 1998/208)

Michael Hardie Boys, Governor-General

Order in Council

At Wellington this 20th day of July 1998

Present:

His Excellency the Governor-General in Council

Pursuant to section 360(1)(a) and (ha) to (hh) of the Resource Management Act 1991, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, makes the following regulations.

Note

Changes authorised by section 17C of the Acts and Regulations Publication Act 1989 have been made in this reprint.

A general outline of these changes is set out in the notes at the end of this reprint, together with other explanatory material about this reprint.

These regulations are administered by the Ministry for the Environment.

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Regulations

1 Title and commencement

- (1) These regulations may be cited as the Resource Management (Marine Pollution) Regulations 1998.
- (2) These regulations come into force on 20 August 1998.

2 Interpretation

In these regulations, unless the context otherwise requires,—

Act means the Resource Management Act 1991

carrying in bulk means the carriage of a noxious liquid substance in the cargo spaces of a ship without any form of intermediate containment or packaging

clean ballast water means ballast water and contaminants carried in a tank used to carry a noxious liquid substance or oil,—

- (a) where the tank has been thoroughly cleaned since last used to carry a noxious liquid substance, and the residue from that cleaning discharged with the tank being emptied; or
- (b) where the tank has been thoroughly cleaned since last used to carry oil and the ballast water and contaminants, when discharged, would not contain oil exceeding 15 parts per million

en route means that a ship is under way at sea on a course, or courses

garbage means all kinds of victual, domestic, and operational waste, excluding fresh fish and parts thereof, generated during the normal operation of the ship or offshore installation and liable to be discharged continuously or periodically; but does not include oil, noxious liquid substances, and sewage

Grade A treated sewage means sewage discharged from a treatment system included in Schedule 5 or Schedule 6 that is maintained and operated in good working order and in accordance with any instructions of the system's manufacturer

Grade B treated sewage means sewage discharged from a treatment system included in Schedule 7 that is maintained and operated in good working order and in accordance with any instructions of the system's manufacturer

noxious liquid substance means any substance specified in Schedule 1; and includes any mixtures of those substances

oil means petroleum in any form, including crude oil, fuel oil, sludge, oil refuse, and refined petroleum products (other than petrochemicals which are noxious liquid substances); and includes the substances specified in Schedule 2

oil spill has the same meaning as in section 281 of the Maritime Transport Act 1994

plastics includes synthetic ropes, synthetic fishing nets, plastic garbage bags, and incinerator ashes from plastic products that may contain toxic or heavy metal residues

platform drainage means the drainage water from the machinery space on an offshore installation, and—

- (a) includes all water and contaminants from generators, fuel tanks, and pumps; but
- (b) does not include any water or contaminant from processing, production, or displacement associated with exploration, drilling, or production activities which are undertaken by the offshore installation

segregated ballast water means ballast water and contaminants in a ship's tank where that tank is completely separated from cargo oil and fuel oil systems and is permanently allocated to the carriage of ballast water or cargoes other than oil or noxious liquid substances

sewage means, in relation to a ship or offshore installation,—

- (a) drainage and other wastes from any form of toilet, urinal, or toilet scupper:
- (b) drainage from washbasins, washtubs, and scuppers located in any dispensary, sick bay, or other medical premises:

- (c) drainage from spaces containing living animals:
- (d) waste waters mixed with the drainage and wastes specified in paragraphs (a), (b), or (c).

Regulation 2 **Grade A treated sewage**: inserted, on 1 July 2002, by regulation 3(1) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

Regulation 2 **Grade B treated sewage**: inserted, on 1 July 2002, by regulation 3(1) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

Regulation 2 **plastics**: inserted, on 1 July 2002, by regulation 3(1) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

Regulation 2 **treated sewage**: revoked, on 1 July 2002, by regulation 3(2) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

Part 1

Definition prescribed for Act

3 Definition of harmful substances

The following substances are **harmful substances** for the purposes of the definition of the term harmful substances in section 2(1) of the Act:

- (a) petroleum in any form, including crude oil, fuel oil, sludge, oil refuse, and refined petroleum products (other than petrochemicals which are noxious liquid substances); and includes the substances specified in Schedule 2:
- (b) any substance specified in Schedule 1 and any mixture of those substances if carried in bulk in a ship:
- (c) drainage and other wastes from any form of toilet, urinal, or toilet scupper on a ship or offshore installation:
- (d) drainage from washbasins, washtubs, and scuppers located in the dispensary, sick bay, or other medical premises of a ship or offshore installation:
- (e) drainage from spaces on a ship or offshore installation containing living animals:
- (f) waste water from a ship or offshore installation mixed with the drainage and waste specified in paragraphs (c), (d), or (e):
- (g) all victual, domestic, and operational waste (other than fresh fish or parts of fresh fish) generated during the

normal operations of a ship or offshore installation and liable to be discharged continuously or periodically.

Part 2

Dumping and incineration

4 Dumping of waste or other matter

- (1) The dumping of waste or other matter, other than the waste or other matter specified in subclauses (2) and (3), in the coastal marine area from any ship, aircraft, or offshore installation is deemed to be a prohibited activity in any regional coastal plan or proposed regional coastal plan.
- (2) In the coastal marine area the dumping of the following waste or other matter from any ship, aircraft, or offshore installation is deemed to be a discretionary activity in any regional coastal plan or proposed regional coastal plan:
 - (a) dredge material:
 - (b) sewage sludge:
 - (c) fish processing waste from an onshore facility:
 - (d) ships and platforms or other man-made structures at sea:
 - (e) inert, inorganic geological material:
 - (f) organic materials of natural origin:
 - (g) bulky items consisting mainly of iron, steel, and concrete.
- (3) This clause does not apply to—
 - (a) the dumping or storage of waste or other matter arising directly from, or related to, the exploration, exploitation, and associated offshore processing of, seabed mineral resources; or
 - (b) a discharge made in accordance with section 15B of the Act or Part 3 of these regulations.

Regulation 4(2): amended, on 1 July 2002, by regulation 4 of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

5 Assessment criteria

- (1) Every application under section 88 of the Act for a coastal permit to dump any waste or other matter specified in regulation 4(2) must include the information specified in Part 1 of Schedule 3.

- (2) The consent authority must, when considering an application under section 88 of the Act for a coastal permit for any waste or other matter specified in regulation 4(2), have regard to the matters set out in Parts 1 and 2 of Schedule 3 in addition to any other requirement of sections 104 and 138A of the Act.

6 Incineration of waste in marine incineration facility

- (1) The incineration of waste or other matter in any marine incineration facility in the coastal marine area is deemed to be a prohibited activity in any regional coastal plan or proposed regional coastal plan.
- (2) This clause does not apply to a discharge made in accordance with section 15B or Part 3 of these regulations.

7 Record keeping

- (1) Every holder of a coastal permit to carry out an activity that would otherwise contravene section 15A of the Act must keep records describing—
- (a) the types and sources of the waste or other matter dumped:
 - (b) the location of dump sites:
 - (c) the method of dumping:
 - (d) the quantity (in cubic metres) of the waste or other matter dumped.
- (2) The records for the preceding calendar year must be provided to the Director of Maritime New Zealand before 1 February in each year.

Regulation 7(2): amended, on 1 July 2005, by section 11(4) of the Maritime Transport Amendment Act 2004 (2004 No 98).

**Part 3
Control of discharges**

8 Discharge of substances for purpose of avoiding, remedying, or mitigating oil spill

- (1) Any person may, in the coastal marine area, discharge from a ship or offshore installation any substance for the purpose of avoiding, remedying, or mitigating the adverse effects of an oil spill.

- (2) This regulation does not authorise the discharge of any substance in contravention of Part 23 of the Maritime Transport Act 1994 or any marine protection rules made under Part 27 of that Act.

9 Discharge of oil

- (1) Any person may, in the coastal marine area, discharge oil, or mixtures containing oil, from any ship if—
- (a) the oil is not derived from the cargo of the ship; and
 - (b) the ship is proceeding en route; and
 - (c) the oil content of the discharge before dilution with any other substance does not exceed 15 parts per million.
- (2) Any person may, in the coastal marine area, discharge oil, or mixtures containing oil, from an offshore installation, if—
- (a) the oil content of the discharge before dilution with any other substance does not exceed 15 parts per million; and
 - (b) the discharge is platform drainage.

10 Discharge of noxious liquid substances

Any person may, in the coastal marine area, discharge from any ship carrying in bulk a noxious liquid substance, any noxious liquid substance if that noxious liquid substance is part of a discharge of clean ballast water or segregated ballast water.

11 Discharge of sewage in coastal marine area

- (1) Before 1 July 2000, any person may discharge sewage in the coastal marine area from a ship or offshore installation, unless that discharge is within 500 metres (0.27 nautical miles) of a marine farm.
- (2) On or after 1 July 2000, no person may discharge sewage in the coastal marine area from a ship or offshore installation unless that discharge occurs—
- (a) more than 500 metres (0.27 nautical miles) seaward from mean high water springs; and
 - (b) more than 500 metres (0.27 nautical miles) from a marine farm; and
 - (c) in water depths greater than 5 metres; and

- (d) more than 200 metres (0.108 nautical miles) from a marine reserve, except the marine reserve constituted by the Marine Reserve (Kermadec Islands) Order 1990; and
 - (e) more than 500 metres (0.27 nautical miles) from an area that the Minister of Fisheries has declared by notice in the *Gazette* to be a mataitai reserve under regulations made under section 186 of the Fisheries Act 1996.
- (3) A rule may only be included in a regional coastal plan or a proposed regional coastal plan relating to the discharges under this regulation if—
- (a) the rule increases the distances seaward or increases the depth specified in subclause (2) for any harbours, estuaries, embayments, or other parts of a region, or increases the distances from a marine farm, marine reserve, or mataitai reserve specified in subclause (2), for all or any part of the year; and
 - (b) the rule takes effect on or after 1 July 2000.

Regulation 11(2)(c): amended, on 1 July 2002, by regulation 5(1) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

Regulation 11(2)(d): added, on 1 July 2002, by regulation 5(1) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

Regulation 11(2)(e): added, on 1 July 2002, by regulation 5(1) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

Regulation 11(3)(a): amended, 1 July 2002, by regulation 5(2) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

12 Discharge of Grade A treated sewage in coastal marine area

- (1) Any person may discharge Grade A treated sewage in the coastal marine area from a ship or offshore installation, but must not discharge it within 100 metres of a marine farm.
- (2) Despite subclause (1), a rule may be included in a regional coastal plan or a proposed regional coastal plan if the rule—
 - (a) relates to discharges of Grade A treated sewage in the internal waters of Fiordland (as defined in section 4 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977); and
 - (b) restricts where those discharges may take place, being a distance of at least 100 metres from a marine farm; and

- (c) does not relate to vessels operated by the New Zealand Defence Force.
- (3) For the purposes of subclause (2), **Fiordland** means the coastal marine area between Awarua Point and Sandhill Point.

