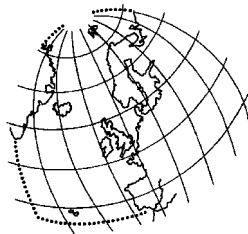


**Biodiversity and Dumped Material Series**

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**Dumping of Wastes at Sea  
in 1999**



**OSPAR Commission  
2002**

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

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

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This Report was made available in June 2002 on the OSPAR website. The data on dumping of wastes at sea in 1999 will be updated if and when new data become available from Contracting Parties to the OSPAR Convention.

## Report on Dumping Permits Issued in 1999

**Table 1** Overview of number of permits issued and tonnes licensed in 1999

Contracting Party	Number of permits issued for waste category						Tonnes licensed (dry weight)	Notes
	Dredged material	Sewage sludge	Inert Material	Fish waste	Vessels or aircraft	Other waste		
<b>Belgium</b>	2							(0)
<b>Denmark</b>	16						3 115 000	
<b>France</b>	33						21 502 328	(1)
<b>Germany</b>								(2)
<b>Iceland</b>	G.P.						793 829	(3)
<b>Ireland</b>	16						1 995 603	(4)
<b>The Netherlands</b>	5						20 058 000 m3	(5)
<b>Norway</b>	58						633 879	(6)
			5				113 462	
					33		NI	(7) (8)
<b>Portugal</b>	9		2				27 140 000	(9)
<b>Spain</b>								
<b>Sweden</b>	13						90 918	
<b>United Kingdom</b>	168						24 813 074	(10)
				1			160	(10) (11)

NI = No information

**Table 2 Specific reporting on permits issued in 1999\***

Contracting Party	Number of permits issued per waste category					Contaminants/ Material of concern**		Reasons for classification
	Dredged material	Sewage sludge	Inert Material	Vessels or aircraft	Other waste	Type	Level 2 (mg/kg)	
Norway (1) (2)				33		33 wooden vessels		

\* Reporting requirements are specified in Appendix 1, point (b) of the Reporting Formats adopted at PRAM 19 for the Annual Reporting of Dumping Permits Issued

\*\* Specification required only for dredged material and sewage sludge

# Report on the Amounts of Wastes Dumped at Sea in 1999

**Table 3a** Details of deposit sites and dumping methods

OSPAR-codes Deposit site	categories of waste					dredged material					other waste categories place of origin	total quantity (in metric tonnes)			notes
	dredged material	inert material	sewage sludge	fish waste	vessels/ aircraft	origin name of watersystem	type of areas dredged Harbour Estuary Sea			dredging operation type capital maintenance		dry weight	Tot. org. carbon	or similar	
<b>Belgium</b>															
B/1	X					Haven en voorhaven Zeebrugge	X				X		339 091		
B/1	X					CDNB Zeebrugge			X		X		2542 958		
B/1	X					Scheur Oost			X		X		3 752		
B/1	X					Scheur Oost			X	X			4621 228		
B/1	X					Scheur West			X	X			1566 373		
B/3	X					CDNB Zeebrugge			X		X		89 556		
B/3	X					Scheur			X	X			41 583		
B/6	X					Haven en voorhaven Zeebrugge	X				X		2063 158		
B/6	X					CDNB Zeebrugge			X				1125 919		
B/9	X					Toegangseul Oostende			X		X		449 484		
B/9	X					Haven Oostende	X				X		142 121		
B/int1+2	X					Dr. van Borssele (Scheldt)		X			X		1340 665		
B/int1+2	X					Put van Terneuzen (Scheldt)		X			X		372 792		
B/int1+2	X					Overloop Hansweert (Scheldt)		X			X		414 458		
B/5+7+1+4	X					Overloop Hansweert (Scheldt)		X			X		698 909		
B/2+3+4+5+7+1+9	X					Dr. van Hansweert (Scheldt)		X			X		3 187 258		
B/4+7+1	X					Dr. van Walsoorden (Scheldt)		X			X		615 349		
B/2+3+1+4+9	X					Ov. Valkenisse (Scheldt)		X			X		741 750		
B/1+4+9	X					Ov. Valkenisse (Scheldt)		X			X		541 389		
B/1+2+3+4+7+9	X					Dr. van Valkenisse (Scheldt)		X			X		1 385 436		
B/1+2+3+4+5+7+9	X					Dr. van Bath (Scheldt)		X			X		1 118 886		
B/2+5	X					Pas van Terneuzen (Scheldt)		X			X		449 901		
B/int/x	X					Dr. van Vlissingen (Scheldt)		X			X		1 071 752		
B/int1+2+9	X					Gat van Ossenisse (Scheldt)		X			X		1 395 234		
<b>Total</b>												<b>26 319 002</b>			
<b>Denmark</b>															
FRB08	X					Gilleleje Østhavn + indsejling	X				X		70 272		
FRB15	X					Kignæs Mole, sejltrende		X			X		1 094		
FRB16	X					Indsejlingen til Hundested Trafikhavn	X						6 696		
FRB18	X					Lynæs Havn + indsejling	X				X		1 152		
FRB20	X					Skuldelev Havn	X				X		122		
NJL01	X					Voerså indsejling og sejltrende	X						1 365		
NJL02	X					Attrup Havn, sejltrende og indsejling		X			X		525		
NJL03	X					Frederikshavn Flådehavn, indsejlinge	X						42 324		
NJL03	X					Søsportshavnen, indsejling og forhav	X						6 750		
NJL03	X					Frederikshavn Havn	X				X		13 200		
NJL03	X					Frederikshavn Havn	X				X		22 800		
NJL07	X					Nibe Sejltrende		X			X		10 738		
NJL07	X					Gjøl sejltrende og indsejling		X			X		3 000		
NJL10	X					Hals Roklub Bådebro	X						120		
NJL10	X					Hou Havn	X				X		3 600		
NJL11	X					Haverslev Havn, sejltrende		X			X		315		
NJL11	X					Haverslev, indsejling		X		X			315		
NJL13	X					Hirtshals Havn, indsejling		X			X		312 375		
NJL25	X					Mariager Fjord, sejltrende		X			X		31 500		
NJL31	X					Rønnerhavnen, indsejlingen		X			X		2 100		
NJL33	X					Skagen Havn, østbassin	X				X		12 900		
NJL41	X					Sæby Havn	X						27 000		
NJL42	X					Vesterø Havn	X				X		5 144		
NJL45	X					Øster Hurup havn	X				X		3 638		
NJL50	X					Ålbæk Havn		X					8 100		
RIB01	X					Esbjerg Havn, sejltrenden inden for b	X				X		18 375		
RIB01	X					Esbjerg Færgehavn	X				X		52 500		

Table 3a Details of deposit sites and dumping methods

OSPAR-codes Deposit site	categories of waste					dredged material					other waste categories place of origin	total quantity (in metric tonnes)			notes
	dredged material	inert material	sewage sludge	fish waste	vessels/ aircraft	origin name of watersystem	type of areas dredged Harbour Estuary Sea			dredging operation type capital maintenance		dry weight	Tot. org. carbon	or similar	
<b>Denmark cont.</b>															
RIB01	X					Grådyb Barre, indsejlingen		X			X		391 950		
RIB02	X					Esbjerg Havn, sejlrenden inden for b	X				X		18 375		
RIB02	X					Grådyb Barre, indsejlingen		X			X		485 100		
RIB02	X					Fanø Lo		X			X		12 227		
RIB03	X					Esbjerg Havn, bassiner incl. Indsejlin	X				X		119 790		
RIB03	X					Slunden m Esbjerg og Fanø		X			X		5 814		
RIB04	X					Esbjerg Havn, bassiner incl. Indsejlin	X				X		118 800		
RIB04	X					Slunden m Esbjerg og Fanø		X			X		5 814		
RIB08	X					Grådyb Barre, indsejlingen		X			X		354 420		
RIN05	X					Thyborøn yderhavn, tilsejling Industr	X				X		17 325		
RIN05	X					Thyborøn Færgehavn og sejlrende	X				X		6 284		
RIN13	X					Fjordhavn, Hvide Sande		X			X		3 445		
RIN24	X					Sejlrenden til Skaven Havn	X			X			1 864		
RIN25	X					Sejlrenden til Stauning Havn	X			X			5 168		
SJL09	X					Rømø Havn (Havneby)	X				X		31 350		
VIB09	X					Hanstholm Havn	X				X		173 544		
VIB09	X					Hanstholm Havn, bassin 1	X				X		14 454		
VIB21	X					Virksund Lystbådehavn	X				X		4 304		
AAR01	X					Anholt Havn	X				X		8 402		
AAR10	X					Grenå Havn	X				X		2 325		
<b>Total</b>													<b>2 438 774</b>		

<b>France</b>															
F/05901	X					Port de Dunkerque	X				X		789 000	20 272	
F/05902	X					Port de Dunkerque	X				X		429 200	11 444	
F/05903	X					Port de Dunkerque	X				X		17 000	479	
F/05904	X					Port de Dunkerque	X				X		664 800	1 872	
F/06201	X					Port de Calais	X				X		461 000	6 795	
F/06202	X					Port de Boulogne	X				X		814 200	10 693	
F/07601	X					Port de Rouen		X			X		4 035 500		1, 2
F/07602	X					Port du Havre	X				X		1 273 300	59 572	
F/07603	X					Port de Dieppe + Centrale nucléaire d	X				X		206 220	3 232	1, 3
F/07604	X					Port de St Valéry en Caux	X				X		19 850	346	1
F/07605	X					Port de Fécamp	X				X		4 020	72	1
F/07606	X					Port du Tréport	X				X		24 609	320	1
F/01401	X					Port de Caen Ouistreham	X				X		602 598	1 368	1
F/02903	X					Port de Lesconil	X				X		11 653	204	1
F/02904	X					Port du Cap-Coz (Fouesnant)	X				X		2 924	13	1
F/02905	X					Port-La-Forêt	X				X		24 089	218	1
F/05602	X					Port Le Palais	X				X		1 985		1
F/04401	X					Port de Nantes Saint Nazaire		X			X		3 183 700	79 593	
F/04402	X					Port de Pornic	X				X		37 556	1 352	1
F/08504	X					Port-Joinville	X				X		8 040		
F/01701	X					Port de la Rochelle Pallice	X				X		177 586	4 766	1
F/01702	X					Port de Fouras et de St Georges d'Olé	X				X		3 756	53	1
F/01708	X					Bourcefranc Le Chapus/Château d'Ol	X				X		3 524	27	1
F/01709	X					Port de La Flotte en Ré	X				X		2 889	90	1
F/03301-2-3	X					Zone Bordeaux - Ambès (Bordeaux)		X			X		1 550 000	33 713	
F/03303-4-5	X					Zone Ambès - Pauillac (Bordeaux)		X			X		2 420 000	27 427	
F/03307	X					Zone Pauillac - Le Verdon (Bordeaux)		X			X		2 180 000	31 731	
F/03308	X					Zone du Verdon (Bordeaux)		X			X		149 000	1 490	
F/03309	X					Passe de l'Ouest (Bordeaux)		X			X		1 060 000	1 060	
F/06401	X					Port de Bayonne	X				X		1 344 329	3 378	1, 2
<b>Total</b>													<b>21 502 328</b>	<b>301 578</b>	