Regulation 12: substituted, on 1 July 2002, by regulation 6 of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

12A Discharge of Grade B treated sewage in coastal marine area

- (1) Any person may discharge Grade B treated sewage in the coastal marine area from a ship or offshore installation, but must not discharge it—
 - (a) within 500 metres (0.27 nautical miles) of a marine farm; or
 - (b) within 500 metres (0.27 nautical miles) of an area that the Minister of Fisheries has declared by notice in the *Gazette* to be a mataitai reserve under regulations made under section 186 of the Fisheries Act 1996.
- (2) A rule may only be included in a regional coastal plan or a proposed regional coastal plan relating to discharges under this regulation if the rule does either or both of the following:
 - (a) specifies the distances from mean high-water springs or the depth where those discharges may take place for all or any part of the year, being distances of at least 500 metres (0.27 nautical miles) from—
 - (i) a marine farm; or
 - (ii) a mataitai reserve:
 - (b) increases the distance from a marine farm or a mataitai reserve where those discharges may take place for all or any part of the year, being at a distance of more than 500 metres (0.27 nautical miles).

Regulation 12A: inserted, on 1 July 2002, by regulation 6 of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

13 Discharge of garbage

- (1) The discharge of plastics, dunnage, lining, and packaging materials in the coastal marine area from any ship is prohibited.
- (2) Any person may, in the coastal marine area, discharge from any ship garbage (other than those items specified in subclause

- (1), including food wastes, paper, rags, glass, metal, bottles, and crockery, if—
 - (a) the garbage has been comminuted or ground to a particle size of 25 millimetres or less; and
 - (b) the discharge occurs at least—
 - (i) 5500 metres (3 nautical miles) seaward of the inner limits of the territorial sea; and
 - (ii) 500 metres (0.27 nautical miles) from any offshore installation.
- (3) The discharge of garbage in the coastal marine area from any offshore installation is prohibited.

14 Discharge of ballast water

- (1) Any person may discharge in the coastal marine area, from a ship or offshore installation, clean ballast water or segregated ballast water.
- (2) This regulation does not authorise the discharge of clean ballast water or segregated ballast water in contravention of the Biosecurity Act 1993, regulations made under that Act, or import health standards made under section 20 of that Act.

15 Discharges made as part of normal operations of ship or offshore installation

Any person may discharge, in the coastal marine area, a contaminant that is incidental to, or derived from, or generated during, the operations listed in Schedule 4 as the normal operations of a ship or offshore installation.

16 Regional rules or resource consents for discharges

No rule may be included in any regional coastal plan, or proposed regional coastal plan, nor any resource consent granted relating to a discharge to which regulations 9, 10, 12, 13, 14, and 15 apply.

Schedule 1

Noxious liquid substances

r 2

Part 1

Substances	UN No
Acetic acid	
Acetic anhydride	1715
Acetochlor	
Acetone cyanohydrin	1541
Acrylamide solution (50% or less)	2074
Acrylic acid	2218
Acrylonitrile	1093
Adiponitrile	2205
Alachlor technical (90% or more)	
Alcohol (C ₁₂ -C ₁₅) poly (1-6) ethoxylates	
Alcohol (C ₁₂ -C ₁₅) poly (7-19) ethoxylates	
Alcohol (C ₁₂ -C ₁₅) poly (20+) ethoxylates	
Alcohol (C ₆ -C ₁₇) (secondary) poly (3-6) ethoxylates	
Alcohol (C ₆ -C ₁₇) (secondary) poly (7-12) ethoxylates	
Alkanes (C ₆ -C ₉)	
Alkaryl polyethers (C ₉ -C ₂₀)	
Alkyl acrylate-Vinylpyridine copolymer in toluene	
Alkylbenzene, alkylindane, alkylindene mixture (each C ₁₂ -C ₁₇)	
Alkyl (C ₃ -C ₄) benzenes	
Alkyl (C ₅ -C ₈) benzenes	
Alkylbenzenesulphonic acid	2584 2586
Alkylbenzenesulphonic acid, sodium salt solution	
Alkyl (C ₇ -C ₉) nitrates	
Alkyl (C ₇ -C ₁₁) phenol poly (4-12) ethoxylate	
Allyl alcohol	1098
Allyl chloride	1100

Substances	UN No
Aluminium chloride (30% or less)/Hydrochloric acid (20% or less) solution	
2-(2-Aminoethoxy) ethanol	3055
Aminoethylethanolamine	
N-Aminoethylpiperazine	2815
2-Amino-2-methyl-1-propanol (90% or less)	
Ammonia aqueous (28% or less)	2672
Ammonium bisulphite solution (70% or less)	
Ammonium nitrate solution (93% or less)	
Ammonium sulphide solution (45% or less)	2683
Ammonium thiocyanate (25% or less)/Ammonium thiosulphate (20% or less) solution	
Ammonium thiosulphate solution (60% or less)	
Amyl acetate (all isomers)	1104
Aniline	1547
Aviation Alkylates (C ₈ paraffins and isoparaffins B. Pt. 95–120°C)	
Benzene and mixtures having 10% benzene or more	1114
Benzenesulphonyl chloride	2225
Benzyl acetate	
Benzyl alcohol	
Benzyl chloride	1738
Bromochloromethane	
Butene oligomer	
Butyl acetate (all isomers)	
Butyl acrylate (all isomers)	
Butylamine (all isomers)	
Butylbenzene (all isomers)	2709
Butyl benzyl phthalate	
Butyl butyrate (all isomers)	

Substances	UN No
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture	
1,2-Butylene oxide	3022
n-Butyl ether	1149
Butyl methacrylate	
n-Butyl propionate	1914
Butyraldehyde (all isomers)	
Butyric acid	2820
Calcium alkyl (C ₉) phenol sulphide/Polyolefin phosphorosulphide mixture	
Calcium hypochlorite solution (15% or less)	
Calcium hypochlorite solution (more than 15%)	
Calcium long-chain alkyl salicylate (C ₁₃₊)	
Camphor oil	
Carbolic oil	
Carbon disulphide	1131
Carbon tetrachloride	1846
Cashew nut shell oil (untreated)	
Chlorinated paraffins (C ₁₀ -C ₁₃)	
Chloroacetic acid (80% or less)	1750
Chlorobenzene	1134
Chloroform	1888
Chlorohydrins (crude)	
4-Chloro-2-methyl phenoxyacetic acid, dimethylamine salt solution	
o-Chloronitrobenzene	1578
2- or 3- Chloropropionic acid	2511
Chlorosulphonic acid	1754
m-Chlorotoluene	2238
o-Chlorotoluene	2238
p-Chlorotoluene	2238

Substances	UN No
Chlorotoluenes (mixed isomers)	2238
Coal tar	
Coal tar naphtha solvent	
Coal tar pitch (molten)	
Cobalt naphthenate in solvent naphtha	
Coconut oil fatty acid	
Creosote (coal tar)	
Creosote (wood)	
Cresols (all isomers)	2076
Cresylic acid (dephenolized)	
Cresylic acid, sodium salt solution	
Crotonaldehyde	1143
1,5,9-Cyclododecatriene	
Cycloheptane	2241
Cyclohexane	1145
Cyclohexanone	1915
Cyclohexanone, Cyclohexanol mixture	
Cyclohexyl acetate	2243
Cyclohexylamine	2357
1,3-Cyclopentadiene dimer (molten)	
Cyclopentane	1146
Cyclopentene	2246
p-Cymene	2046
Decanoic acid	
Decene	
Decyl acetate	
Decyl acrylate	
Decyl alcohol (all isomers)	
Decyloxytetrahydrothiophene dioxide	

Substances	UN No
Dibromomethane	
Dibutylamine	
Dibutyl hydrogen phosphonate	
Dibutyl phthalate	
Dichlorobenzene (all isomers)	
3,4-Dichloro-1-butene	
1,1-Dichloroethane	2362
Dichloroethyl ether	
1,6-Dichlorohexane	
2,2'-Dichloroisopropyl ether	2490
Dichloromethane	1593
2,4-Dichlorophenol	2021
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution (70% or less)	
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	
1,1-Dichloropropane	
1,2-Dichloropropane	1279
1,3-Dichloropropane	
1,3-Dichloropropene	2047
Dichloropropene/Dichloropropane mixtures	
2,2-Dichloropropionic acid	
Diethanolamine	
Diethylamine	1154
Diethylaminoethanol	2686
2,6-Diethylaniline	
Diethylbenzene	2049
Diethylenetriamine	2079
Di-(2-ethylhexyl) phosphoric acid	1902

Substances	UN No
Diethyl phthalate	
Diethyl sulphate	1594
Diglycidyl ether of bisphenol A	
Diglycidyl ether of bisphenol F	
Di-n-hexyl adipate	
Diisobutylamine	2361
Diisobutylene	2050
Diisobutyl phthalate	
Diisopropanolamine	
Diisopropylamine	1158
Diisopropylbenzene (all isomers)	
N,N-Dimethylacetamide solution (40% or less)	
Dimethyl adipate	
Dimethylamine solution (45% or less)	1160
Dimethylamine solution (greater than 45% but not greater than 55%)	1160
Dimethylamine solution (greater than 55% but not greater than 65%)	1160
N,N-Dimethylcyclohexylamine	2264
Dimethylethanolamine	2051
Dimethylformamide	2265
Dimethyl glutarate	
Dimethyl hydrogen phosphite	
Dimethyloctanoic acid	
Dimethyl phthalate	
Dimethyl succinate	
Dinitrotoluene (molten)	1600
1,4-Dioxane	1165
Dipentene	2052
Diphenyl	

Substances	UN No
Diphenylamine, reaction product with 2,2,4-Trimethylpentene	
Diphenylamines, alkylated	
Diphenyl/Diphenyl ether mixtures	
Diphenyl ether	
Diphenyl ether/Diphenyl phenyl ether mixture	
Diphenylmethane diisocyanate	2489
Diphenylol propane-epichlorohydrin resins	
Di-n-propylamine	2383
Dodecene (all isomers)	
Dodecyl alcohol	
Dodecylamine/Tetradecylamine mixture	
Dodecyldimethylamine/Tetradecyldimethylamine mixture	
Dodecyl diphenyl ether disulphonate solution	
Dodecylphenol	
Drilling brines, containing zinc salts	
Epichlorohydrin	2023
Ethanolamine	2491
2-Ethoxyethyl acetate	1172
Ethyl acrylate	1917
Ethylamine	1036
Ethylamine solutions (72% or less)	2270
Ethyl amyl ketone	2271
Ethylbenzene	1175
N-Ethylbutylamine	
Ethyl butyrate	1180
Ethylcyclohexane	
N-Ethylcyclohexylamine	
Ethylene chlorohydrin	1135
Ethylene cyanohydrin	

Substances	UN No
Ethylenediamine	1604
Ethylene dibromide	1605
Ethylene dichloride	1184
Ethylene glycol butyl ether acetate	
Ethylene glycol diacetate	
Ethylene glycol methyl ether acetate	
Ethylene glycol monoalkyl ethers	
Ethylene oxide/Propylene oxide mixtures with an ethylene oxide content of not more than 30% in weight	2983
Ethyl 3 - ethoxypropionate	
2-Ethylexyl acrylate	
2-Ethylhexylamine	2276
Ethylidenenorbornene	
Ethyl methacrylate	2277
o-Ethylphenol	
2-Ethyl-3-propylacrolein	
Ethyltoluene	
Ferric chloride solutions	2582
Ferric nitrate/Nitric acid solution	
Fluorosilicic acid (20%–30%) in water solution	1778
Formaldehyde solutions (45% or less)	1198 2209
Formic acid	1779
Fumaric adduct of rosin, water dispersion	
Furfural	1199
Furfuryl alcohol	2874
Glutaraldehyde solutions (50% or less)	
Glycidyl ester of C ₁₀ trialkylacetic acid	
Heptane (all isomers)	1206
Heptanol (all isomers)	

Substances	UN No
Heptene (all isomers)	
Heptyl acetate	
Hexamethylenediamine solution	1783
Hexamethyleneimine	2493
Hexane (all isomers)	1208
Hexene (all isomers)	
Hexyl acetate	1233
Hydrochloric acid	1789
Hydrogen peroxide solutions (over 8% but not over 60%)	2014 2984
Hydrogen peroxide solutions (over 60% but not over 70%)	2015
2-Hydroxyethyl acrylate	
2-Hydroxy-4-(methylthio)-butanoic acid	
Icosa (oxypropane-2,3-diyl)s	
Isophoronediamine	2289
Isophorone diisocyanate	2290
Isoprene	1218
Isopropanolamine	
Isopropylamine	1221
Isopropylcyclohexane	
Isopropyl ether	1159
Lactonitrile solution (80% or less)	
Lauric acid	
Liquid chemical wastes	
Long-chain alkaryl polyether (C ₁₁ -C ₂₀)	
Long-chain polyetheramine in alkyl (C ₂ -C ₄) benzenes	
Long-chain polyetheramine in aromatic solvent	
Magnesium long-chain alkyl salicylate (C ₁₁)/(C ₁₁₊)	
Maleic anhydride	2215
Mercaptobenzothiazol, sodium salt solution	

Substances	UN No
Mesityl oxide	1229
Metam sodium solution	
Methacrylic acid	2531
Methacrylic resin in ethylene dichloride	
Methacrylonitrile	3079
N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methyl chloroac- etanilide	
Methyl acrylate	1919
Methylamine solutions (42% or less)	1235
Methylamyl acetate	1233
Methamyl alcohol	2053
Methyl butyrate	1237
Methylcyclohexane	2296
Methylcyclopentadiene dimer	
Methyldiethanolamine	
2-Methyl-6-ethylaniline	
2-Methyl-5-ethylpyridine	2300
Methyl formate	1243
Methyl heptyl ketone	
Methyl methacrylate	1247
Methylnaphthalene (molten)	
2-Methylpyridine	2313
3-Methylpyridine	2313
4-Methylpyridine	2313
Methyl salicylate	
alpha-Methylstyrene	2303
Morpholine	2054
Motor fuel anti-knock compounds (containing lead alkyls)	1649
Naphthalene (molten)	2304
Naphthenic acids	

Substances	UN No
Neodecanoic acid	
Nitrating acid (mixture of sulphuric and nitric acids)	1796
Nitric acid (less than 70%)	2031
Nitric acid (70% and over)	2031 2032
Nitrobenzene	1662
Nitroethane	
Nitroethane (80%)/Nitropropane (20%)	
o-Nitrophenol (molten)	1663
1- or 2-Nitropropane	2608
Nitropropane (60%)/Nitroethane (40%) mixture	
o- or p-Nitrotoluenes	1664
Nonane (all isomers)	1920
Nonene (all isomers)	
Nonyl acetate	
Nonyl alcohol (all isomers)	
Nonylphenol	
Nonyl phenol poly (4 ⁺) ethoxylate	
Octane (all isomers)	1262
Octanol (all isomers)	
Octene (all isomers)	
n-Octyl acetate	
Octyl aldehydes	1191
Olefin mixtures (C ₅ -C ₇)	
Olefin mixtures (C ₅ -C ₁₅)	
alpha-Olefins (C ₆ -C ₁₈) mixtures	
Oleum	1831
Oleylamine	
Palm kernel acid oil	
Paraldehyde	1264

Substances	UN No
Pentachloroethane	1669
1,3 - Pentadiene	
Pentane (all isomers)	1265
Pentene (all isomers)	
n-Pentyl propionate	
Perchloroethylene	1897
Phenol	2312
1-Phenyl-1-xylylethane	
Phosphoric acid	1805
Phosphorus, yellow or white	
Phthalic anhydride (molten)	2214
alpha-Pinene	2368
beta-Pinene	
Pine oil	1272
Polyalkyl (C ₁₈ -C ₂₂) acrylate in xylene	
Polyalkylene oxide polyol	
Poly (2 ⁺) cyclic aromatics	
Polyethylene polyamines	
Polyferric sulphate solution	
Polymethylene polyphenyl isocyanate	
Polyolefinamine in alkyl (C ₂ -C ₄) benzenes	
Polyolefineamine in aromatic solvent	
Polyolefin phosphorusulphide, barium derivative (C ₂₈ -C ₂₅₀)	
Potassium chloride solution (10% or more)	
Potassium hydroxide solution	1814
Potassium oleate	
n-Propanolamine	
beta-Propiolactone	
Propionaldehyde	1275

Substances	UN No
Propionic acid	1848
Propionic anhydride	2496
Propionitrile	2404
n-Propylamine	1277
iso-Propylamine (70% or less) solution	
Propyl benzene (all isomers)	
n-Propyl chloride	1278
Propylene dimer	
Propylene oxide	1280
Propylene tetramer	2850
Propylene trimer	2057
Pyridine	1282
Rosin	
Rosin soap (disproportionated) solution	
Sodium alkyl (C ₁₄ -C ₁₇) sulphonates (60–65%) solution	
Sodium aluminate solution	1819
Sodium borohydride (15% or less)/Sodium hydroxide solution	
Sodium dichromate solution (70% or less)	
Sodium hydrogen sulphide (6% or less)/Sodium carbonate (3% or less) solution	
Sodium hydrogen sulphite solution (45% or less)	2693
Sodium hydrosulphide solution (45% or less)	2949
Sodium hydrosulphide/Ammonium sulphide solution	
Sodium hydroxide solution	1824
Sodium hypochlorite solution (15% or less)	1791
Sodium nitrite solution	
Sodium petroleum sulphonate	
Sodium silicate solution	
Sodium sulphide solution (15% or less)	
Sodium sulphite solution (25% or less)	

Substances	UN No
Sodium tartrates/Sodium succinates solution	
Sodium thiocyanate solution (56% or less)	
Styrene monomer	2055
Sulpho hydrocarbon long-chain (C ₁₈₊) alkylamine mixture	
Sulphuric acid	1830
Sulphuric acid, spent	1832
Tall oil (crude and distilled)	
Tall oil fatty acid, barium salt	
Tall oil fatty acid (resin acids less than 20%)	
Tall oil soap (disproportionated) solution	
Tetrachloroethane	1702
Tetraethylenepentamine	2320
Tetrahydrofuran	2056
Tetrahydronaphthalene	
Tetramethylbenzene (all isomers)	
Toluene	1294
Toluenediamine	1709
Toluene diisocyanate	2078
o-Toluidine	1708
Tributyl phosphate	
1,2,4-Trichlorobenzene	2321
1,1,1-Trichloroethane	2831
1,1,2-Trichloroethane	
Trichloroethylene	1710
1,2,3-Trichloropropane	
1,1,2-Trichloro - 1,2,2-trifluoroethane	
Tricresyl phosphate (containing less than 1% ortho-isomer)	
Tricresyl phosphate (containing 1% or more ortho-isomer)	2574
Tridecanoic acid	

Substances	UN No
Triethanolamine	
Triethylamine	1296
Triethylbenzene	
Triethylenetetramine	2259
Triethyl phosphite	2323
Triisopropylated phenyl phosphates	
Trimethylacetic acid	
Trimethylamine solution (30% or less)	1297
Trimethylbenzene (all isomers)	
Trimethylhexamethylene diamine (2,2,4- and 2,4,4-isomers)	2327
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4-isomers)	2328
2,2,4- Trimethyl-1,3-pentane-diol-1-isobutyrate	
Trimethyl phosphite	2329
1,3,5-Trioxane	
Trixylyl phosphate	
Turpentine	1299
Undecanoic acid	
1-Undecene	
Undecyl alcohol	
Urea/Ammonium nitrate solution (containing aqua ammonia)	
Valeraldehyde (all isomers)	2058
Vinyl acetate	1301
Vinyl ethyl ether	1302
Vinylidene chloride	1303
Vinyl neodecanoate	
Vinyltoluene	2618
White spirit, low (15–20%) aromatic	1300
Xylenes	1307
Xylenol	2261

Substances	UN No
Zinc alkaryl dithiophosphate (C ₇ -C ₁₆)	
Zinc alkyl dithiophosphate (C ₃ -C ₁₄)	

Part 2

Substances	UN No
Acrylonitrile-Styrene copolymer dispersion in polyether polyol	
Alkenyl (C ₁₁₊) amide	
Alkyl (C ₈₊) amine, Alkenyl (C ₁₂₊) acid ester mixture	
Alkyldithiothiadiazole (C ₆ -C ₂₄)	
Aluminium sulphate solution	
Ammonium hydrogen phosphate solution	
Ammonium polyphosphate solution	
Ammonium sulphate solution	
n-Amyl alcohol	1105
sec-Amyl alcohol	1105
Amyl alcohol, primary	1105
Animal and fish acid oils and distillates, not otherwise specified, including:	
animal acid oil, fish acid oil, lard acid oil, mixed acid oil, mixed general acid oil, mixed hard acid oil, mixed soft acid oil	
Animal and fish oils, not otherwise specified, including:	
cod liver oil, lanolin, neatsfoot oil, pilchard oil, sperm oil	
Aryl polyolefins (C ₁₁ -C ₅₀)	
Brake fluid base mix:	
(Poly(2-8) alkylene (C ₂ -C ₃) glycols/Polyalkylene (C ₂ -C ₁₀) glycols/monoalkyl (C ₁ -C ₄) ethers and their borate esters)	
Butylene glycol	
gamma-Butyrolactone	
Calcium hydroxide slurry	
Calcium long-chain alkaryl sulphonate (C ₁₁ -C ₅₀)	
Calcium long-chain alkyl phenate sulphide (C ₈ -C ₄₀)	