Table 3a Details of deposit sites and dumping methods

OSPAR-codes Deposit site	categories of waste					origin name of watersystem	dredged material			dredging operation type		other waste categories place of origin	total quantity (in metric tonnes)			notes
	dredged material	inert material	sewage sludge	fish waste	vessels/ aircraft		Harbour	Estuary	Sea	capital	maintenance		dry weight	Tot. org. carbon	or similar	
<b>Germany</b>																
10	X					Dagebüll harbour	X			X			37 000			4
12	X					Husum harbour	X			X			59 000			4
13	X					Harbour and outer harbour of Büsum	X			X			33 000			4
14	X					Elbe estuary / navigation channel;	X	X		X	X		4830 000			4, 5
15	X					Weser estuary / navigation channel		X		X			447 000			4, 6
17	X					Jade bay / navigation channel	X	X		X			2007 000			4, 7
18	X					Old outer harbour/tidal harbour of W	X			X			7 000			4
19	X					Niedersachsenbrücke Wilhelmshaver	X			X			50 000			4
20	X					Outer harbour of Hooksiel	X			X			3 000			4
21	X					Wangerooge harbour	X			X			11 000			4
22	X					Spiekeroog harbour	X			X			23 000			4
25	X					Baltrum harbour	X			X			5 000			4
30	X					Harbours Norderney and Norddeich	X			X			34 000			4
32	X					Norddeich harbour	X			X			19 000			4
34	X					Ems estuary / navigation channel		X		X			2760 000			4, 8
40	X					Harbour basin of river Eider flood ga		X		X			35 000			4
41	X					Niedersachsenbrücke Wilhelmshaver	X	X		X			108 000			4
43	X					Bensersiel harbour	X			X			21 000			4
44	X					Harbours Langeog and Bensersiel	X			X			26 000			4
45	X					Approach channel of Juist harbour	X			X			28 000			4
<b>Total</b>													<b>10 543 000</b>			
<b>Iceland</b>																
IS 18	X					Súðavík	X			X			6 954			
IS 20	X					Dranganes	X			X			1 220			
IS 25	X					Sauðárkrókur	X			X			39 406			
IS 27	X					Siglufjörður	X			X			40 260			
IS 30	X					Hrísey	X			X			22 692			
IS 33	X					Akureyri	X			X			9 760			
IS 38	X					Raufarhöfn	X			X			28 267			
IS 39	X					Þórsböfn	X			X			70 040			
IS 41	X					Vopnafjörður	X			X			36 600			
IS 52	X					Vestmannaeyjar	X			X			14 884			
IS 54	X					Grindavík	X			X			250 100			
IS 55	X					Sandgerði	X			X			5 246			
IS 58	X					Hafnafj/Straumsvík	X			X			268 400			
<b>Total</b>													<b>786 875</b>			
<b>Ireland</b>																
Irl 6	X					Liffey Estuary	X			X			20 946			
Irl 6	X					Liffey Estuary	X	X		X			218 328			
Irl 8	X					Suir/Barrow Estuary	X	X					370 904			
Irl 13	X					Barrow Estuary	X			X			2 570			
Irl 17	X					Cork Harbour		X		X			57 316			
Irl 20	X					Boyne Estuary	X	X		X			7 600			
Irl 20	X					Boyne Estuary		X	X	X			220 475			
Irl 29	X					Shannon Estuary	X			X			59 850			
Irl 30	X					Boyne Estuary		X		X			1 936			
Irl 31	X					Shannon Estuary	X			X			73 500			
Irl 32	X					Shannon Estuary	X			X			7 700			
Irl 33	X					Shannon Estuary	X			X			448 539			
Irl 33	X					Shannon Estuary	X			X			71 610			
<b>Total</b>													<b>1 561 274</b>			

**Table 3a Details of deposit sites and dumping methods**

OSPAR-codes	categories of waste					dredged material					other waste categories	total quantity			notes	
	Deposit site	dredged material	inert material	sewage sludge	fish waste	vessels/ aircraft	origin name of watersystem	type of areas dredged				dredging operation type	categories place of origin	(in metric tonnes)		
							Harbour	Estuary	Sea	capital	maintenance		dry weight	Tot. org. carbon	or similar	
<b>The Netherlands</b>																
NL-6	X					Scheveningen Harbour	X				X		133 019	N.D.		
NL-7	X					IJmuiden Harbour	X				X		1080 965	N.D.		
NL-8	X					Rotterdam Harbour	X				X		7492 850	N.D.		
NL-10	X					Eastern Sceldt Harbours	X				X		32 379	883		
NL-11	X					Western Sceldt Harbours	X				X		2933 370	62 488		
NL-13	X					Waddensea W Harbours	X				X		473 136	N.D.		
NL-14	X					Waddensea E Harbours	X				X		773 680	N.D.		
NL-15	X					Ems-Dollard Harbours	X				X		1068 436	N.D.		
<b>Total</b>													<b>13 987 835</b>	<b>63 371</b>		
<b>Norway</b>																
1/Østfold	X					Oslofjord	X				X		360			
2/Østfold	X					Oslofjord	X				X		12 000			
3/Østfold	X					Oslofjord	X				X		720			
4/Østfold	X					Oslofjord	X				X		840			
5/Østfold	X					Oslofjord	X				X		600			
6/Østfold	X					Oslofjord	X				X		60			
7/Østfold	X					Oslofjord	X				X		40			
8/Østfold	X					Oslofjord	X				X		240			
9/Østfold	X					Oslofjord	X				X		40			
10/Østfold	X					Oslofjord	X				X		2 400			
11/Østfold	X					Oslofjord	X				X		12 000			
12/Østfold	X					Oslofjord	X				X		360			
13/Østfold	X					Oslofjord	X				X		240			
14/Oslo & Ak	X					Oslofjord	X				X		150			
15/Vestfold	X					Oslofjord	X				X		288			
16/Vestfold	X					Oslofjord	X				X		480			
17/Vestfold	X					Oslofjord	X				X		180			
18/Vestfold	X					Oslofjord	X				X		1 728			
19/Vestfold	X					Oslofjord	X				X		1 188			
20/Vestfold	X					Oslofjord	X				X		336			
21/Vestfold	X					Oslofjord	X				X		360			
22/Vestfold	X					Oslofjord	X				X		432			
23/Vestfold	X					Oslofjord	X				X		864			
24/Vestfold	X					Oslofjord	X				X		156			
25/Vestfold	X					Oslofjord	X				X		600			
26/Vestfold	X					Oslofjord	X				X		288			
27/Vestfold	X					Oslofjord	X				X		960			
28/Vestfold	X					Oslofjord	X				X		288			
29/Vestfold	X					Oslofjord	X				X		192			
30/Telemark	X					Skagerak	X				X		180			
31/Aust-Agde	X					Skagerak	X				X		120			
32/Vest-Agde					X	Skagerak										9
33/Vest-Agde					X	Skagerak										9
34/Vest-Agde					X	Skagerak										9
35/Vest-Agde					X	Skagerak										9
36/Vest-Agde					X	Skagerak										9
37/Vest-Agde	X					Skagerak	X				X		480			
38/Vest-Agde	X					Skagerak	X				X		864			
39/Vest-Agde		X				Skagerak							360			
40/Vest-Agde		X				Skagerak							58 002			
41/Vest-Agde		X				Skagerak							47 100			
42/Vest-Agde		X				Skagerak							6 000			
43/Rogaland					X	North Sea										9
44/Rogaland	X					North Sea	X				X		6 500			
45/Rogaland	X					North Sea	X				X		3 500			

**Table 3a Details of deposit sites and dumping methods**

OSPAR-codes Deposit site	categories of waste					dredged material					other waste categories place of origin	total quantity (in metric tonnes)			notes	
	dredged material	inert material	sewage sludge	fish waste	vessels/ aircraft	origin name of watersystem	type of areas dredged Harbour Estuary Sea			dredging operation type capital maintenance		dry weight	Tot. org. carbon	or similar		
<b>Norway cont.</b>																
46/Hordaland	X					North Sea	X				X		2 400			
47/Hordaland	X					North Sea	X				X		1 296			
48/Hordaland	X					North Sea	X				X		432			
49/Hordaland	X					North Sea	X				X		120			
50/Sogn & F					X	Norwegian Sea										9
51/Sogn & F	X					Norwegian Sea	X				X		4 600			
52/Sogn & F		X				Norwegian Sea							2 000			
53/Møre & R					X	Norwegian Sea										9
54/Møre & R					X	Norwegian Sea										9
55/Møre & R					X	Norwegian Sea										9
56/Møre & R					X	Norwegian Sea										9
57/Møre & R					X	Norwegian Sea										9
58/Møre & R	X					Norwegian Sea	X				X		1 200			
59/Møre & R	X					Norwegian Sea	X				X		1 200			
60/Sor-Trond	X					Norwegian Sea	X				X		389			
61/Sor-Trond	X					Norwegian Sea	X				X		1 200			
62/Sor-Trond					X	Norwegian Sea										9
63/Nordland	X					Norwegian Sea	X				X		132 000			
64/Nordland	X					Norwegian Sea	X				X		344 928			
65/Nordland	X					Norwegian Sea	X				X		5 400			
66/Nordland	X					Norwegian Sea	X				X		14 160			
67/Nordland	X					Norwegian Sea	X				X		13 200			
68/Nordland	X					Norwegian Sea	X				X		6 000			
69/Nordland	X					Norwegian Sea	X				X		6 000			
70/Nordland	X					Norwegian Sea	X				X		3 720			
71/Nordland	X					Norwegian Sea	X				X		7 260			
72/Nordland	X					Norwegian Sea	X				X		1 800			
73/Nordland					X	Norwegian Sea										9
74/Nordland					X	Norwegian Sea										9
75/Nordland					X	Norwegian Sea										9
76/Nordland					X	Norwegian Sea										9
77/Nordland					X	Norwegian Sea										9
78/Nordland					X	Norwegian Sea										9
79/Nordland					X	Norwegian Sea										9
80/Nordland					X	Norwegian Sea										9
81/Nordland					X	Norwegian Sea										9
82/Nordland					X	Norwegian Sea										9
83/Nordland					X	Norwegian Sea										9
84/Nordland					X	Norwegian Sea										9
85/Nordland					X	Norwegian Sea										9
86/Nordland					X	Norwegian Sea										9
87/Nordland					X	Norwegian Sea										9
88/Nordland					X	Norwegian Sea										9
89/Nordland					X	Norwegian Sea										9
90/Nordland					X	Norwegian Sea										9
91/Nordland					X	Norwegian Sea										9
92/Troms	X					Norwegian Sea	X				X		300			
93/Troms					X	Norwegian Sea										9
94/Troms					X	Norwegian Sea										9
95/Finmark	X					Barents Sea	X				X		9 240			
96/Finmark	X					Barents Sea	X				X		240			
97/Finmark	X					Barents Sea	X				X		26 760			
98/Finmark					X	Barents Sea										9
<b>Total</b>													<b>747 341</b>			

Table 3a Details of deposit sites and dumping methods

OSPAR-codes Deposit site	categories of waste					dredged material					other waste categories place of origin	total quantity (in metric tonnes)			notes
	dredged material	inert material	sewage sludge	fish waste	vessels/ aircraft	origin name of watersystem	type of areas dredged Harbour Estuary Sea			dredging operation type capital maintenance		dry weight	Tot. org. carbon	or similar	
<b>Portugal</b>															
P/1		X				Viana do Castelo			X				130 000		
P/2		X				S. Martinho do Porto			X				325 000		
P/3	X					Figueira da Foz		X					112 800		
P/4	X					Lisboa		X					39 000		
P/5	X					Lisboa		X					182 000		
P/6	X					Lisboa		X					61 100		
P/7	X					Lisboa		X					1 708 200		
P/8	x					Lisboa	X						46 800		
P/9	X					Seixal		X					52 000		
P/10	X					Portimao		X					44 100		
P/11	X					Faro		X					13 000		
<b>Total</b>													<b>2 714 000</b>		
<b>Spain</b>															
E/1	X					Puerto de Pasajes	X				X				
E/2	X					Puerto de Bilbao	X				X		55 282	1 982	
E/3	X					Puerto de Santander	X	X		X			8 902	235	
E/5	X					Puerto de Aviles	X	X		X	X		608 454	8 819	
E/6	X					Puerto de Ferrol	X			X			399 760	12 840	
E/8	X					Puerto de Villagarcía		X		X			1 047 782	44 321	
E/11	X					Puerto de Sevilla		X			X		627 532	8 916	
E/12	X					Puerto de Cádiz	X	X		X			81 777	2 355	
<b>Total</b>													<b>2 829 489</b>	<b>79 468</b>	
<b>Sweden</b>															
N 6543563	X					Skagerack			X		X		4 387		
E 1232768						(St Björkholmen)									
N 6509009	X					Skagerack			X		X		2 210		
E 1232153						(St Borgen)									
N 6490108	X					Skagerack			X		X		364		
E 1235186						(Ösofjorden)									
N 6470316	X					Skagerack			X		X		39		
E 1242917						(Norra Hamnen)									
N 6474772	X					Skagerack			X		X		2 961		
E 1269778						(Norra Hamnen)									
N 6464197	X					Skagerack			X		X		1 300		
E 1251712						(Koljöfjorden)									
N 6442621	X					Skagerack			X		X		1 300		
E 1244977						(Räbbehuvud)									
N 6431598	X					Skagerack			X		X		32		
E 1247566						(Holmen Grå)									
N 6444088	X					Skagerack			X		X		260		
E 1262365						(Almön/Källön)									
N 6419497	X					Kattegatt			X		X		9 750		
E 1251185						(Guleskären)									
N 6404863	X					Kattegatt	X				X		57 200		
E 1253761						(Stora Kalvsund)									
N 6395214	X					Kattegatt	X				X		9 750		
E 1247672						(Vinga)									
N 6400620	X					Kattegatt	X				X		1 365		
E 1258115						(Hakefjorden)									
<b>Total</b>													<b>90 918</b>		