Part 2—*continued*

Substances	UN No
epsilon-Caprolactam (molten or aqueous solutions)	
Choline chloride solutions	
Citric acid (70% or less)	
Coconut oil fatty acid methyl ester	
Cyclohexanol	
Decahydronaphthalene	1147
Diacetone alcohol	1148
Dialkyl (C ₇ -C ₁₃) phthalates	
Diethylene glycol	
Diethylene glycol dibutyl ether	
Diethylene glycol phthalate	
Di-(2-ethylhexyl) adipate	
Diisobutyl ketone	1157
Diisononyl adipate	
Diisopropylnaphthalene	
2,2-Dimethylpropane-1,3-diol	
Dinonyl phthalate	
Ditridecyl phthalate	
Diundecyl phthalate	
Dodecenylsuccinic acid, dipotassium salt solution	
2-Ethoxyethanol	1171
Ethyl acetate	1173
Ethyl acetoacetate	
2-Ethyl-2-(hydroxymethyl) propane-1,3,-diol, (C ₈ -C ₁₀) ester	
Ethylenediaminetetraacetic acid, tetrasodium salt solution	
Ethylene glycol	
Ethylene glycol acetate	
Ethylene glycol methyl butyl ether	

Part 2—*continued*

Substances	UN No
Ethylene glycol phenyl ether	
Ethylene glycol phenyl ether/Diethylene glycol phenyl ether mixture	
2-Ethylhexanoic acid	
Ethyl propionate	1195
Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt solution	
Formamide	
Glycerine (83%), Dioxanedimethanol (17%) mixture	
Glycerol monooleate	
Glyoxal solution (40% or less)	
n-Heptanoic acid	
Hexamethylenediamine adipate (50% in water)	
Hexamethylenetetramine solutions	
Hexanoic acid	
Hexanol	2282
N-(Hydroxyethyl) ethylenediaminetriacetic acid, trisodium salt solution	
Isoamyl alcohol	1105
Isobutyl formate	2393
Iso- and cyclo-alkanes (C ₁₀ -C ₁₁)	
Isophorone	
Lactic acid	
Latex, ammonia (1% or less)-inhibited	
Long-chain alkaryl sulphonic acid (C ₁₆ -C ₆₀)	
Magnesium long-chain alkaryl sulphonate (C ₁₁ -C ₅₀)	
3-Methoxybutyl acetate	
Methyl acetoacetate	
Methyl alcohol	1230

Part 2—*continued*

Substances	UN No
Methyl amyl ketone	1110
Methylbutenol	
Methyl tert-butyl ether	2398
Methyl butyl ketone	
Methylbutynol	
Methyl isobutyl ketone	1245
Methyl propyl ketone	1249
N-Methyl-2 pyrrolidone	
Myrcene	
Naphthalenesulphonic acid-Formaldehyde copolymer, sodium salt solution	
Nitrilotriacetic acid, trisodium salt solution	
Nonanoic acid (all isomers)	
Nonyl methacrylate monomer	
Octanoic acid (all isomers)	
Olefin-Alkyl ester copolymer (molecular weight 2000 ⁺)	
Oleic acid	
Palm oil fatty acid methyl ester	
Palm stearin	
Pentaethylenhexamine	
Pantanoic acid	
Poly(2-8)alkylene glycol monoalkyl (C ₁ -C ₆) ether	
Poly(2-8)alkylene glycol monoalkyl (C ₁ -C ₆) ether acetate	
Polybutenyl succinimide	
Polyether (molecular weight 2000 ⁺)	
Polyolefin amide alkeneamine (C ₂₈₊)	
Polyolefin amide alkeneamine borate (C ₂₈ -C ₂₅₀)	
Polyolefin amide alkeneamine polyol	

Part 2—*continued*

Substances	UN No
Polyolefin anhydride	
Polyolefin ester (C ₂₈ -C ₂₅₀)	
Polyolefin phenolic amine (C ₂₈ -C ₂₅₀)	
Polypropylene glycol	
n-Propyl acetate	1276
Propylene glycol methyl ether acetate	
Propylene glycol monoalkyl ether	
Sodium acetate solutions	
Sodium benzoate	
Sodium carbonate solution	
Sulphohydrocarbon (C ₃ -C ₈₈)	
Sulpholane	
Tallow	
Tallow fatty acid	
Triethyl phosphate	
Trimethylolpropane polyethoxylate	
Urea/Ammonium mono- and di-hydrogen phosphate/Potassium chloride solution	
Urea/Ammonium nitrate solution	
Urea/Ammonium phosphate solution	
Vegetable acids and oils and distillates, not otherwise specified, including:	
corn acid oil, cotton seed oil, dark mixed acid oil, groundnut acid oil, mixed acid oil, mixed general acid oil, mixed hard acid oil, mixed soft acid oil, rapeseed acid oil, safflower acid oil, soya acid oil, sunflower seed acid oil	

Part 2—*continued***Substances****UN No**

Vegetable oils, not otherwise specified, including:
 babbasu oil, beech nut oil, castor oil, cocoa butter, coconut oil,
 corn oil, cotton seed oil, groundnut oil, hazelnut oil, linseed oil,
 nutmeg butter, oiticica oil, olive oil, palm nut oil, palm oil, peel
 oil (oranges and lemons), perilla oil, poppy oil, raisin seed oil,
 rape seed oil, rice bran oil, safflower oil, salad oil, sesame oil,
 soya bean oil, sunflower oil, tucum oil, tung oil, walnut oil

Waxes

Zinc alkenyl carboxamide

Schedule 2

r 2

Substances classified as oil**Ashphalt solutions**

Blending Stocks

Roofers Flux

Straight run residue

Gasoline blending stocks

Alkylates - fuel

Reformats

Polymer - fuel

Gasoline

Casinghead (natural)

Automotive

Aviation

Straight Run

Fuel oil no. 1 (kerosene)

Fuel oil no. 1 - D

Fuel oil no. 2

Fuel oil no. 2 - D

Jet fuels

JP - 1 (kerosene)
JP - 3
JP - 4
JP - 5 (kerosene, heavy)
Turbo fuel
Kerosene
Mineral spirit

Oils

Clarified
Crude oil
Mixtures containing crude oil
Diesel oil
Fuel oil no. 4
Fuel oil no. 5
Fuel oil no. 6
Residual fuel oil
Road oil
Transformer oil
Aromatic oil (excluding vegetable oil)
Lubricating oil and blending stocks
Mineral oil
Motor oil
Penetrating oil
Spindle oil
Turbine oil

Distillates

Straight run
Flashed feed stocks

Gas oil

Cracked

Naptha

Solvent

Petroleum

Heartcut distillate oil

Schedule 3

r 5

Assessment of waste or other matter**Part 1****Additional matters to be included in
application under section 88**

- 1 The application must include a detailed description and characterisation of the waste to enable a proper assessment to be made of its potential impacts on human health and the environment. The description must include any material capable of creating floating debris or otherwise contributing to an adverse effect on the environment.
- 2 The characterisation of the wastes and their constituents must include—
 - (a) the origin, total amount, form, and average composition;
 - (b) the properties: physical, chemical, biochemical, and biological;
 - (c) the toxicity;
 - (d) the persistence: physical, chemical, and biological;
 - (e) the accumulation and biotransformation in biological materials or sediments.
- 3 The application must include information about—
 - (a) the types, amounts, and relative hazard of wastes generated; and
 - (b) the details of the production process and the sources of wastes within that process; and
 - (c) the feasibility of the following waste reduction or prevention techniques:
 - (i) product reformulation;
 - (ii) clean production technologies;
 - (iii) process modification;

1—*continued*

- (iv) input substitution:
 - (v) on-site, closed-loop recycling.
- 4 For dredged material and sewage sludge, the application must identify the sources of contamination and waste prevention strategies that may be used to control that contamination.
- 5 Applications to dump waste or other matter must include information about the consideration that has been given to the following hierarchy of waste management options:
- (a) re-use:
 - (b) off-site recycling:
 - (c) destruction of hazardous constituents:
 - (d) treatment to reduce or remove the hazardous constituents:
 - (e) disposal on land, into air, and in water.
- 6 The application must include the following information about the proposed dump site:
- (a) the physical, chemical, and biological characteristics of the water column and the seabed:
 - (b) identification of values and other uses of the sea in the area under consideration:
 - (c) an assessment of the constituent fluxes associated with dumping in relation to existing fluxes of substances in the marine environment:
 - (d) the economic and operational feasibility.
- 7 The application must include an assessment of the potential effects of sea or land disposal options.
- 8 The application for dumping must integrate information on waste characteristics, conditions at the proposed dump site(s), fluxes, and proposed disposal techniques. The application must specify the potential effects on the environment and define the nature, temporal, and spatial scales and duration of expected effects and state any assumptions.

Part 2**Additional matters to be considered by the
consent authority**

- 9 Consideration of an application must have regard to the avoidance, remedying, or mitigation of environmental disturbance and detriment. Consideration of an application must also have regard to the imposing of conditions specifying—
- (a) the types and sources of materials to be dumped:
 - (b) the location of the dump site(s):
 - (c) the method of dumping:
 - (d) monitoring and reporting requirements.
- 10 Consideration of an application must have regard to the imposition of monitoring programmes as a condition of a resource consent.

Schedule 4

r 15

**Normal operations of ship or offshore
installation**

- 1 Ship propulsion.
- 2 Heat exchange systems, including engine cooling systems, air conditioning, refrigeration, and condensers.
- 3 Stormwater drainage from systems and scuppers, except from those areas used for the storage of any harmful substance.
- 4 The use of washing facilities in the accommodation areas producing greywater from showers, handbasins, baths, galleys, dishwashers, and laundries but does not include use of any dispensary, sick bay, or other medical premises.
- 5 The cleaning of the ship or offshore installation, except for the exterior of the hull below the load line or parts of the ship used for carrying cargo.
- 6 The incineration of waste or other matter generated from a ship or offshore installation.
- 7 Firefighting.
- 8 The operation of a weapon system on any ship of the New Zealand Defence Force.