Table 3a Details of deposit sites and dumping methods

OSPAR-codes Deposit site	categories of waste					dredged material					other waste categories place of origin	total quantity (in metric tonnes)			notes		
	dredged material	inert material	sewage sludge	fish waste	vessels/ aircraft	origin name of watersystem	type of areas dredged Harbour Estuary Sea			dredging operation type capital maintenance		dry weight	Tot. org. carbon	or similar			
<b>UK</b>																	
CR019	X					Cromarty Firth	X				X			27 048			
CR021	X					Moray Firth			X		X			48 365			
CR030	X					Moray Firth	X				X			12 920			
CR031	X					Grampian Coast			X		X			880			
CR040	X					Spey Bay/Moray Firth/Grampian Cst	X				X			10 223			
CR050	X					Grampian Coast	X			X	X			0			
CR060	X					Fraserburgh Bay	X			X	X			360			
CR080	X					Grampian Coast	X				X			5 124			
CR110	X					Dee River/North Sea	X		X		X			144 514			
DM001	X					Humber River		X		X				5 240			
DV010	X					Kent Coast	X		X	X	X			134 019			
DV011	X					Kent Coast	X				x			0			
FI095	X					Scalloway, Shetland	X			X				6 960			
FO010	X					South Esk River	X				X			17 927			
FO020	X					Tayside Coast	X	X		X	X			21 407			
FO021	X					Firth Of Tay	X				X			32 502			
FO025	X					Firth Of Tay	X				X			700			
FO028	X					Firth of Tay	X				X			0			
FO036	X					Firth of Forth	X				X			37 031			
FO038	X					Firth Of Forth	X				X			17 256			
FO041	X					Firth Of Forth	X	X			X			35 758			
FO044	X					Firth Of Forth	X				X			375 314			
FO048	X					Firth Of Forth	X				X			0			
FO051	X					Firth of Forth/Fife Coast	X				X			28 704			
FO080	X					Eye River		X		X	X			0			
HU015	X					Humberside Coast	X		X		X			5 013			
HU020	X					Humber River	X	X		X	X			93 655			
HU030	X					Humber River	X	X	X		X			799 651			
HU040	X					Humber River	X				X			18 823			
HU041	X					Humber River	X				X			20 726			
HU045	X					Humber River		X		X				0			
HU060	X					Humber River	X	X		X	X			1 698 487			
HU080	X					Humber River	X	X			X			1 395 476			
HU090	X					Humber River	X	X			X			324 373			
HU139	X					Witham River	X	X	X		X			39 766			
HU141	X					Great Ouse River	X	X			X			18 678			
HU143	X					Great Ouse River	X	X			X			13 621			
HU150	X					Yare River	X	X	X	X	X			37 586			
HU160	X					Waveney River	X				x			29 703			
HU162	X					Humber River			X	X				14 079			
IS040	X					Anglesey Coast	X				X			6 435			
IS055	X					Conwy River	X				X			2 918			
IS110	X					Mersey River	X	X			X			78 038			
IS120	X					Mersey River	X		X		X			152 361			
IS128	X					Mersey River		X			X			60 300			
IS140	X					Mersey River	X	X	X		X			507 295			
IS150	X					Mersey River/Liverpool Bay	X	X	X	X	X			1 953			
IS170	X					Wyre River	X				X			874 961			
IS180	X					Cumbria Coast	X	X		X	X			0			
IS192	X					Lune River	X				X			3 507			
IS200	X					Morecambe Bay	X				X			123 363			
IS205	X					Cumbria Coast	X	X		X	X			777 693			
IS230	X					Cumbria Coast	X			X				21 831			
IS240	X					Cumbria Coast	X				X			15 058			
IS241	X					Cumbria Coast	X				X			62 962			
IS286	X					Luce Bay	X				X			2 500			
IS287	X					Luce Bay	X				X			0			
IS288	X					Luce Bay	X				X			0			
IS400	X					Douglas Harbour, Isle of Man	X				X			5 940			

**Table 3a Details of deposit sites and dumping methods**

OSPAR-codes Deposit site	categories of waste					dredged material						other waste categories place of origin	total quantity (in metric tonnes)			notes	
	dredged material	inert material	sewage sludge	fish waste	vessels/ aircraft	origin name of watersystem	type of areas dredged			dredging operation type			dry weight	Tot. org. carbon			or similar
							Harbour	Estuary	Sea	capital	maintenance						
IS590	X					Lagan River/Belfast Lough	X	X		X	X		353 801				
IS650	X					Down Coast	X				X		6 956				
IS671	X					Carlingford Lough	X				X		280 420				
LU010	X					Camel River	X				X		1 222				
LU055	X					Somerset Coast	X			X			0				
LU083	X					Avon River	X	X			X		258 556				
LU084	X					Avon River	X	X			X		50 070				
LU085	X					Avon River	X	X			X		66 723				
LU086	X					Avon River	X	X			X		1 185				
LU110	X					Taff R./Usk R./Severn Est.	X	X		X	X		215 195				
LU115	X					Severn Estuary	X				X		23 730				
LU130	X					Neath River/Swansea Bay	X	X	X	X	X		1 319 654				
LU140	X					Usk River	X			X	X		61 356				
LU168	X					Milford Haven	X				X		0				
MA010	X					Loch Ryan	X				X		7 443				
MA021	X					Firth Of Clyde	X	x			X		90 421				
MA025	X					Firth Of Clyde	X				X		13 459				
MA050	X					Firth Of Clyde	X				X		8 750				
MA501	X					Foyle River	X				X		11 225				
MA545	X					Foyle River	X				X		108 037				
MA570	X					Antrim Coast	X				X		0				
MA571	X					Antrim Coast	X				X		7 048				
MA581	X					Antrim Coast	X				X		322				
MA605	X					Antrim Coast	X				X		801				
PL019	X					Salcombe Estuary							0				
PL030	X					Tamar River	X				X		0				
PL031	X					Tamar River	X			X	X		28 474				
PL060	X					Fowey River/Cornwall Coast South	X	X			X		39 390				
PL075	X					Falmouth Harbour/Truro River	X			X	X		6 807				
PL100	X					Mounts Bay	X				X		36 179				
PO070	X					Teign River	X				X		0				
PO090	X					Teign River	X				X		0				
TH038	X					Orwell River	X				X		13 432				
TH041	X					Orwell River/Suffolk Coast	X		X	X	X		27 774				
TH049	X					Orwell/Stour Rivers + Essex/Suffolk	X		X	X	X		17 836 094				
TH052	X					Orwell/Stour Rivers + Essex/Suffolk	X	X	X	X	X		1 367 348				
TH070	X					Thames River	X		X		X		0				
TH140	X					Kent Coast	X				X		51 159				
TH145	X					Kent Coast	X				X		0				
TH200	X					Orwell River	X				X		8 290				
TH201	X					Orwell River	X				X		0				
TY022	X					Coquet River		X			X		2 146				
TY042	X					Northumberland Coast	X				X		106 103				
TY070	X					Tyne River	X				X		97 258				
TY081	X					Tyne River	X	X			X		115 200				
TY090	X					Wear River	X			X	X		112 409				
TY130	X					Durham Coast	X				X		14 280				
TY150	X					Tees River/Hartlepool Bay	X	X	X	X	X		838 224				
TY160	X					Tees River/Hartlepool Bay	X	X	X		X		133 051				
TY180	X					Esk River	X		X		X		18 471				
TY190	X					North Yorkshire Coast	X				X		2 552				
WI010	X					Ouse River (E.Sussex)	X				X		98 468				
WI020	X					East Sussex Coast	X				X		21 739				
WI031	X					Adur River	X		X		X		62 626				
WI060	X					So'ton Water, IoW, Portsmouth...	X	X	X	X	X		618 154				
WI080	X					So'ton Water, IoW etc.	X	X			X		10 383				
WI090	X					So'ton Water, IoW etc.	X				X		4 271				
WI110	X					Poole Harbour	X	X	X	X	X		102 645				
FI045				X									110				
FI050				X									0				
<b>Total</b>													<b>32 828 409</b>				

Amounts of Wastes Dumped at Sea in 1999

Table 3b Total loads (methods of determination indicated in Part II)

OSPAR-codes Deposit site	in tonnes												in kilogramms														
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ-HCH	Diel-drin	DDT	TBT	other/notes	
<b>Belgium</b>																											
B/1	0,193	0,071	6,104	24,279	6,714	13,496	7,290	47,134		0,482										0					19		
B/1	1,449	0,534	45,773	182,076	50,351	101,210	54,673	353,471		3,611										0					146		
B/1	0,002	0,000	0,067	0,269	0,074	0,149	0,081	0,522		0,000										0					0		
B/1	0,693	0,277	40,852	113,220	20,796	58,227	37,155	183,001		1,202										0					70		
B/1	0,235	0,094	13,847	38,376	7,049	19,736	12,594	62,028		0,407										0					24		
B/3	0,036	0,015	1,621	5,973	1,388	3,260	1,845	1,845		0,089										0					3		
B/3	0,006	0,002	0,368	0,006	0,187	0,524	0,334	1,647		0,011										0					1		
B/6	1,176	0,433	37,137	147,722	40,851	82,114	44,358	286,779		2,930										0					119		
B/6	0,450	0,191	20,379	75,099	17,452	40,983	23,194	133,984		1,115										0					38		
B/9	0,085	0,040	4,347	14,968	3,304	7,911	4,585	25,621		0,184										0					28		
B/9	0,080	0,027	2,345	8,385	3,269	5,529	2,615	19,471		0,256										0					9		
B/int1+2																											
B/int1+2																											
B/int1+2																											
B/5+7+1+4																											
B/2+3+4+5+7+1+9																											
B/4+7+1																											
B/2+3+1+4+9																											
B/1+4+9																											
B/1+2+3+4+7+9																											
B/1+2+3+4+5+7+9																											
B/2+5																											
Bint/x																											
B/int1+2+9																											
<b>Total</b>	<b>4</b>	<b>2</b>	<b>173</b>	<b>610</b>	<b>151</b>	<b>333</b>	<b>189</b>	<b>1 116</b>		<b>10</b>										<b>0</b>						<b>457</b>	
<b>Denmark cont.</b>																											
FRB08	0,005	0,001		0,063	0,351	0,141	0,077	0,632																			
FRB15	0,000	0,000					0,003	0,004																			
FRB16	0,000	0,000			0,007		0,033																				
FRB18	0,000	0,000		0,002	0,006	0,003	0,002																				
FRB20	0,000	0,000			0,001	0,001																					
NJL01	0,000	0,000	0,002	0,007	0,005	0,007	0,004	0,005																			
NJL02	0,000	0,000		0,008	0,005	0,007	0,005	0,017																			
NJL03																											
NJL03																											
NJL03																											
NJL03																											
NJL07	0,002			0,064	0,043	0,043	0,032	0,225																			
NJL07																											
NJL10																											
NJL10																											
NJL11	0,000	0,000		0,003	0,002	0,003	0,002	0,007																			
NJL11																											
NJL13																											
NJL25																											
NJL31																											
NJL33																											
NJL41																											
NJL42	0,000	0,001		0,023	0,028	0,021	0,015																				
NJL45																											
NJL50																											
RIB01																											
RIB01																											