Schedule 5

r 3(1)

Grade A sewage treatment systems

Schedule 5: added, on 1 July 2002, by regulation 7(a) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

(Approved in accordance with International Maritime Organisation resolution MEPC.2(VI))

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)	
1 Brazil	1 Tridente Ind. E. Comercio de Equipamentos Navais Ltda. 20090 Rio de Janeiro	“Super Trident”			
		ST25X	17.5	15.0	
		ST 2	1.6	1.2	
		ST 4	3.01	2.4	
		ST 6	4.55	3.6	
		ST 8	6.0	4.8	
		ST10	7.4	6.0	
		ST13	9.6	7.8	
		ST15	11.0	9.0	
		ST20	14.5	12.0	
		ST25	17.5	15.0	
		ST30	23.1	18.0	
			“Retrofit Trident”		
			RT20	1.6	1.2
		RT40	3.01	2.4	
		RT60	4.55	3.6	
		RT80	6.0	4.8	
	2 SEMCO SA Sao Paulo		“Super Trident”		
			ST 2	1.6	1.2
			ST 4	3.01	2.4
ST 6			4.55	3.6	
ST 8			6.0	4.8	
ST10			7.4	6.0	
ST15			11.0	9.0	

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		ST20	14.5	12.0
		ST25	17.5	15.0
		ST30	23.1	18.0
		“Retrofit Trident”		
		RT20	1.6	1.2
		RT40	3.01	2.4
		RT60	4.55	3.6
		RT80	6.0	4.8
2 Bulgaria	1 MICHAILOV MV CO. Bourgas	TYPE 434	1.5	1.8
3 China	1 Shanghai Marine Instrument and Equipment Works, 200 Minseng Rd, Shanghai	CSWA-3	2.4	0.72
	2 Taixing Ship’s Machinery Works Taixing, Jiangsu	WCX-36	39.6	1.26
		WCX-24	26.4	0.84
		WCB-300(s)	22.32	15.50
		WCB-250(S)	18.24	13.00
		WCB-200(S)	14.40	10.50
		WCB-150(S)	10.32	8.00
		WCB-100(S)	7.44	5.50
		WCB-80	6.00	4.30
		WCB-60	4.56	3.30
		WCB-50	3.60	2.70
		WCB-40	2.88	2.20
		WCB-30	2.16	1.60
		WCB-25	1.75	1.25
		WCB-20	1.44	1.10
		WCB-15	1.19	0.85

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		WCB-10	0.72	0.60
		WCB-6	0.42	0.21
	3 Zhangjiang Marine Auxiliary Machinery Factory Zhangjiang, Jiangsu	WCB-40Z	3.08	1.54
	4 Luzhou Machinery Works Nanjing, Jiangsu	ST1	0.85	0.6
		ST2	1.6	1.2
		ST3	2.31	1.8
		ST4	3.01	2.4
		ST6	4.55	3.6
		ST8	6.0	4.8
		ST10	7.4	6.0
		ST15	11.0	9.0
		RT40	3.01	2.4
4 Croatia	1 Ekološki sistemi d.o.o., 47000 Karlovac, Mala švar a, 155	BRODOPUR45	3.15	2.70
		BRODOPUR BP-25	1.6	1.38
		BRODOPUR BP-45	3.15	2.70
	2 Tvornica Turbina d.o.o., Kneza Branimira 8 4700 Karlovac	BRODOPUR BP-25	1.6	1.38
5 Denmark	1 Atlas A/S Baltorpvej 154 DK 2750 Ballerup Copenhagen	AWWU	36.0	—
6 Germany	1 VEB Abwasserbehandlungsanlagen Merseburg	KA-MR 1.5 S 50C	1.75:5.0	1.14:3.25
		KA-MR 1.5 S 50B	1.5:4.25	0.98:2.76

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
	2 Wasserbehandlung Merseburg GmbH Amtshluser 23-29 4200 Merseburg	KA-MR 1.5 S 50-1/E	2.0	1.3
	3 KG Hamman Wassertechnik GmbH P.O. Box 21 31 2105 Hamburg Seevetal 2	HL-Cont H1rCont HL-Cont H1rCont HLrCont HLrCont 1 m ³ h HL-Cont 7 HL-Compact-Mini HL-Cont C-45	108.0 720.0 360.0 168.0 96.0 24.0 168.0 24.0 96.0	816.0 540.0 270.0 126.0 72.0 18.0 126.0 18.0 72.0
	4 Format-Chemie und Apparate GmbH 2086 Ellerau	MSTP 1 MSTP 1 MSTP 1A MSTP 1B MSTP 2 MSTP 3 MSTP 4 MSTP 5 MSTP 6 MSTP 7 MSTP 8 MSTP 9	6.0 6.6 3.3 4.5 12.0 18.0 22.5 33.0 48.0 69.0 150.0 300.0	3.0 3.3 1.65 2.25 6.0 9.0 11.25 16.5 24.0 34.5 75.0 150.0
	5 Format-Chemie GmbH P.O. Box 1263 25476 Ellerau	MSTP 1A MSTP 1B MSTP 1 MSTP 2 MSTP 3 MSTP 4	1.26 2.10 2.50 3.85 5.25 6.65	0.48 0.81 0.95 1.49 2.03 2.57

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)
		MSTP 5	9.80	3.80
		MSTP 6	14.00	5.40
		MSTP 7	21.00	8.10
		MSTP 8	45.50	17.60
		MSTP 9	91.00	35.10
6	Apparatebau Salzkotten GmbH Ferdinand- Henze-Strasse 9 33154 Salzkotten	Bio-Compact KSA-S-10	1.75	0.8
		Bio-Compact KSA-S-15	2.625	1.2
		Bio-Compact KSA-S-20	3.5	1.6
		Bio-Compact KSA-S 25	4.375	2.0
		Bio-Compact KSA-S-35	6.125	3.060
		Bio-Compact KSA-S-50	8.750	4.375
		Bio-Compact KSA-S-100	17.5	8.0
		Bio-Compact KSA-S 200	35.0	15.0
		Bio-Compact KSA-S-300	52.5	21.45
		Bio-Compact KSA-S-600	105.0	36.0
		Bio-Compact KSA-S-800	140.0	48.0

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
7	Aquache- mindustrielle Wasserbehand- lungs-GmbH, 14-16 5000 Köln	BIO AQUA Aerob 35	6.125	2.6
		BIO AQUA Aerob 45	9.625	6.875
		BIO AQUA Aerob 55	7.875	3.4
		BIO AQUA Aerob	3.15	2.7
		18/36	4.375	3.72
		BIO AQUA Aerob 25/50	6.125	5.25
		BIO AQUA Aerob 35/70	9.625	8.25
		BIO AQUA Aerob 55/110	12.6	23.6
		Bio AQUA Aerob 150/300	13.125	39.375
		Bio AQUA Aerob 75/150	13.125	39.375
		Bio AQUA Aerob 100/200	17.5	52.5
		Bio AQUA Aerob 140/280	24.5	73.5
		Bio AQUA Aerob 240/480	45.0	135.0
		8	Paul Pleiger Maschinenfab- rik GmbH & Co. KG, D-5810 Witten 3	BIOMAT
BS 10	2.2			0.8
BS 15	3.3			1.17
BS 20	4.4			1.5
		BS 25	5.5	1.75

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)		
9	Willi Becker Ingenieurburo GmbH Hamburg	“HELI-FLOW” BF 5M	0.38	0.3		
		“HELI-FLOW” HF 10M	0.76	0.6		
		“HELI-FLOW” BF 13M	0.98	0.78		
		“HELI-FLOW” MY 19M	1.42	1.14		
		“HELI-FLOW” BF 26M	1.97	1.56		
		“HELI-FLOW” BF 32M	2.42	1.92		
		“HELI-FLOW” BF 41 M	3.10	2.46		
		“HELI-FLOW” HF 58M	4.39	3.48		
		“HELI-FLOW” BF 71 M	5.38	4.26		
		“HELI-FLOW” HF 84M	6.36	5.04		
		10	Aqua Mar GmbH Rothenbacher Weg 4a 5064 Rosrath 1	Aqua Mar Bio Unit MSP I	2.62	1.25
				Aqua Mar Bio Unit MSP II	5.75	2.47
				Aqua Mar Bio Unit MSP III	7.875	3.38
				Aqua Mar Bio Unit MSP IV	12.25	5.25
Aqua Mar Bio Unit MSP V	26.5			11.25		
Aqua Mar Bio Unit MSP VI	44.0			19.5		
		Aqua Mar Bio Unit MSP VII	70.0	21.0		
		Aqua Mar Bio, Unit MSP VIII	105.0	32.0		
		Aqua Mar Bio Unit MSP IX	142.0	47.6		

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		Aqua Mar Bio Unit MSP X	172.0	75.0
		Aqua Mar Bio Unit MSP 25	4.38	1.875
		Aqua Mar Bio Unit MSP 60	10.5	4.5
		Aqua Mar Bio Unit MSP 80	13.12	5.63
	11 Aqua chemindustrielle Abwasserbehandlung-GmbH Quellenweg 13 5060 Bergisch-Gladbach 1	Bio Aqua Aerob 45/90	7.815	23.625
		Bio Aqua Aerob 12	2.1	0.89
		Bio Aqua Aerob 12/24	2.1	1.80
		Bio Aqua Aerob 25/50	4.375	13.125
		Bio Aqua Aerob 35/70	6.125	18.375
		Bio Aqua Aerob 45/90	7.875	23.625
		Bio Aqua Aerob 55/110	9.625	28.875
	12 Citex Maschinen-Apparatebau Gastechnik GmbH 2000 Hamburg 71	CEAK 35/50	12.0	600.0
	13 Schiffsanlagenbau Barth GmbH, Chausseestr. 5B 0-2380 Barth	MSA 2.5	1.75-3.5	1.1-2.3
		MSA 5	3.5-6.75	2.3-4.4
		MSA 10	6.75-13.5	4.4-8.8
		MSA 15	13.5-20.25	8.8-13.2
		MSA 2.5 CL	1.75-3.5	1.1-2.3
		MSA 5CL	3.5-6.75	2.3-4.4
	14 VEB Kombinat Schiffbau Rostock	KAREA25	25.0	12.5

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)
15	Aquamar GmbH Zum Alten Wasserwerk 6 D-51491 Overath	Bio unit MSP III	7.875	3.38
		Bio unit MSP 1	2.62	1.125
		Bio unit MSP 25	4.38	1.875
		Bio unit MSP II	5.75	2.47
		Bio unit MSP 60	10.5	4.5
		Bio unit MSP IV	12.25	5.15
		Bio unit MSP 80	13.12	5.63
		16 Hamann Wassertechnik GmbH P.O.B2201 D-21202 Seevetal	Basis-Frame	24.0
	Norway-Frame		24.0	18.0
	L-Frame		96.0	72.0
	Norway-Frame		96.0	72.0
	Double-Frame		96.0	72.0
	L-Frame		168.0	126.0
	Norway-Frame		168.0	126.0
	Double-Frame	168.0	126.0	
L-Frame	360.0	270.0		
Norway-Frame	360.0	270.0		
Double-Frame	360.0	270.0		
Compact-Mini -Big-Tank	36.0	27.0		
Mini-Frame-Big	36.0	27.0		
Norway-Frame- Big	36.0	27.0		
HL-Cont Super Mini	2.52	1.89		
HL-Cont (1 m ³ /h) Compact-Mini	24.0	18.0		
HL-Cont. (96 m ³ /d)	96.0	72.0		
HL-Cont. (168 m ³ /d)	168.0	126.0		
HL-Cont. (360 m ³ /d)	360.0	270.0		
HL-Cont. (720 m ³ /d)	720.0	540.0		

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		HL-Cont. (1080 m ³ /d)	1080.0	810.0
	17 Triton-Format GmbH Wemer-von-Siemen-Str. 2 25479 Ellerau	MSTP 1A	1.26	0.48
		MSTP 1B	2.1	0.81
		MSTP 1	2.5	0.95
		MSTP 2	3.85	1.49
		MSTP 3	5.25	2.03
		MSTP 4	6.65	2.57
		MSTP 5	9.8	3.8
		MSTP 6	14.0	5.4
		MSTP 7	21.0	8.1
		MSTP 8	45.5	17.6
		MSTP 9	91.0	35.1
		MSTP 10-1500V	37.5	40.5
		MSTP 11-1800V	45.0	48.6
	18 MARTIN SYSTEMS AG Bettelhecker Str. 25 96515 Sonneberg	STKS 65	16.25	5.85
		STKS 25	5.50	2.30
		STKS 110	16.80	9.92
		STKS 250	35.00	22.50
		STKS 300	42.50	25.50
		BMA 15	2.40	1.35
	19 UTS Maschinen- und Ausrüstungsbau GmbH Friedrich-Engels-Str. 23-25 96515 Sonneberg	STKS 25	5.50	2.30
		STKS 65	16.25	5.85

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)
	20 DVZ-Services GmbH Waldstrasse 23 D-28844 Weyhe	DVZ-MSD II/10	0.85	0.95
		DVZ-MSD II/20	1.73	1.90
		DVZ-MSD II/30	2.59	2.85
		DVZ-MSD II/40	3.46	3.80
		DVZ-MSD II/50	4.32	4.75
		DVZ-MSD II/60	5.18	5.70
		DVZ-MSD II/70	6.04	6.65
		DVZ-MSD II/80	6.91	7.60
		DVZ-MSD II/100	8.64	9.50
		DVZ-MSD II/120	10.36	11.40
		DVZ-MSD II/140	12.08	13.30
		DVZ-MSD II/160	13.82	15.20
		DVZ-MSD II/180	15.54	17.10
		DVZ-MSD II/200	17.28	19.00
		DVZ-MSD II/240	20.72	22.80
		DVZ-MSD II/300	22.464	24.71
		DVZ-SKA 10 "Biomaster"	1.85	1.29
		DVZ-SKA 20 "Biomaster"	3.70	2.58
		DVZ-SKA 30 "Biomaster"	5.50	3.86
		DVZ-SKA 40 "Biomaster"	7.40	5.15
		DVZ-SKA 50 "Biomaster"	9.20	6.40
		DVZ-SKA 70 "Biomaster"	12.95	6.48

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
	21 VA TECH WABAG ESMIL GmbH Lise-Meitner- Str. 4a 40878 Ratingen	MEMROD LT 10	1.8	0.9
		MEMROD LT 25	3.75	2.25
		MEMROD LT 230	34.5	20.7
	22 Rochem UF-Systeme GmbH Stadtshaus- brücke 1-3 Fleethof 20355 Hamburg	Bio-Filt ® 03/06	24.0	10.0
		Bio-Filt ® 16/18 TWIN	150.0	230.0
	23 MARTIN SYSTEMS AG Ackerstrasse 40 D-96515 Sonneberg	BMA 25	5.0	2.25
		BMA 15	2.4	1.35
	24 RWO Ab- wassertechnik GmbH Leerkämpe 3 D-28259 Bremen	WWT3 BIOPUR	4.63	2.174
		WWT4 BIOPUR	6.48	3.04
		WWT1 BIOPUR	1.76	0.83
		WWT2 BIOPUR	2.59	1.22
		WWT5 BIOPUR	9.81	4.61
	7 Finland	1 Aquamaster- Rauma Oy P Box 220 SF-26101 Rauma	UNEX BIO-20	1.4
UNEX BIO-40			2.8	1.4
UNEX BIO-60			4.2	2.1
UNEX BIO-80			5.6	2.8
UNEX BIO-100			7.0	3.5
UNEX BIO-200			14.0	7.0
UNEX BIO-600			42.0	21.0
UNEX BIO-800			56.0	28.0
UNEX BIO SECTIONAL				
20			1.4	0.7
40	2.8	1.4		
60	4.2	2.1		
80	5.6	2.8		

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)	
		UNEX Cem			
		-3	72.0	28.8	
		-7.5	180.0	72.0	
		-15	360.0	144.0	
		UNEX SIMULTAN			
		-10	3.0	1.5	
		-15	4.0	2.0	
		-40	12.0	6.0	
		-60	18.0	9.0	
		-80	24.0	12.0	
		-100	30.0	15.0	
8	Greece	1	Environmental Protection Engineering Ltd		
			88 Iroon Polytechniou Str. 18536 Piraeus		
			TRITON 196	1.96	0.85
			TRITON 1900	19.00	8.34
			TRITON 408	4.08	1.77
			TRITON 1000	10.0	4.34
			TRITON 4000	40.0	17.35
9	Italy	1	Pollution Control Engineering Sr. I, Trattamento Acque Via Dei Mille 99, La Spezia		
			BIODISK FVN 25	2.5	(less than the standards)
			BIODISK FVN 30	4.0	
			BIODISK FVN 50	6.0	
			BIODISK FVN 60	8.0	
			BIODISK FVN 100	15.0	
			BIODISK FVN 200	30.0	
			BIODISK FVN 300	45.0	

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)		
	2 I.S.L.R. Sas di Antonelli & C 16165 Genova Struppa	BIOEPURO-B/50	5.0			
		75	15.0			
		25	2.5			
		20	2.0			
		75-2	7.5			
		100	10.0			
		125	12.5			
		150	15.0			
		200	20.0			
		10 Japan	1 Sasakura Engineering Co. Ltd Osaka 500	Super Trident ST2	1.6	1.2
				Super Trident ST4	3.01	2.4
				Super Trident ST6	4.55	3.66
				Super Trident ST8	6.0	4.8
Super Trident ST10	7.4			6.0		
Super Trident ST15	11.0			9.0		
Super Trident ST20	14.5			12.0		
Super Trident ST25	17.5			15.0		
Super Trident ST30	23.1			18.0		
Super Trident ST2A	1.6			1.2		
Super Trident ST3A	2.31			1.8		
Super Trident ST4A	3.01			2.4		
Super Trident ST6A	4.55			3.6		

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)
		Super Trident ST2N	1.6	1.2
		Super Trident ST4N	3.01	2.4
		Super Trident ST6N	4.55	3.6
		Super Trident STBN	6.0	4.8
		Super Trident ST10N	7.4	6.0
		Super Trident STI 5N	11.0	9.0
		Super Trident ST20N	14.5	12.0
		Super Trident ST25N	17.5	15.0
		Super Trident ST30N	23.1	18.0
		Retro-fit Trident RT 20	1.6	1.2
		Retro-fit Trident RT 40	3.01	2.4
		Retro-fit Trident RT 60	4.55	3.6
		Retro-fit Trident RT 80	6.0	4.8
2	Nissin Refrigeration and Engineering Ltd Osaka	Marine Defecamat NST-20	1.2	0.27
		Marine Defecamat NST-30	1.8	0.405
		Marine Defecamat NST-40	2.4	0.54
		NST-50	3.0	0.67
		NST-60	3.6	0.81
		NST-70	4.2	0.94

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		NST-80	4.8	1.08
		NST-90	5.4	1.21
		NST-100	6.0	1.35
		NST-125	7.5	1.68
		NST-150	9.0	2.02
		NST-300	18.0	4.05
		NST-400	24.0	5.40
		NST-500	30.0	6.75
		NST-650	39.0	8.77
		NST-750	45.0	10.12
		Marine Defecamat NST-20H	1.2	0.27
		Marine Defecamat NST-25H	1.5	0.338
		Marine Defecamat NST-30H	1.8	0.405
		Marine Defecamat NST-40H	2.4	0.54
	3 Taiko Kikai Industries Co. Ltd 209 Shimotabuse Tabuse-cho Kamage-Gun Yamaguchi-Pref Japan 742-15	TAIKO SHIPCLEAN BFT 40	2.4	0.54
		AP-2 SHIPCLEAN	1.2	0.27
		AP-3 SHIPCLEAN	1.8	0.405
		AP-4 SHIPCLEAN	2.4	0.54
		AP-5 SHIPCLEAN	3.0	0.675
		AP-6 SHIPCLEAN	4.5	1.0125
		AP-7 SHIPCLEAN	6.0	1.35

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		SBT-15	0.9	0.2025
		SBT-25	1.5	0.3375
		SBT-40	2.4	0.54
		SBT-65	3.9	0.8775
4	Goko Seisakusho Co. Ltd. 27-3, 5-chome Shimbashi Minato-ku Tokyo	“AEROBICT C” TF 20	0.7	0.27
		“AEROBICT” TF 25	0.337	
		1.0	1.6	0.540
		“AEROBICT C” TF 40	0.6752.1	
		“AEROBICT” TF 50	0.540	0.81
		2.0	1.08	
		“AEROBICT C” TF 60		
		“AEROBICT” TF 40	1.62	0.54
		1.6		
		“AEROBICT” TF 80		
		3.2		
		AEROBICT TF 120		
		4.8		
5	Nippon Kokan, Yokohama	NKK-25 D II	1.5	0.337
6	Japan Development Consultants Inc. 1 Tatagami-cho Sasebo-City Nagasaki	CLEAN FRIEND BFM-35	2.13	

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
11 Netherlands	1 Holland Marine Services Amsterdam b.v Vlothavenweg 16, 1013 BJ Amsterdam, The Netherlands	MSD-11 Series	4.0	1.1
12 Poland	1 Pomorskie Zaklady Urzadzen Okretowych "WARMA" 86-300 Grudziadz Ul. Lotnicza 21	LK-30A LK-100 LK-200 LK-320 LK-30 LK-50 LK-100 LK-200 LK-320 MOS40 MOS-2S	1.95 6.5 13.0 20.8 1.95 3.25 6.5 13.0 20.8 40.0 2.5	1.36 4.55 9.1 14.56 1.8 3.0 6.0 12.0 19.2 27.9 1.75
	2 Centrum Techniki Morskie; OBR Gdansk, Ul J. Matejki 6	TELKA 03	6.0	4.5
	3 Stocznia Szczecinska Im. Adolfa Warskiego Szczecin	B 430-7	1.3	0.9
	4 Zaklady Doswiadczalno-Produkcyjnych "TECHMOR" ul. Marynarki Polskiej 59, Gdansk	TELKA 06	12.0	9.0