Table 3b

## Total loads (methods of determination indicated in Part II)

OSPAR-codes Deposit site	in tonnes												in kilograms														
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ- HCH	Diel- drin	DDT	TBT	other/ notes	
<b>Denmark cont.</b>																											
RIB01																											
RIB02																											
RIB02																											
RIB02																											
RIB03	0,042	0,017		3,234	1,713	2,995		11,739																			
RIB03																											
RIB04	0,042	0,017		3,208	1,699	2,970		11,642																			
RIB04	0,002	0,001		0,116	0,048	0,093		0,366																			
RIB08																											
RIN05	0,003	0,001	0,095	0,334	0,220	0,217	0,076	1,247																			
RIN05	0,000	0,000	0,018	0,048	0,030	0,044	0,028	0,157																			
RIN13	0,000	0,000	0,004	0,009	0,016	0,024	0,009	0,065																			
RIN24	0,000	0,000	0,003	0,009	0,004	0,004	0,009	0,037																			
RIN25	0,002	0,000	0,019	0,026	0,027	0,036	0,045	0,274																			
SJL09	0,000	0,000	0,009	0,011	0,010	0,014	0,010	0,066																			
VIB09	0,005	0,005	0,017	0,503	0,121	0,295	0,208	1,284																			
VIB09	0,004	0,001	0,087	0,260	0,419	0,347		1,474																			
VIB21	0,002	0,000	0,019	0,037	0,060	0,026	0,032	0,138																			
AAR01	0,000	0,000	0,009	0,037	0,025	0,057	0,024	0,141																			
AAR10	0,000	0,000	0,001	0,005	0,003	0,007	0,003	0,018																			
<b>Total</b>	<b>0,11</b>	<b>0,04</b>	<b>0,28</b>	<b>8,01</b>	<b>4,84</b>	<b>7,39</b>	<b>0,59</b>	<b>29,54</b>																			
<b>France</b>																											
F/05901	0,4	0,1	9,8	38,9	7,1	22,7	10,2	63,9			2 150,0	670,4	0,1	0,1	0,1	0,2	0,2	0,1	0,1	0,9							
F/05902	0,2	0,1	5,3	21,6	5,6	14,6	5,8	41,8			1 040,1	342,8	0,2	0,2	0,4	0,6	0,6	0,5	0,4	2,8							
F/05903	0,0	0,0	0,2	0,8	0,2	0,6	0,2	1,9			46,2	15,3	0,1	0,1	0,3	0,4	0,5	0,6	0,4	2,3							
F/05904	0,5	0,1	9,1	31,1	8,6	23,0	8,3	72,4			1 805,5	599,2	2,0	2,7	12,0	15,3	17,9	21,9	16,6	88,4							
F/06201	0,2	0,0	4,7	8,9	3,3	7,8	2,6	52,0			0,1																
F/06202	0,5	0,1	5,6	15,9	8,2	17,7	4,5	77,0			0,3																
F/07601																											
F/07602	0,8	0,6	16,2	96,4	40,9	75,9	26,9	176,1	364,4	1,6	3 398,7	1 506,1	9,3	7,6	13,1	13,5	29,7	25,6	13,5	412,4							
F/07603	0,1	0,0	1,2	4,3	2,1	3,9	1,7	10,8			239,6	98,4															
F/07604	0,0	0,0	0,1	0,7	0,2	0,4	0,2	1,2	1,0																		
F/07605	0,0	0,0	0,0	0,1	0,4	0,3	0,1	0,5			6,3	5,4															
F/07606	0,0	0,0	0,1	1,3	0,5	0,6	0,7	1,2			17,8	11,3															
F/01401	0,2	0,1	3,9	23,0	13,8	11,7	8,1	58,3			763,3	462,0	0,6	4,1	1,6	1,0	2,6	1,9	0,7	12,5							
F/02903	0,0	0,0	0,1	0,2	0,5	0,4	0,1	1,6			28,5	10,5	0,0	0,0	0,1	0,2	0,3	0,3	0,2	1,2							
F/02904	0,0	0,0	0,0	0,1	0,0	0,1	0,0	0,1																			
F/02905	0,0	0,0	0,1	0,6	0,3	0,3	0,1	0,7			26,6	5,0															
F/05602	0,0	0,0	0,0	0,0	0,1	0,2	0,0	0,3																			0,4
F/04401	0,9	0,4	57,6	226,0	79,6	127,3	95,5	407,5																			
F/04402	0,0	0,0	0,0	2,6	0,9	1,5	0,0	3,8			80,7	29,5															
F/08504	0,0	0,0	0,2	0,5	2,9	2,5	0,2	4,1					0,0		0,1	0,1	0,1	0,1	0,1	0,4							
F/01701	0,0	0,0	2,6	10,3	2,3	4,9	4,1	23,8	17,2		247,8	111,0															
F/01702	0,0	0,0	0,1	0,2	0,0	0,1	0,1	0,4			5,9	2,2															
F/01708	0,0	0,0	0,0	0,2	0,0	0,2	0,1	0,4	0,2		3,6	2,1															
F/01709	0,0	0,0	0,0	0,0	0,3	0,1	0,0	0,4	0,1		7,2	2,3															
F/03301-2-3	1,1	0,3	34,1	140,5	71,3	210,3	66,1	408,2	207,7		2 790,0	1 290,4				18,6	34,1	26,4	18,6	449,5							
F/03303-4-5	1,2	0,4	46,0	146,0	53,2	105,7	62,9	354,1	96,0		8 413,5	1 492,3															
F/03307	1,3	0,4	39,5	145,6	52,1	100,5	65,2	322,2	81,4		2 732,3	1 395,2															
F/03308	0,1	0,0	2,5	8,1	3,2	6,1	3,9	17,9	4,2																		
F/03309	0,1	0,1	5,7	13,8	8,0	10,6	8,5	24,4	5,3																		
F/06401	0,0	0,0	1,7	1,8	3,1	5,2	2,6	19,8	0,0		278,7	253,3															
<b>Total</b>	<b>7,6</b>	<b>2,8</b>	<b>246,4</b>	<b>939,6</b>	<b>368,6</b>	<b>755,1</b>	<b>378,7</b>	<b>2146,7</b>	<b>777,4</b>	<b>2,1</b>	<b>24082,4</b>	<b>8304,6</b>	<b>12,3</b>	<b>14,7</b>	<b>27,6</b>	<b>49,9</b>	<b>85,9</b>	<b>77,4</b>	<b>50,6</b>	<b>970,7</b>							



Table 3b

## Total loads (methods of determination indicated in Part II)

OSPAR-codes Deposit site	in tonnes												in kilograms											other/ notes			
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ- HCH	Diel- drin		DDT	TBT	
<b>Germany</b>																											
10	0,019	0,006	0,558	1,407	0,227	1,183	0,610	2,553	0,186	0,008	75,089	23,903															
12	0,030	0,018	1,124	3,264	1,216	3,185	1,371	8,796	5,758	0,037	187,366	64,427															
13	0,016	0,010	0,459	1,420	0,452	1,377	0,590	3,573	0,415	0,015	68,398	24,584															
14	3,622	3,960	101,422	342,902	149,718	241,480	130,399	1115,639																			
15	0,156	0,054	3,127	13,401	5,360	11,167	5,807	39,309	6,700	0,353	0,335	0,223	0,415	0,179	0,853	0,826	0,429	3,261	0,170	0,138				1,447	30,599		
17	0,723	0,823	40,148	176,649	36,133	90,332	84,310	295,084	190,701	2,108	1,204	1,024	2,569	1,526	2,268	3,232	0,923	12,747	1,004	0,984				2,208	60,221		
18	0,004	0,003	0,178	0,671	0,195	0,500	0,248	1,309	0,151	0,008	<0,013	<0,007	0,027	0,013	0,010	0,013	0,008	<0,092	0,010	<0,003	<0,007	<0,040	0,134				
19	0,025	0,017	1,148	5,491	1,298	3,344	1,897	8,486	0,749	0,012	<0,100	<0,050	<0,050	<0,050	<0,025	<0,025	<0,025	<0,324	<0,025	<0,010	<0,050	<0,300	0,649				
20	0,002	0,001	0,078	0,295	0,084	0,194	0,107	0,537	0,090	0,001	<0,006	<0,003	<0,003	<0,003	0,003	0,002	0,001	<0,021	0,003	0,001	<0,003	<0,018	0,212				
21	0,007	0,001	0,389	0,968	0,337	0,863	0,590	2,653																			
22	0,015	0,003	0,738	1,983	0,623	1,730	1,153	5,512																			
25	0,002	0,001	0,144	0,353	0,134	0,374	0,203	1,144																			
30	0,017	0,004	0,880	2,351	0,896	2,644	1,285	7,523																			
32	0,009	0,003	0,519	1,280	0,519	1,317	0,686	4,416																			
34	0,828	0,497	30,362	132,490	41,403	88,327	49,684	264,981	49,684	1,849	2,319	1,242	1,987	1,711	4,223	4,113	1,187	16,782	4,416	0,276				6,625	77,286		
40	0,004	0,008	0,328	1,553	0,380	0,656	0,449	2,692	0,932	0,017	0,005	0,019	0,036	0,016	0,041	0,045	0,021	0,183	0,017	0,010				0,055	0,186		
41	<0,054	0,038	2,485	11,886	2,809	7,240	4,106	18,370	<1,620	0,027	<0,216	<0,108	<0,108	<0,108	<0,054	<0,054	<0,054	<0,702	<0,054	<0,022	<0,108	<0,648	1,405				
43	0,011	0,002	0,600	1,692	0,514	1,606	0,942	4,904																			
44	0,014	0,002	0,714	2,016	0,595	1,957	1,131	5,739																			
45	0,021	0,004	1,000	2,556	0,806	2,167	1,500	7,528																			
<b>Total</b>	<b>&lt;5,581</b>	<b>5,454</b>	<b>186,402</b>	<b>704,629</b>	<b>243,698</b>	<b>461,644</b>	<b>287,070</b>	<b>1800,747</b>	<b>&lt;256,986</b>	<b>4,436</b>	<b>330,854</b>	<b>112,915</b>	<b>&lt;4,199</b>	<b>&lt;2,676</b>	<b>&lt;5,196</b>	<b>&lt;3,606</b>	<b>&lt;7,478</b>	<b>&lt;8,310</b>	<b>&lt;2,649</b>	<b>&lt;34,113</b>	<b>&lt;5,699</b>	<b>&lt;1,444</b>	<b>&lt;0,168</b>	<b>&lt;11,341</b>	<b>895,133</b>		
<b>Iceland</b>																											
IS 18																											
IS 20																											
IS 25																											
IS 27																											
IS 30																											
IS 33																											
IS 38																											
IS 39																											
IS 41																											
IS 52																											
IS 54																											
IS 55																											
IS 58																											
<b>Total</b>																											
<b>Ireland</b>																											
irl 6	0,031	0,005	0,314	1,054	0,901	1,822	0,698	6,451	<0,08	<0,03	<0,02	<0,04	0,03	0,04	<0,02	<0,27	<0,02	<0,02	<0,02	<0,13	<3,00						
irl 6	0,352	0,074	3,225	11,066	9,432	21,581	7,956	63,512	<0,87	<0,35	<0,24	<0,40	<0,32	<0,38	<0,24	<2,80	<0,22	<0,22	<0,22	<1,45	32,0						
irl 8	0,054	0,017	2,789	13,931	2,768	8,378	5,344	31,194	<1,11	<1,11	<1,11	<1,11	<1,11	<1,11	<1,11	<7,77	<1,11	<1,11	<1,11	4,44	<1,30						
irl 13	<0,001	<0,001	0,003	0,02	0,014	0,034	0,012	0,146	<0,009	<0,009	<0,009	<0,009	<0,009	<0,009	<0,009	<0,063	<0,009	<0,009	<0,009	<0,036	ND						
irl 17	0,024	0,009	0,572	2,723	2,155	2,450	1,705	8,397	<0,11	<0,12	<0,11	<0,11	<0,11	<0,11	<0,11	<0,78	<0,11	<0,11	<0,11	<0,51	<6,00						
irl 20	0,002	<0,001	0,062	0,146	0,038	0,088	0,149	0,414	<0,007	<0,007	<0,007	<0,007	<0,007	<0,007	<0,007	<0,049	<0,007	<0,007	<0,007	<0,021	<0,10						
irl 20	0,040	0,004	1,548	3,499	1,160	2,108	3,296	9,635	<0,19	<0,19	<0,19	<0,19	<0,19	<0,19	<0,19	<1,33	<0,19	<0,19	<0,19	<0,57	<2,00						
irl 29	<0,006	0,005	0,104	1,32	1,335	1,481	1,481	2,828	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0,60	
irl 30	<0,001	<0,0001	0,014	0,03	0,010	0,019	0,029	0,085	<0,002	<0,002	<0,002	<0,002	<0,002	<0,002	<0,002	<0,014	<0,002	<0,002	<0,002	<0,006	<0,10						
irl 31	0,032	0,006	0,706	2,955	0,853	2,154	1,904	6,806	<0,03	<0,03	<0,03	<0,03	<0,03	<0,03	<0,03	<0,21	<0,03	<0,03	<0,03	<0,09	<0,40						
irl 32	0,002	<0,001	0,069	0,241	0,096	0,172	0,145	0,630	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0,10	
irl 33	<0,045	0,016	2,153	8,208	3,454	14,308	4,665	25,970	<0,45	<0,45	<0,45	<0,45	<0,45	<0,45	<0,45	<3,15	ND	<0,45	<0,45	<1,35	<9,00						
irl 33	<0,007	0,003	0,344	1,310	0,551	2,280	0,745	4,146	<0,07	<0,07	<0,07	<0,07	<0,07	<0,07	<0,07	<0,49	ND	<0,07	<0,07	<0,21	<1,40						
<b>Total</b>	<b>&lt;0,597</b>	<b>&lt;0,142</b>	<b>11,90</b>	<b>46,50</b>	<b>22,767</b>	<b>56,875</b>	<b>28,129</b>	<b>160,214</b>	<b>&lt;2,93</b>	<b>&lt;2,37</b>	<b>&lt;2,24</b>	<b>&lt;2,42</b>	<b>&lt;2,33</b>	<b>&lt;2,39</b>	<b>&lt;2,24</b>	<b>&lt;16,93</b>	<b>&lt;1,70</b>	<b>&lt;2,22</b>	<b>&lt;2,22</b>	<b>&lt;8,81</b>	<b>&lt;56,00</b>						