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)	
13 Republic of Korea	1 Consolidated Machinery Inc. Yang San	BIO AQUA 35	6.125	2.6	
		BIO AQUA 25	4.375	1.86	
		BIO AQUA 18	3.15	1.34	
		BIO AQUA 55	9.625	4.125	
		BIO AQUA 45	7.875	3.4	
		AEROB-12	2.1	0.89	
		AEROB-12C	2.1	0.89	
		AEROB-18	3.15	1.34	
		AEROB-18C	3.15	1.34	
		AEROB-25	4.375	1.86	
		AEROB-35	6.125	2.6	
		AEROB-45	7.875	3.4	
		AEROB-55	9.625	4.125	
	2	HanDok Precision Ind; Kangseo-Gu Seoul	HDST -150	0.9	
			HDST -250	1.5	
			HDST -400	2.4	
			HDST -650	3.9	
	3	Chang Won Environment Ind. Co. Ltd Kim hai Kyung Nam-Do	SEACLEAN II-10CE	0.3	
			SEACLEAN II-20CE	0.6	
SEACLEAN U-30CE			0.9		
SEACLEAN U-50CE			1.5		
SEACLEAN' II-150CE			4.5		
SEACLEAN II-30CE-S			0.9		
SEACLEAN II-50CE-S			1.5		
SEACLEAN II-50CE(B)			2.4		
SEACLEAN II-50CE(B)			2.4		

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		SEACLEAN II-100CE	3.0	
		SEACLEAN II-100CE-S	3.0	
		SEACLEAN II-150CE-S	4.5	
		SEACLEAN II-300CE	9.0	
	4 Changkwang Engineering Co., Ltd Youngdeungpo-Ga, Seoul	HDST-150	0.9	
		HDST-250	1.5	
		HDST-400	2.4	
		HDST-650	3.9	
14 Russian Federation	1 Sudoimport Moskva Smolenskaia - Sennaia pl 32/34	EOS-15	15.0	6.0
		EOS-5	5.0	2.5
	2 "EKOS Ltd" Barrikadnaja st. 36, fl. 8 St. Petersburg	STOK-IOMI	10.0	5.0
		STOK-50M	50.0	25.0
	3 Krasnoutilovskai St 55-6 198152 St. Petersburg	STOK-30M	30.0	15.0
		STOK-70M	70.0	35.0
15 Spain	1 DETEGASA Ctra. Castro-Meiras 15550 Valdovino La Coruna	<i>PHYSICAL-CHEMICAL</i>		
		DELTA FQ-6	6.0	3.3
		DELTA FQ-10	10.0	5.5
		DELTA FQ-15	15.24	8.3
		DELTA FQ-22	22.0	12.1
		DELTA FQ-24	24.0	13.2
		DELTA FQ-28	28.0	15.4
		DELTA FQ-30	30.3	16.6
		DELTA FQ-36	36.0	19.8
		DELTA FQ-40	40.0	22.0
		DELTA FQ-50	50.0	27.5

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		DELTA FQ-88	88.5	48.6
		DELTA FQ-105	105.0	57.5
		DELTA FQ-125	125.0	68.75
		<i>BIOLOGICAL</i>		
		DELTA PR-036	0.36	0.19
		DELTA PR-069	0.69	0.38
		DELTA PR-138	1.38	0.75
		DELTA PR-200	2.0	1.10
		DELTA PR-260	2.6	1.43
		DELTA PR-400	4.0	2.2
		DELTA PR-540	5.40	2.97
		DELTA PR-670	6.70	3.68
		DELTA PR-870	8.70	4.78
		DELTA PR-1000	10.0	5.50
		DELTA PR-1310	13.10	7.20
		DELTA PR-1590	15.90	8.74
		DELTA PR-2110	21.10	11.60
		DELTA PR-2600	26.0	14.30
		DELTA PR-3480	34.80	19.14
		DELTA PR-4392	43.92	24.15
16 Sweden	1 Consilium Marine, Stockholm Sweden S-17122 Solna	NEPTUMATIC MOC-12	12.0	6.2
		NEPTUMATIC MOC-20	20.0	10.3
		NEPTUMATIC MOC-28	28.0	14.4
		NEPTUMATIC MOC-28R	21.0	10.6
		NEPTUMATIC MOC-75	75.0	30.0
		NEPTUMATIC MOC-75 Compart	75.0	30.0
		NEPTUMATIC MOC-100	100.0	40.0

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		NEPTUMATIC MOC-125 -	125.0	50.0
		NEPTUMATIC MOC-130	130.0	52.0
		NEPTUMATIC RETRO-30	30.0	15.4
		NEPTUMATIC RETRO-45	45.0	23.2
		NEPTUMATIC MOD 130	130.0	52.0
17 United Kingdom	1 Hamworthy Engineering Ltd, Pump and Compressor Division Fleets Corner Poole, Dorset BH17 7LA	Retro-fit Trident RT 80	6.0	4.8
		Retro-fit Trident RT 60	4.55	3.6
		Retro-fit Trident RT 40	3.01	2.4
		Retro-fit Trident RT 20	1.6	1.2
		Super Trident ST 60	46.2	36.0
		Super Trident ST 50	30.0	36.75
		Super Trident ST 40	24.0	28.0
		Super Trident ST 40X	28.0	24.0
		Super Trident ST 30	23.1	18.0
		Super Trident ST 25X	17.5	15.0
		Super Trident ST 25	17.5	15.0
		Super Trident ST 20	14.5	12.0
		Super Trident ST 15	11.0	9.0
		Super Trident ST 13	9.6	7.8

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)
		Super Trident ST 10	7.4	6.0
		Super Trident STS	6.0	4.8
		Super Trident ST 6	4.55	3.6
		Super Trident ST 4	3.01	2.4
		Super Trident ST 3	2.1	1.8
		Super Trident ST 2	1.6	1.2
		Super Trident ST i	0.8	0.6
		Super Trident ST O	0.45	0.32
		Super Trident ST 60S	46.2	36.0
		Trident T 10	0.68	0.6
		Trident T 20	1.36	1.2
		Trident T 30	2.04	1.8
		Trident T 40	2.73	2.4
		Trident T 50	3.41	3.0
		Trident T O	4.09	3.6
		Trident T 75	5.11	4.5
		Trident T 100	6.81	6.0
		Super Trident		
		ST-OA	0.42	0.35
		ST-IA	0.8	0.6
		ST-2A	1.6	1.2
		ST 3A	2.31	1.8
		ST-4A	3.0	2.4
		ST-6A	4.55	3.6
		ST-8A	6.0	4.8

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
18 United States	2 Marine Ventures Ltd Marven House, 1 Field Road, Reading RG1 6AP England	SEACARE 10	1.0	0.6
		SEACARE 40	4.0	2.4
		SEACARE 200	20.0	12.0
	3 Elsan Marine International Ltd Sandwich Kent	STOUR LC 5	0.18	0.3
		STOUR LC 10	0.36	0.6
		STOUR LC 20	0.72	12.0
		STOUR LC 35	1.26	2.1
		STOUR LC 60	2.16	3.6
	1 Exstar International Corp., 6502 Windmill Way, Wilmington, North Carolina 28405	MARLAND SANI-SYSTEM:		
		SS-645 Type II	17.4	13.5
		SS-630 Type II	11.36	9.0
		SS-615 Type II	5.11	4.05
		SS-600 Type II	2.84	2.25
		SS 40		
		SS 60		
SS 600		2.84	2.25	
SS 615		5.11	4.05	
2 Microphor Inc. Willits California		M 8		
	M 10			
	M 12			
	M 14			
	M30	0.057	0.18	
	M 40	0.076	0.24	
	M 50	0.095	0.3	
	M-100	0.189	0.6	
	M 150	0.284	0.9	
	M 200	0.379	1.2	
M 300	0.568	1.8		

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)
		M 500	0.946	3.0
		M 600	1.136	3.6
		M 800	1.514	4.8
		M 1000	1.893	6.0
		MC 50	0.473	0.3
		MC 100	0.946	0.6
		MC 150	1.419	0.9
		MC 200	1.893	1.2
		MC 300	2.839	1.8
		MC 500	4.731	3.0
		MC 600	5.678	3.6
		MC 800	7.57	4.8
		MC 1000	9.463	6.0
3	St. Louis Ship. 611 East Marceau Street St. Louis Missouri 63111	“FAST” LS-1	0.57	0.17
		“FAST” LS-2	0.91	0.27
		“FAST” 6m	1.02	0.31
		“FAST” LS-3	1.36	0.41
		“FAST” 9M	1.59	0.48
		“FAST” 13M	2.39	0.71
		“FAST” 12D	2.61	0.78
		“FAST” 18M	3.18	0.95
		“FAST” 18D	3.86	1.15
		“FAST” 26M	4.77	1.43
		“FAST” 25D	5.68	1.70
		“FAST” 40D	8.41	2.51
		“FAST” 50D	10.70	3.19
		“FAST” D6		
		“FAST” D8		

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
4	FAST Systems, Inc. St. Louis, Missouri 63110	"FAST" DI, DIM	3.52	
		"FAST" D2, D2M	5.22	
		"FAST" D3, D3M	7.72	
		"FAST" D4, D4M	11.35	
		"FAST" D5, DSM	14.42	
		"FAST" D6, D6M	19.98	
		"FAST" D7, D7M	29.97	
		"FAST" D8, D8M	46.89	
		"FAST" D9, D9M	67.67	
		"FAST" M1	1.13	
		"FAST" M2	1.70	
		"FAST" M3	2.49	
		"FAST" M4	3.29	
		"FAST" MS	4.88	
5	Sigma Treatment Systems Inc., 2 Davis Ave Frazer Pennsylvania 19355 USA (Manor Welding and Fabrication Co. Ltd, 4-5 Wainman Rd., Woodston Peterborough PE2 OBU England)	BIO-ST5 500	1.89	1.67
		BIO-ST5 1500	5.68	5.0
		BIO-ST5 1000	3.79	3.33

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)
6	Houston Systems Manufacturing Co. New Iberia, LA	“HELI-FLOW” HF 5M	0.38	0.3
		“HELI-FLOW” BF 10M	0.76	0.6
		“HELI-FLOW” BF 13M	0.98	0.78
		“HELI-FLOW” HF 19M	1.42	1.14
		“HELI-FLOW” HT 26M	1.97	1.56
		“HELI-FLOW” HF 32M	2.42	1.92
		“HELI-FLOW” HF 41 M	3.10	2.46
		“HELI-FLOW” HF 58M	4.39	3.48
		“HELI-FLOW” HF 71 M	5.38	4.26
		“HELI-FLOW” HF 84M	6.36	5.04
		“HELI-FLOW” HF 104M	7.87	6.24
		“HELI-FLOW” HF 130M	9.84	7.8
		“HELI-FLOW” HF 156M	11.81	9.36
		“HELI-FLOW” HF 175M	13.24	10.5
		“HELI-FLOW” HF 188M	14.23	11.28
		“HELI-FLOW” HF 208M	15.75	12.48
		“HELI-FLOW” HF 234M	17.72	14.04
“HELI-FLOW” HF 292M	22.11	17.52		

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		“HELI-FLOW” HF 325M	24.61	19.5
		“HELI-FLOW” HF 357M	27.03	21.42
		“HELM-FLOW” HF 390M	29.53	23.4
		“HELI-FLOW” HF 455M	34.45	27.3
7	Red Fox Industries Inc. New Iberia LA	RF-100-M	0.38	0.3
		RF-200-M	0.76	0.6
		RF-350-M	1.33	1.05
		RF-500-M	1.9	2.00
		RF-750-M	2.9	3.00
		RF-1000-M	3.79	4.00
		RF-1500-M	5.7	6.00
		RF-2000-M	7.6	8.00
		RF-2500-M	9.5	10.00
		RF-3000-M	11.4	12.00
		RF-3500-M	13.3	14.00
		RF-4000-M	15.2	16.00
		RF-4500-M	17.1	18.00
		RF-5000-M	19.0	20.00
		RF-5500-M	20.9	22.00
		RF-6000-M	22.8	24.00
		RF-7500-M	28.5	30.00
		RF-9000-M	34.2	36.00
		RF-0.5-MP	0.61	0.48
		(Little Fox)		
		PAC FP 50	0.19	0.3
		PAC FP 200	0.76	0.6
		PAC FP 500	1.89	1.5
		PAC FP 750	2.84	2.25

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)
		PAC FP 1000	3.79	3.0
		PAC FP 1500	5.68	4.5
		PAC FP 2000	7.57	6.0
		PAC FP 2500	9.40	7.5
8	Effluent Technology Corporation 402 Tacoma Ave. S P.O. Box 2094 Tacoma WA 98401	“ORCA” MK 2/12	1.36	1.44
		“ORCA” MK 2/24	2.73	2.88
		“ORCA” MK 2/36	4.09	4.32
9	KIMCO Inc. P.O. Box 1551 Houston, TX 77251	HF 2M	—	—
		HF SM	0.38	0.3
		HF 10M	0.76	0.6
		HF 13M	0.98	0.78
		HF 19M	1.42	1.14
		HF 26M	1.97	1.56
		HF 32M	2.42	1.92
		HF 41M	3.10	2.46
		HF 58M	4.39	3.48
		HF 71M	5.38	4.26
		HF 84M	6.36	5.04
		HF 104M	7.87	6.24
		HF 130M	9.84	7.8
		HF 156M	11.81	9.36
		HF 175M	13.24	10.5
		HF 188M	14.23	11.28
		HF 208M	15.75	12.48
		HF 234M	17.72	14.04
		HF 292M	22.11	17.52
		HF 325M	24.61	19.5
		HF 357M	27.03	21.42
		HF 390M	29.53	23.4

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m ³ /day)	Designed organic loading (kg/day)
		HF 455M	34.45	27.3
	10 OMNIPURE WASTEWATER TREATMENT 8623	“OMNIPURE” 4M	1.48	0.78
		“OMNIPURE” 6M	2.96	1.62
	Windswept Houston, Texas	“OMNIPURE” 8M	6.815	3.6
		“OMNIPURE” 12M	13.63	7.2
		“OMNIPURE” 12MX	28.39	15.0
	11 EES Corporation 12850 Bournewood Drive, Sugarland, Texas 77478	“OMNIPURE” I SMX	56.00	30.0
	12 Envirovac Inc. 1260 Turret Drive Rockford IL 61111	ORCA II-12	1.36	1.44
		ORCA IIA-12	1.36	1.44
		ORCA II-24	2.72	2.88
		ORCA IIA-24	2.72	2.88
		ORCA II-36	4.09	4.32
		ORCA IIA-36	4.09	4.32
		ORCA II-160	18.17	19.2
		ORCA II-165	18.93	19.8
		ORCA II-330	37.47	39.6
		ORCA II-360	37.47	39.6
		ORCA II-500	56.81	60.0
		ORCA IIA-12	1.36	1.44
		ORCA IIA-24	2.73	2.88
		ORCA IIA-36	4.09	4.32

Manufacturing countries	Manufactured by	Type and model	Designed hydraulic loading (m³/day)	Designed organic loading (kg/day)
13	Exceltec International Corp.	Omnipure 6MC	3.0	1.62
	1110 Industrial Drive	Omnipure 7MC	4.5	2.4
	Sugarland Texas 77478	Omnipure 8MC	7.0	3.6
		Omnipure 12MC	14.0	7.2
		Omnipure 12MX	28.0	15.0
		Omnipure 15MX	56.0	30.0

Schedule 6

r 3(1)

Grade A sewage treatment systems

Schedule 6: added, on 1 July 2002, by regulation 7(b) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

Any system that, when tested under International Maritime Organisation Resolution MEPC.2(VI), meets, or exceeds, the following standards:

- (a) a faecal coliform standard where the geometric mean of the faecal coliform count does not exceed 250 faecal coliforms per 100 millilitres of water; and
 - (b) a suspended solids standard where the geometric mean of the total suspended solids content, when suspended solids are analysed by gravimetric methods, does not exceed—
 - (i) 50 milligrams per litre of water when analysed on shore; or
 - (ii) 100 milligrams per litre of water more than the suspended solids content of the ambient water used for flushing when analysed on board a ship; and
 - (c) a biochemical oxygen demand count where the geometric mean of 5-day biochemical oxygen demand of the samples of sewage does not exceed 50 milligrams per litre of water.
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Schedule 7

r 3(1)

Grade B sewage treatment systems

Schedule 7: added, on 1 July 2002, by regulation 7(c) of the Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99).

(Approved in accordance with the United States of America Environmental Protection Agency Federal Water Pollution Control Act, 33 U.S.C. 1322, Part 159—Marine Sanitation Devices as Type 1)

Manufacturing countries	Manufactured by	Type and model	Approximate designed hydraulic loading (m³/day)
United States	Galley Maid Marine Products, Inc PO Box 10417 Riviera Beach Florida 33404	Delta Marine Head Central Waste Treatment System	2.2 1.5
	Raritan Engineering Company, Inc 530 Orange Street PO Box 1157 Millville New Jersey 08332	Lectra/San MC Purasan PST	2.7 2.2
	Sealand Technology, Inc Fourth Street PO Box 38 Big Prairie Ohio 4461	Saanx One	2.2

Marie Shroff,
Clerk of the Executive Council.

Issued under the authority of the Acts and Regulations Publication Act 1989.
Date of notification in *Gazette*: 23 July 1998.

Contents

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 - 2 Status of reprints
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Notes

1 *General*

This is a reprint of the Resource Management (Marine Pollution) Regulations 1998. The reprint incorporates all the amendments to the regulations as at 1 July 2005, as specified in the list of amendments at the end of these notes.

Relevant provisions of any amending enactments that contain transitional, savings, or application provisions that cannot be compiled in the reprint are also included, after the principal enactment, in chronological order. For more information, *see* <http://www.pco.parliament.govt.nz/reprints/>.

2 *Status of reprints*

Under section 16D of the Acts and Regulations Publication Act 1989, reprints are presumed to correctly state, as at the date of the reprint, the law enacted by the principal enactment and by the amendments to that enactment. This presumption applies even though editorial changes authorised by section 17C of the Acts and Regulations Publication Act 1989 have been made in the reprint.

This presumption may be rebutted by producing the official volumes of statutes or statutory regulations in which the principal enactment and its amendments are contained.

3 *How reprints are prepared*

A number of editorial conventions are followed in the preparation of reprints. For example, the enacting words are not included in Acts, and provisions that are repealed or revoked

are omitted. For a detailed list of the editorial conventions, see <http://www.pco.parliament.govt.nz/editorial-conventions/> or Part 8 of the *Tables of New Zealand Acts and Ordinances and Statutory Regulations and Deemed Regulations in Force*.

4 Changes made under section 17C of the Acts and Regulations Publication Act 1989

Section 17C of the Acts and Regulations Publication Act 1989 authorises the making of editorial changes in a reprint as set out in sections 17D and 17E of that Act so that, to the extent permitted, the format and style of the reprinted enactment is consistent with current legislative drafting practice. Changes that would alter the effect of the legislation are not permitted. A new format of legislation was introduced on 1 January 2000. Changes to legislative drafting style have also been made since 1997, and are ongoing. To the extent permitted by section 17C of the Acts and Regulations Publication Act 1989, all legislation reprinted after 1 January 2000 is in the new format for legislation and reflects current drafting practice at the time of the reprint.

In outline, the editorial changes made in reprints under the authority of section 17C of the Acts and Regulations Publication Act 1989 are set out below, and they have been applied, where relevant, in the preparation of this reprint:

- omission of unnecessary referential words (such as “of this section” and “of this Act”)
- typeface and type size (Times Roman, generally in 11.5 point)
- layout of provisions, including:
 - indentation
 - position of section headings (eg, the number and heading now appear above the section)
- format of definitions (eg, the defined term now appears in bold type, without quotation marks)
- format of dates (eg, a date formerly expressed as “the 1st day of January 1999” is now expressed as “1 January 1999”)

- position of the date of assent (it now appears on the front page of each Act)
- punctuation (eg, colons are not used after definitions)
- Parts numbered with roman numerals are replaced with arabic numerals, and all cross-references are changed accordingly
- case and appearance of letters and words, including:
 - format of headings (eg, headings where each word formerly appeared with an initial capital letter followed by small capital letters are amended so that the heading appears in bold, with only the first word (and any proper nouns) appearing with an initial capital letter)
 - small capital letters in section and subsection references are now capital letters
- schedules are renumbered (eg, Schedule 1 replaces First Schedule), and all cross-references are changed accordingly
- running heads (the information that appears at the top of each page)
- format of two-column schedules of consequential amendments, and schedules of repeals (eg, they are rearranged into alphabetical order, rather than chronological).

**5 *List of amendments incorporated in this reprint
(most recent first)***

Maritime Transport Amendment Act 2004 (2004 No 98): section 11(4)
Resource Management (Marine Pollution) Amendment Regulations 2002 (SR 2002/99)