Table 3b

## Total loads (methods of determination indicated in Part II)

OSPAR-codes Deposit site	in tonnes												in kilograms											other/ notes			
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ- HCH	Diel- drin		DDT	TBT	
<b>The Netherlands</b>																											
NL-6	0,000	0,000	1,978	8,685	5,256	8,477	2,036	19,220	23,369	0,000	N.D.	N.D.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NL-7	0,618	0,276	14,009	37,290	20,854	40,093	15,342	139,582	167,623	1,765	N.D.	N.D.	2	1	2	2	4	3	1	15	0	0	1	N.D.	10		
NL-8	4,381	2,216	93,480	224,080	130,989	225,654	95,406	841,540	282,440	7,344	N.D.	N.D.	26	17	17	13	15	23	14	124	10	7	8	N.D.	N.D.		
NL-10	0,016	0,008	0,462	1,307	0,467	0,828	0,436	2,781	3,293	0,051	N.D.	N.D.	0	0	0	0	1	0	0	1	0	0	0	0	N.D.		
NL-11	2,013	0,875	43,517	134,650	51,259	98,445	41,816	297,118	266,655	3,285	N.D.	N.D.	2	2	2	3	6	5	3	23	1	1	1	2	N.D.		
NL-13	0,196	0,137	4,655	18,237	8,449	16,322	7,442	52,714	43,709	0,588	N.D.	N.D.	1	1	1	1	1	1	1	7	0	2	2	N.D.	4		
NL-14	0,377	0,179	9,841	34,853	13,925	27,316	14,186	95,465	244,112	0,460	N.D.	N.D.	3	3	3	3	3	3	3	21	3	3	3	3	1		
NL-15	0,417	0,258	10,808	37,989	16,233	39,016	19,781	108,867	103,426	0,783	N.D.	N.D.	5	5	5	5	5	5	5	35	5	5	5	5	1		
<b>Total</b>	<b>8,0</b>	<b>3,9</b>	<b>178,8</b>	<b>497,1</b>	<b>247,4</b>	<b>456,2</b>	<b>196,4</b>	<b>1557,3</b>	<b>1134,6</b>	<b>14,3</b>	<b>N.D.</b>	<b>N.D.</b>	<b>39</b>	<b>29</b>	<b>30</b>	<b>27</b>	<b>35</b>	<b>40</b>	<b>27</b>	<b>226</b>	<b>19</b>	<b>18</b>	<b>20</b>	<b>10</b>	<b>16</b>		
<b>Norway</b>																											
1/Østfold																											
2/Østfold																											
3/Østfold																											
4/Østfold																											
5/Østfold																											
6/Østfold																											
7/Østfold																											
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9/Østfold																											
10/Østfold																											
11/Østfold																											
12/Østfold																											
13/Østfold																											
14/Oslo & Ak																											
15/Vestfold																											
16/Vestfold																											
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27/Vestfold																											
28/Vestfold																											
29/Vestfold																											
30/Telemark																											
31/Aust-Agde																											
32/Vest-Agde																											
33/Vest-Agde																											
34/Vest-Agde																											
35/Vest-Agde																											
36/Vest-Agde																											
37/Vest-Agde																											
38/Vest-Agde																											
39/Vest-Agde																											
40/Vest-Agde																											
41/Vest-Agde																											
42/Vest-Agde																											
43/Rogaland																											
44/Rogaland																											
45/Rogaland																											

Table 3b

Total loads (methods of determination indicated in Part II)

OSPAR-codes Deposit site	in tonnes													in kilograms															
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ-HCH	Diel-drin	DDT	TBT	other/notes			
<b>Norway cont.</b>																													
46/Hordaland																													
47/Hordaland																													
48/Hordaland																													
49/Hordaland																													
50/Sogn & F																													
51/Sogn & F																													
52/Sogn & F																													
53/Møre & R																													
54/Møre & R																													
55/Møre & R																													
56/Møre & R																													
57/Møre & R																													
58/Møre & R																													
59/Møre & R																													
60/Sor-Trond																													
61/Sor-Trond																													
62/Sor-Trond																													
63/Nordland																													
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90/Nordland																													
91/Nordland																													
92/Troms																													
93/Troms																													
94/Troms																													
95/Finmark																													
96/Finmark																													
97/Finmark																													
98/Finmark																													
<b>Total</b>																													

Table 3b

## Total loads (methods of determination indicated in Part II)

OSPAR-codes Deposit site	in tonnes													in kilograms										other/ notes			
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ- HCH	Diel- drin		DDT	TBT	
<b>Portugal</b>																											
P/1																											
P/2																											
P/3																											
P/4																											
P/5																											
P/6																											
P/7																											
P/8																											
P/9																											
P/10																											
P/11																											
<b>Total</b>																											
<b>Spain</b>																											
E/1																											
E/2	0,250	0,070	1,590	3,440	4,440	6,370	1,410	26,870	0,230				0,50	0,63	1,80	0,42	3,41	4,53	4,58	15,9							
E/3	0,010	0,004	1,460	0,270	0,240	0,710	0,100	2,380	0,003												0,00						
E/5	1,640	1,720	8,870	11,240	10,960	51,830	4,810	193,800													6,31						
E/6	0,190	0,030		8,690	10,740	12,030	3,950	70,750	0,023												0,02						
E/8	0,900	0,660	24,460	137,800	72,990	44,470	34,100	115,850	0,398												1,69						
E/11	0,120	0,550	11,610	13,060	15,640	33,730	20,300	122,900	0,033				0,00	0,01	0,06	0,04	0,08	0,09	0,06		0,34						
E/12	0,007	0,005	1,120	1,130	1,170	0,900	1,070	2,960													0,1						
<b>Total</b>	<b>3</b>	<b>3</b>	<b>49</b>	<b>176</b>	<b>116</b>	<b>150</b>	<b>66</b>	<b>536</b>	<b>1</b>				<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>24</b>							
<b>Sweden</b>																											
N 6543563																											
E 1232768																											
N 6509009																											
E 1232153																											
N 6490108																											
E 1235186																											
N 6470316																											
E 1242917																											
N 6474772																											
E 1269778																											
N 6464197																											
E 1251712																											
N 6442621																											
E 1244977																											
N 6431598																											
E 1247566																											
N 6444088																											
E 1262365																											
N 6419497																											
E 1251185																											
N 6404863	0,006	0,005	ni	0,264	0,700	0,360	0,216	2,300																			
E 1253761																											
N 6395214	0,001	0,002																									
E 1247672																											
N 6400620	0,150	0,200																									
E 1258115																											
<b>Total</b>	<b>0,2</b>	<b>0,2</b>		<b>0,3</b>	<b>0,7</b>	<b>0,4</b>	<b>0,2</b>	<b>2,3</b>																			

Table 3b

## Total loads (methods of determination indicated in Part II)

OSPAR-codes Deposit site	in tonnes											in kilograms															
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ- HCH	Diel- drin	DDT	TBT	other/ notes	
<b>UK</b>																											
CR019	0,001	0,000	0,045	0,137	0,070	0,146	0,752	0,638																			
CR021	0,004	0,001	0,025	0,046	0,094	0,098	0,042	0,919																			
CR030	0,003	0,001	0,053	0,115	0,277	0,252	0,068	1,127																			
CR031	0,000	0,000	0,003	0,011	0,014	0,013	0,063	0,044																			
CR040	0,002	0,001	0,052	0,132	0,148	0,152	0,100	0,774																			
CR050	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																			
CR060	0,000	0,001	0,005	0,006	0,113	0,062	0,005	0,033																			
CR080	0,003	0,001	0,054	0,098	0,984	0,548	0,066	3,187																			
CR110	0,059	0,030	1,644	4,786	16,440	7,165	3,979	11,361																			
DM001	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																			
DV010	0,025	0,013	0,100	5,293	1,848	9,193	2,616	10,361																			
DV011	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																			
FI095	0,001	0,000	0,048	0,196	0,180	0,068	0,225	0,529																			
FO010	0,003	0,001	0,137	0,441	0,420	0,333	0,326	1,255																			
FO020	0,003	0,003	0,155	0,801	0,284	0,493	0,779	1,481																			
FO021	0,007	0,008	0,253	1,054	0,813	1,143	1,980	4,196																			
FO025	0,000	0,000	0,001	0,004	0,006	0,005	0,006	0,027																			
FO028	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																			
FO036	0,008	0,053	0,618	2,785	1,800	2,785	1,511	5,777																			
FO038	0,012	0,021	0,272	1,109	0,779	1,700	1,182	2,589																			
FO041	0,004	0,051	0,675	2,674	2,298	2,610	5,082	4,536																			
FO044	0,038	0,487	3,578	25,725	19,274	26,556	13,437	51,549																			
FO048	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																			
FO051	0,008	0,009	0,308	0,988	1,060	1,255	1,167	2,724																			
FO080	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																			
HU015	0,003	0,001	0,067	0,247	0,281	0,322	0,121	2,337																			
HU020	0,068	0,028	3,624	11,036	4,424	10,048	4,777	23,673																			
HU030	0,583	0,241	30,941	94,230	37,772	85,792	40,786	202,123																			
HU040	0,025	0,008	0,840	2,596	1,260	3,035	1,050	6,510																			
HU041	0,028	0,009	0,920	2,854	1,401	3,342	1,156	7,168																			
HU045	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																			
HU060	1,138	0,504	65,749	190,987	79,749	174,716	83,332	415,798																			
HU080	1,017	0,421	53,996	164,442	65,917	149,716	71,176	352,726																			
HU090	0,230	0,094	12,548	37,083	16,120	35,619	17,407	82,482																			
HU139	0,018	0,004	0,060	1,958	0,673	1,407	1,040	3,610																			
HU141	0,008	0,002	0,208	0,821	0,270	1,634	0,533	1,697																			
HU143	0,007	0,002	0,182	0,594	0,233	0,677	0,337	1,285																			
HU150	0,001	0,001	0,000	0,255	0,273	0,718	0,130	1,426																			
HU160	0,036	0,002	0,654	3,775	0,854	1,381	2,533	3,457																			
HU162	0,007	0,004	0,355	1,435	0,546	1,018	0,554	2,384																			
IS040	0,004	0,011	0,057	0,269	0,154	0,271	0,160	0,650																			
IS055	0,001	0,001	0,039	0,145	0,055	0,087	0,081	0,503																			
IS110	0,118	0,145	1,937	8,150	5,898	13,122	2,728	26,172																			
IS120	0,138	0,227	0,561	12,837	9,595	18,701	4,264	48,462																			
IS128	0,004	0,005	0,000	0,586	0,218	0,676	0,296	3,292																			
IS140	0,488	0,756	10,829	42,865	31,769	63,585	14,282	157,659																			
IS150	0,000	0,001	0,009	0,070	0,035	0,049	0,040	0,112																			
IS170	0,139	0,105	0,000	17,546	5,229	15,338	9,412	46,706																			
IS180	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																			
IS192	0,001	0,001	0,028	0,120	0,040	0,099	0,057	0,277																			
IS200	0,054	0,037	1,018	3,625	1,606	3,939	1,861	10,269																			
IS205	0,167	0,017	4,916	14,616	2,707	15,577	10,080	37,004																			
IS230	0,029	0,011	0,354	1,072	0,893	3,502	0,750	3,680																			
IS240	0,008	0,0018	0,222	0,710	0,315	0,683	0,342	1,840																			
IS241	0,032	0,0077	0,929	2,967	1,319	2,857	1,429	7,692																			
IS286	0,001	0,000	0,012	0,040	0,038	0,050	0,034	0,186																			
IS287	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																			
IS288	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																			
IS400	0,003	0,003	0,115	0,240	0,766	1,093	0,150	1,948																			

Table 3b

## Total loads (methods of determination indicated in Part II)

OSPAR-codes Deposit site	in tonnes												in kilograms															
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ- HCH	Diel- drin	DDT	TBT	other/ notes		
ISS90	0,408	0,428	3,319	21,579	17,526	17,635	13,473	75,032																				
IS650	0,006	0,001	0,000	0,158	0,100	0,182	0,082	0,700																				
IS671	0,067	0,009	1,301	6,839	2,898	4,409	3,560	14,255																				
LU010	0,000	0,000	0,050	0,055	0,089	0,055	0,039	0,244																				
LU055	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																				
LU083	0,058	0,052	0,991	9,741	4,107	11,841	5,417	32,635																				
LU084	0,013	0,012	0,291	2,141	0,891	2,655	1,212	7,264																				
LU085	0,018	0,015	0,381	2,836	1,181	3,513	1,604	9,615																				
LU086	0,001	0,000	0,016	0,075	0,030	0,098	0,044	0,262																				
LU110	0,236	0,093	3,820	15,381	12,743	28,302	9,645	72,967																				
LU115	0,010	0,009	0,339	1,313	0,707	1,818	0,707	5,049																				
LU130	0,999	0,445	21,774	67,580	78,473	127,598	39,699	349,261																				
LU140	0,108	0,037	1,163	7,312	3,964	8,172	2,851	22,814																				
LU168	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																				
MA010	0,001	0,000	0,037	0,204	0,109	0,048	1,064	0,287																				
MA021	0,087	0,106	1,257	13,654	9,766	19,893	2,930	33,998																				
MA025	0,005	0,001	0,048	1,830	0,369	0,334	0,751	1,480																				
MA050	0,003	0,001	0,049	0,478	0,125	0,275	0,527	0,901																				
MA501	0,006	0,011	0,000	0,331	0,064	0,041	0,078	0,150																				
MA545	0,054	0,108	0,000	3,188	0,616	0,395	0,747	1,439																				
MA570	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																				
MA571	0,001	0,001	0,000	0,352	0,211	0,282	0,113	0,705																				
MA581	0,000	0,000	0,000	0,001	0,000	0,002	0,008	0,005																				
MA605	0,000	0,000	0,000	0,006	0,000	0,008	0,011	0,022																				
PL019	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																				
PL030	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																				
PL031	0,025	0,021	1,741	1,156	3,970	3,996	0,895	6,830																				
PL060	0,036	0,004	1,268	1,039	3,546	1,719	0,444	7,722																				
PL075	0,011	0,006	0,386	0,175	1,817	0,916	0,196	4,441																				
PL100	0,013	0,011	1,326	1,084	2,365	1,599	0,688	4,418																				
PO070	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																				
PO090	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																				
TH038	0,010	0,004	0,242	1,019	1,132	0,966	0,506	2,702																				
TH041	0,016	0,008	0,431	2,073	1,410	1,390	0,882	3,623																				
TH049	4,224	0,469	222,951	809,665	384,884	161,933	436,515	912,926																				
TH052	0,275	0,137	0,000	90,333	27,099	46,951	44,206	132,342																				
TH070	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																				
TH140	0,012	0,004	0,697	1,970	0,807	1,462	1,010	2,906																				
TH145	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																				
TH200	0,002	0,001	0,086	0,264	0,084	0,131	0,137	0,368																				
TH201	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000																				
TY022	0,001	0,000	0,012	0,017	0,003	0,015	0,011	0,038																				
TY042	0,056	0,022	0,000	7,232	5,096	9,368	4,466	16,309																				
TY070	0,134	0,033	2,033	5,825	6,628	17,158	3,309	33,703																				
TY081	0,173	0,048	2,478	7,651	8,556	20,325	4,142	40,330																				
TY090	0,051	0,039	2,583	5,370	4,612	18,408	3,055	20,403																				
TY130	0,007	0,001	0,191	0,268	0,670	0,345	1,206																					
TY150	1,613	1,555	19,821	175,443	189,588	209,817	37,344	658,691																				
TY160	0,264	0,255	3,233	28,600	27,916	33,947	6,124	108,554																				
TY180	0,005	0,003	0,252	0,693	0,410	0,820	0,504	1,923																				
TY190	0,000	0,001	0,040	0,116	0,068	0,132	0,054	0,252																				
WI010	0,020	0,007	0,000	3,717	1,404	1,669	1,603	6,196																				
WI020	0,009	0,001	0,328	0,851	0,315	0,429	0,429	1,323																				
WI031	0,034	0,008	0,735	1,479	1,229	1,648	1,052	10,145																				
WI060	0,211	0,098	7,424	28,913	14,503	30,701	14,589	44,413																				
WI080	0,005	0,002	0,213	0,687	0,531	0,385	0,353	1,236																				
WI090	0,001	0,001	0,086	0,258	0,405	0,173	0,130	0,584																				
WI110	0,025	0,011	0,583	1,581	1,155	1,425	0,766	13,680																				
FI045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FI050	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>13,848</b>	<b>7,410</b>	<b>503,168</b>	<b>1997,098</b>	<b>1141,076</b>	<b>1459,331</b>	<b>952,592</b>	<b>4222,579</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Amounts of Wastes Dumped at Sea in 1999**

**Table 3c Environmentally relevant loads (principles and methods of calculation indicated in Part II)**

OSPAPR-codes	in tonnes													in kilogramms																
	Deposit site	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ-HCH	Diel-drin	DDT	TBT	other/notes			
<b>Belgium</b>																														
B/1																														
B/1																														
B/1																														
B/1																														
B/3																														
B/3																														
B/6																														
B/6																														
B/9																														
B/9																														
B/int1+2																														
B/int1+2																														
B/int1+2																														
B/5+7+1+4																														
B/2+3+4+5+7+1+9																														
B/4+7+1																														
B/2+3+1+4+9																														
B/1+4+9																														
B/1+2+3+4+7+9																														
B/1+2+3+4+5+7+9																														
B/2+5																														
Bint/x																														
B/int1+2+9																														
<b>Total</b>																														
<b>Denmark</b>																														
FRB08																														
FRB15																														
FRB16																														
FRB18																														
FRB20																														
NJL01																														
NJL02																														
NJL03																														
NJL03																														
NJL03																														
NJL03																														
NJL07																														
NJL07																														
NJL10																														
NJL10																														
NJL11																														
NJL11																														
NJL13																														
NJL25																														
NJL31																														
NJL33																														
NJL41																														
NJL42																														
NJL45																														
NJL50																														
RIB01																														
RIB01																														

**Table 3c Environmentally relevant loads (principles and methods of calculation indicated in Part II)**

OSPAR-codes Deposit site	in tonnes											in kilograms											other/ notes						
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ-HCH		Diel-drin	DDT	TBT			
<b>Denmark</b>																													
RIB01																													
RIB02																													
RIB02																													
RIB02																													
RIB03																													
RIB03																													
RIB04																													
RIB04																													
RIB08																													
RIN05																													
RIN05																													
RIN13																													
RIN24																													
RIN25																													
SJL09																													
VIB09																													
VIB09																													
VIB21																													
AAR01																													
AAR10																													
<b>Total</b>																													
<b>France</b>																													
F/05901																													
F/05902																													
F/05903																													
F/05904																													
F/06201																													
F/06202																													
F/07601																													
F/07602																													
F/07603																													
F/07604																													
F/07605																													
F/07606																													
F/01401																													
F/02903																													
F/02904																													
F/02905																													
F/05602																													
F/04401																													
F/04402																													
F/08504																													
F/01701																													
F/01702																													
F/01708																													
F/01709																													
F/03301-2-3																													
F/03303-4-5																													
F/03307																													
F/03308																													
F/03309																													
F/06401																													
<b>Total</b>																													



**Table 3c Environmentally relevant loads (principles and methods of calculation indicated in Part II)**

OSPAR-codes Deposit site	in tonnes											in kilograms											other/ notes						
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ-HCH		Diel-drin	DDT	TBT			
<b>Germany</b>																													
10																													
12																													
13																													
14																													
15																													
17																													
18																													
19																													
20																													
21																													
22																													
25																													
30																													
32																													
34																													
40																													
41																													
43																													
44																													
45																													
<b>Total</b>																													
<b>Iceland</b>																													
IS 18																													
IS 20																													
IS 25																													
IS 27																													
IS 30																													
IS 33																													
IS 38																													
IS 39																													
IS 41																													
IS 52																													
IS 54																													
IS 55																													
IS 58																													
<b>Total</b>																													
<b>Ireland</b>																													
Irl 6																													
Irl 6																													
Irl 8																													
Irl 13																													
Irl 17																													
Irl 20																													
Irl 20																													
Irl 29																													
Irl 30																													
Irl 31																													
Irl 32																													
Irl 33																													
Irl 33																													
<b>Total</b>																													

**Table 3c Environmentally relevant loads (principles and methods of calculation indicated in Part II)**

OSPAR-codes Deposit site	in tonnes												in kilograms												other/ notes			
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ-HCH	Diel-drin	DDT		TBT		
<b>The Netherlands</b>																												
NL-6	0,000	0,000	0,936	0,000	0,377	2,658	0,000	5,233	9,218	0,000	N.D.	N.D.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NL-7	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	136,054	1,167	N.D.	N.D.	2	1	2	2	4	3	1	15	0	0	1	N.D.	10			
NL-8	2,501	0,857	29,103	0,000	0,000	60,833	0,000	254,564	81,939	7,344	N.D.	N.D.	26	17	17	13	15	23	14	124	10	7	8	N.D.	N.D.			
NL-10	0,001	0,002	0,247	0,195	0,107	0,275	0,000	0,000	0,000	0,000	N.D.	N.D.	0	0	0	0	1	0	0	1	0	0	0	0	N.D.			
NL-11	0,575	0,321	22,694	21,985	15,780	45,413	0,318	0,000	0,000	0,000	N.D.	N.D.	2	2	2	3	6	5	3	23	1	1	1	2	N.D.			
NL-13	0,000	0,002	0,000	0,000	0,000	0,000	0,000	0,000	30,559	0,328	N.D.	N.D.	1	1	1	1	1	1	1	7	0	2	2	N.D.	4			
NL-14	0,177	0,035	2,944	0,000	0,000	9,765	0,000	31,485	244,112	0,460	N.D.	N.D.	3	3	3	3	3	3	3	21	3	3	3	3	1			
NL-15	0,124	0,014	0,666	0,000	0,000	13,460	0,000	12,199	103,426	0,783	N.D.	N.D.	5	5	5	5	5	5	5	35	5	5	5	5	1			
<b>Total</b>	<b>3,4</b>	<b>1,2</b>	<b>56,6</b>	<b>22,2</b>	<b>16,3</b>	<b>132,4</b>	<b>0,3</b>	<b>303,5</b>	<b>605,3</b>	<b>10,1</b>	<b>N.D.</b>	<b>N.D.</b>	<b>39</b>	<b>29</b>	<b>30</b>	<b>27</b>	<b>35</b>	<b>40</b>	<b>27</b>	<b>226</b>	<b>19</b>	<b>18</b>	<b>20</b>	<b>10</b>	<b>16</b>			
<b>Norway</b>																												
1/Østfold																												
2/Østfold																												
3/Østfold																												
4/Østfold																												
5/Østfold																												
6/Østfold																												
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11/Østfold																												
12/Østfold																												
13/Østfold																												
14/Oslo & Ak																												
15/Vestfold																												
16/Vestfold																												
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30/Telemark																												
31/Aust-Agde																												
32/Vest-Agde																												
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41/Vest-Agde																												
42/Vest-Agde																												
43/Rogaland																												
44/Rogaland																												
45/Rogaland																												

**Table 3c Environmentally relevant loads (principles and methods of calculation indicated in Part II)**

OSPAR-codes Deposit site	in tonnes											in kilograms																
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ-HCH	Diels-Drin	DDT	TBT	other/notes		
<b>Norway cont.</b>																												
46/Hordaland																												
47/Hordaland																												
48/Hordaland																												
49/Hordaland																												
50/Sogn & F																												
51/Sogn & F																												
52/Sogn & F																												
53/Møre & R																												
54/Møre & R																												
55/Møre & R																												
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58/Møre & R																												
59/Møre & R																												
60/Sør-Trønd																												
61/Sør-Trønd																												
62/Sør-Trønd																												
63/Nordland																												
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91/Nordland																												
92/Troms																												
93/Troms																												
94/Troms																												
95/Finmark																												
96/Finmark																												
97/Finmark																												
98/Finmark																												
<b>Total</b>																												

**Table 3c Environmentally relevant loads (principles and methods of calculation indicated in Part II)**

OSPAR-codes Deposit site	in tonnes											in kilograms											other/ notes				
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ-HCH		Diel-drin	DDT	TBT	
<b>Portugal</b>																											
P/1																											
P/2																											
P/3																											
P/4																											
P/5																											
P/6																											
P/7																											
P/8																											
P/9																											
P/10																											
P/11																											
<b>Total</b>																											
<b>Spain</b>																											
E/1																											
E/2																											
E/3																											
E/5																											
E/6																											
E/8																											
E/11																											
E/12																											
<b>Total</b>																											
<b>Sweden</b>																											
N 6543563																											
E 1232768																											
N 6509009																											
E 1232153																											
N 6490108																											
E 1235186																											
N 6470316																											
E 1242917																											
N 6474772																											
E 1269778																											
N 6464197																											
E 1251712																											
N 6442621																											
E 1244977																											
N 6431598																											
E 1247566																											
N 6444088																											
E 1262365																											
N 6419497																											
E 1251185																											
N 6404863																											
E 1253761																											
N 6395214																											
E 1247672																											
N 6400620																											
E 1258115																											
<b>Total</b>																											

**Table 3c Environmentally relevant loads (principles and methods of calculation indicated in Part II)**

OSPAR-codes Deposit site	in tonnes											in kilograms															
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ-HCH	Diel-drin	DDT	TBT	other/notes	
<b>UK</b>																											
CR019																											
CR021																											
CR030																											
CR031																											
CR040																											
CR050																											
CR060																											
CR080																											
CR110																											
DM001																											
DV010																											
DV011																											
FI095																											
FO010																											
FO020																											
FO021																											
FO025																											
FO028																											
FO036																											
FO038																											
FO041																											
FO044																											
FO048																											
FO051																											
FO080																											
HU015																											
HU020																											
HU030																											
HU040																											
HU041																											
HU045																											
HU060																											
HU080																											
HU090																											
HU139																											
HU141																											
HU143																											
HU150																											
HU160																											
HU162																											
IS040																											
IS055																											
IS110																											
IS120																											
IS128																											
IS140																											
IS150																											
IS170																											
IS180																											
IS192																											
IS200																											
IS205																											
IS230																											
IS240																											
IS241																											
IS286																											
IS287																											
IS288																											
IS400																											

**Table 3c Environmentally relevant loads (principles and methods of calculation indicated in Part II)**

OSPAR-codes Deposit site	in tonnes											in kilograms											other/ notes						
	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	Total CB	HCB	γ-HCH		Diel-drin	DDT	TBT			
IS590																													
IS650																													
IS671																													
LU010																													
LU055																													
LU083																													
LU084																													
LU085																													
LU086																													
LU110																													
LU115																													
LU130																													
LU140																													
LU168																													
MA010																													
MA021																													
MA025																													
MA050																													
MA501																													
MA545																													
MA570																													
MA571																													
MA581																													
MA605																													
PL019																													
PL030																													
PL031																													
PL060																													
PL075																													
PL100																													
PO070																													
PO090																													
TH038																													
TH041																													
TH049																													
TH052																													
TH070																													
TH140																													
TH145																													
TH200																													
TH201																													
TY022																													
TY042																													
TY070																													
TY081																													
TY090																													
TY130																													
TY150																													
TY160																													
TY180																													
TY190																													
WI010																													
WI020																													
WI031																													
WI060																													
WI080																													
WI090																													
WI110																													
FI045																													
FI050																													
<b>Total</b>																													

## General Information

The continental decimal system is used throughout this report. Empty cells indicate that no information was available. Italic numbers are used when the measured/calculated value was smaller than the actual number given in the cell.

## Additional Information

(Referring to Part II of the Formats for the Annual Reporting of Amounts of Wastes Dumped at Sea adopted at PRAM 1995)

### 1. Deposit Site

#### France

#### CODES AND NAMES OF DUMPING SITES IN FRANCE – 1999

The following table "Codes and names of dumping sites in France - 1999" lists the dumping sites used by French *ports* during 1999 as well as the corresponding OSPAR code.

Code OSCOM 1999	Dumping Site
F/05901	Vidage Ouest Sud (Dunkerque)
F/05902	Vidage Ouest Nord (Dunkerque)
F/05903	Vidage Milieu (Dunkerque)
F/05904	Vidage Est (Dunkerque)
F/06201	(Calais)
F/06202	(Boulogne)
F/07601	Dépôt du Kannick (Rouen)
F/07602	Dépôt d'Octeville (Le Havre)
F/07603	(Dienne / Penly)
F/07604	(St Valéry en Caux)
F/07605	(Fécamp)
F/07606	(Le Tréport)
F/01401	(Caen - Ousitreham)
F/02903	(Port de Lesconil)
F/02904	(Port du Cap-Coz - Fouesnant)
F/02905	(Port-La-Forêt)
F/05602	(Port Le Palais)
F/04401	La Lambarde (Nantes St Nazaire)
F/04402	(Pornic)
F/08504	Port (Port-Joinville)
F/01701	Dépôt du Lavardin (La Rochelle Pallice)
F/01702	Fosse d'Aix (Fouras - St Denis d'Oléron)
F/01708	Dépôt de Lamouroux (Bourcefranc)
F/01709	Coureau de la Pallice (La Flotte en Ré)
F/03301	Zone de Montferrand (Bordeaux) secteur 1-1 à 1-3
F/03302	Zone de Cazeau (Bordeaux) secteur 1-5 à 1-6
F/03303	Zone de l'île Verte (Bordeaux) secteur 1-8
F/03304	Zone de l'île Nouvelle (Bordeaux) secteur 2-1

Code OSCOM 1999	Dumping Site
E/03305	Zone du Tromneloun (Bordeaux) secteur 2-3 à 2-4
E/03307	Secteur 3-2 à 3-7 (Bordeaux)
E/03308	Secteur 4-1 (Bordeaux)
E/03309	Secteur 4-3 (Bordeaux)
E/06401	(Bavonne)

### United Kingdom

DM001 was a deposit site within the Humber Estuary on the east coast of England where dredged material was used to assist in the burial of a pipeline.

## 2. Method of determination

### France

#### DEFINITION OF ASSUMPTIONS MADE IN CALCULATING QUANTITIES OF DRY MATTER IN TABLE 3A

Relationship between the saturated density of the mixture  $\rho_{sat}$  and the concentration of dry matter  $\rho_{ms}$ :

These two parameters are connected through the following relationship:

$$\rho_{ms} = \frac{\rho_{ss}}{(\rho_{ss} - \rho_o)} \times (\rho_{sat} - \rho_o) \text{ in which:}$$

- $\rho_{sat}$  = density of the mixture (in kg/m<sup>3</sup>)
- $\rho_{ms}$  = concentration of dry matter in the mixture (in kg dry matter/m<sup>3</sup>)
- $\rho_o$  = density of water at 4°C (in kg/m<sup>3</sup>)
- $\rho_{ss}$  = density of the dry sediment (in kg/m<sup>3</sup>).

Assuming that  $\rho_{ss} = 2\,600 \text{ kg/m}^3$  and  $\rho_o = 1\,025 \text{ kg/m}^3$ , the following simplified formula is obtained:

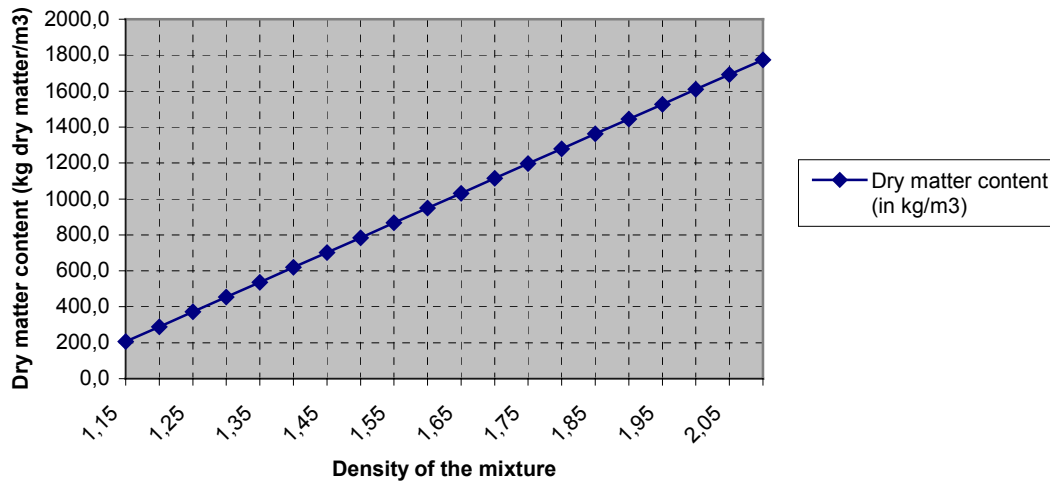
$$\rho_{ms} = 1\,650,8 \times (d - 1\,025)$$

where d is the density of the mixture.

This can be represented graphically as follows:



### Estimation of dry matter content as a function of the density



#### Calculation of quantities of dry matter deposited

If the volume in situ to be dredged is known, an approximate calculation of the quantities of dry matter dredged can be carried out using the following assumptions according to the situation encountered:

Type of material	Mean density in situ	Density for calculation	Dry matter content (kg dry matter/m <sup>3</sup> )
Fresh sludge	1,1 to 1,3	1,2	288,9
Consolidated sludge	1,3 to 1,6	1,45	701,6
Sand	1,6 to 2	1,8	1 279,4

In practice, data relating to the mean densities in situ of the sediments dredged in the principal French ports are known and listed by the Groupement d'Interêt Economique Dragages-Ports (Port-dredging Economic Interest Grouping).

If the volume in the hoppers is known, an approximate calculation of the quantities of dry matter dredged can be carried out using the following assumptions according to the situation encountered:

Type of dredging	Type of material	Mean density in the Hoppers	Density for calculation	Dry matter content (kg dry matter/m <sup>3</sup> )
Trailer suction dredge	Liquid sludge	1,2	1,2	288,9
	Consolidated sludge	1,25 to 1,35	1,3	454,0
	Sand	1,8	1,8	1 279,4
Mechanical dredge	Fresh sludge	1,15 to 1,25	1,2	288,9
	Consolidated sludge	1,3 to 1,4	1,35	536,5
	Sand	1,8	1,8	1 279,4

## **Spain**

With regard to the grain size fraction analysed, in all cases has been smaller than 0,063 mm, apart from the analysis of the deposit sites E/8 (Villagarcía), done with an smaller 2 mm than fraction.

With respect to the methods of determination used, they have been the following ones:

### Sample preparation:

- Drying of the sample at 60°C during 24h.
- Sieving of the sample with a 2 mm sieve.
- Separation, when done, of the smaller than 0,063 mm fraction, using water and a 0,063 mm plastic sieve.
- Homogenisation and grinding of the sample in an agate mortar.
- Determination of the humidity by drying at 105°C up to constant weight.

### Heavy metals analysis:

*For Cd, Pb, Cu, Zn, Ni and Cu:*

- Acid digestion with nitric acid in a microwave oven.
- Quantitative determination by atomic absorption spectrophotometry, in flame or in graphite chamber, depending on the sample concentration.

*For As:*

- Acid digestion in microwave oven with nitric acid.
- Previous reduction of the sample.
- Determination by hydride generation matched to an atomic absorption spectrophotometer.

*For Hg:*

- Acid digestion in microwave oven with nitric acid.
- Determination by cold vapour technique matched to atomic absorption spectrophotometry.

### Poly-chlorinated-biphenyls:

- Extraction of homogenised and grinded sample with a methylene chloride:hexane (1:1) mixture.
- Extract concentration and passing through an anhydrous sodium sulphate column.
- Sulphur elimination by purification with powder of copper.
- Extract purification in column, avoiding the organochlorated compounds with a mixture of ethylic ether in hexane at successive concentrations of 6, 15 and 50%, ending with pure hexane.
- Quantitative determination by gas chromatography with electron capture detector, using an HP-S capillary column of 0,22 mm inner diameter.

### Polyaromatic hydrocarbons:

- Extraction by means of decantation, mixture with acetone:hexane (1:1) and ultrasounds.
- Purification by means of decantation with salt saturated with sodium sulfate.

- Determination using gas chromatography with a 60 mm capillary column, BOD5 and flame ionization detector.
- Confirmation, when necessary, by means of mass chromatography.

Organic matter:

For this parameter we have used two type of techniques.

*As volatile solids:*

- Drying of the sample at 105°C, grinding in a mortar and combustion in muffle at 550°C up to constant weight.
- Determination of total quantity as (formula used in our "Recommendations for the management of dredged material in the ports of Spain"):

$$TOC\ mass\ (tn) = \frac{0,35 \times Volatile\ solids\ concentration\ (\%) \times dumped\ mass\ (tn)}{100}$$

*As Total organic carbon (TOC):*

- Drying at 105°C, elimination of the inorganic carbon with HCL and determination by means of calcination and detection of CO2 with an infrared detector (Elementary analysis).
- Determination of the total quantity as:

$$TOC\ mass\ (tn) = \frac{TOC\ concentration\ (\%) \times dumped\ mass\ (tn)}{100}$$

**United Kingdom**

All analyses of dredged material on <2mm fraction. Methods of determination as specified in reports listed below:

Allchin, C.A., Kelly, C.A. and Portmann, J.P. (1989) Methods of analysis for chlorinated hydrocarbons in marine and other samples. Aquatic Environmental Protection: Analytical Methods, MAFF Directorate of Fisheries Research, Lowestoft, (6), 25 pp.

Jones, B.R. and Laslett, R.E. (1994) Methods for analysis of trace metals in marine and other samples. Aquatic Environmental Protection: Analytical Methods, MAFF Directorate of Fisheries Research, Lowestoft, (11), 29 pp.

Law, R.J., Fileman, T.W. and Portmann, J.P. (1988) Methods of analysis of hydrocarbons in marine and other samples. Aquatic Environmental Protection: Analytical Methods, MAFF Directorate of Fisheries Research, Lowestoft, (2), 25 pp.

Waldock, M.J., Waite, M.E., Miller, D., Smith, D.J. and Law, R.J. (1989) The determination of total tin and organotin compounds in environmental samples. *Aquatic Environmental Protection: Analytical Methods*, MAFF Directorate of Fisheries Research, Lowestoft, (4), 25 pp.

## Footnotes to all tables

### Table 1

- (0) In 1999, 2 permits were issued in Belgium: one to prolong all existing (4) ones with one year and one to change the amount licensed in one of the four existing ones. So no real new dredging permits were issued.
- (1) Belgium: Different administrative framework.
- (2) Specific permits for the dumping of dredged material are usually not issued in Germany, but all dumping operations are carried out under national regulations which are in accordance with the OSPAR requirements.
- (3) There is a general permit in Iceland for disposing dredged material when the contamination of the sediment does not exceed given threshold values.
- (4) Only 15 (1 989 603 dry tonnes) of the 16 Irish permits issued were taken up.
- (5) The amounts of waste licensed in the permits issued by the Netherlands in 1999 are based on a volume rather than a dry weight in tonnes. Therefore a total amount of 20 058 000 m<sup>3</sup> is licensed.
- (6) Norway reported in some cases the amounts of dredged material in m<sup>3</sup>. In such cases, the calculation factor of 1,2 tonnes dredged material / m<sup>3</sup> of dredged material was used.
- (7) No information was available in Norway as regards the weight of the vessels. However, they were all under 150 ft. long.
- (8) Norway reported due to possible illegal dumping of 2 wooden vessels, the total number of dumped vessels in 1999 (35) is higher than the number of permits issued (33).
- (9) Portugal advised that the figure includes
  - a. 455 000 tonnes of clean dredged material;
  - b. 2 212 210 tonnes of dredged material with traceable contamination; and
  - c. 46 800 tonnes of dredged material with low contamination.
- (10) UK licensed tonnages are usually on a wet weight basis. These are the estimated dry weight equivalents.
- (11) UK informed that an additional 1,000 tonnes dry weight of fish waste was licensed for deposit in the sea in 1999. The material was licensed for deposit directly onto the intertidal zone but is not dumping under the terms of the Convention. 956 tonnes of fish waste was deposited under this licence during 1999.

### Table 2

- (1) Norway reported that there were no consistent data available on the environmental contaminant load of the dredged material.
- (2) Norway reported due to possible illegal dumping of 2 wooden vessels, the total number of dumped vessels in 1999 (35) is higher than the number of permits issued (33).

### Tables 3 a,b,c

- (1) France reported that, where necessary, the quantities have been converted from m<sup>3</sup> into tonnes by using the conversion method explained under methods of calculation.

- (2) France: Exempted of analyses in accordance with the OSPAR Guidelines for the Management of Dredged Material
- (3) France informed that this site is not a harbour, but the dredging operation was done in a protected area.
- (4) For Germany where necessary, the quantities have been converted from m<sup>3</sup> into tonnes by using the following conversion factors (specific gravity):
  - in case of silt: 1,2
  - in case of sand: 1,8
  - in case of lacking information: 1,5
  - in cases where no dry weight (DW) was indicated, the DW was estimated to be 50% (in order to calculate the annual load from the concentration given)
- (5) Germany: Additional quantity of 8 643 000 t sand, exempt from chemical analysis according to § 3.3.1
- (6) Germany: Additional quantity of 4 068 000 t sand, exempt from chemical analysis according to § 3.3.1
- (7) Germany: Additional quantity of 505 000 t sand, exempt from chemical analysis according to § 3.3.1
- (8) Germany: Additional quantity of 2 281 000 t sand, exempt from chemical analysis according to § 3.3.1
- (9) Norway reported that due to possible illegal dumping of 2 wooden vessels, the total number of dumped vessels in 1999 (35) is higher than the number of permits issued (33).

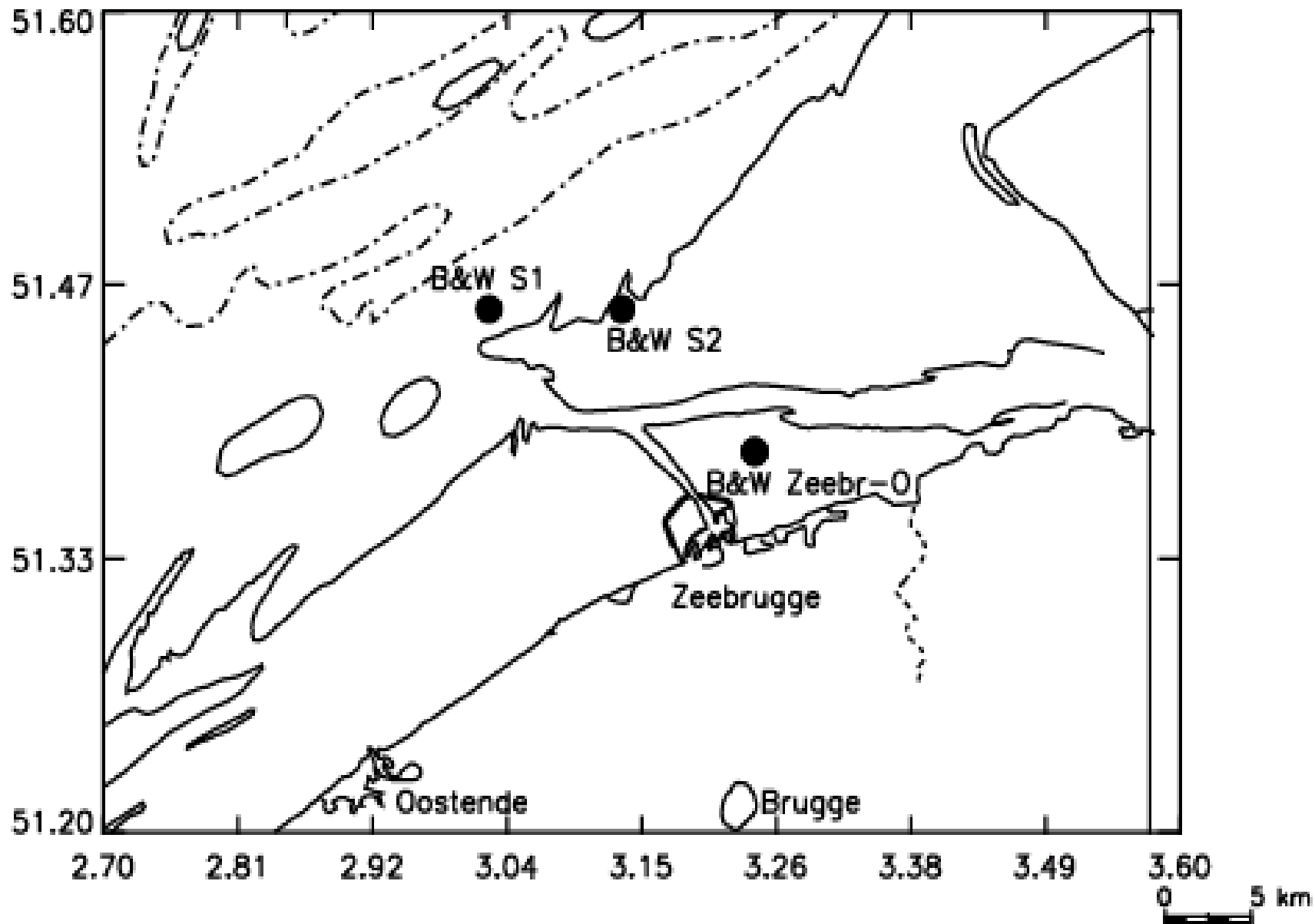


Figure 1a Dumping of dredged material in internal waters carried out in 1999

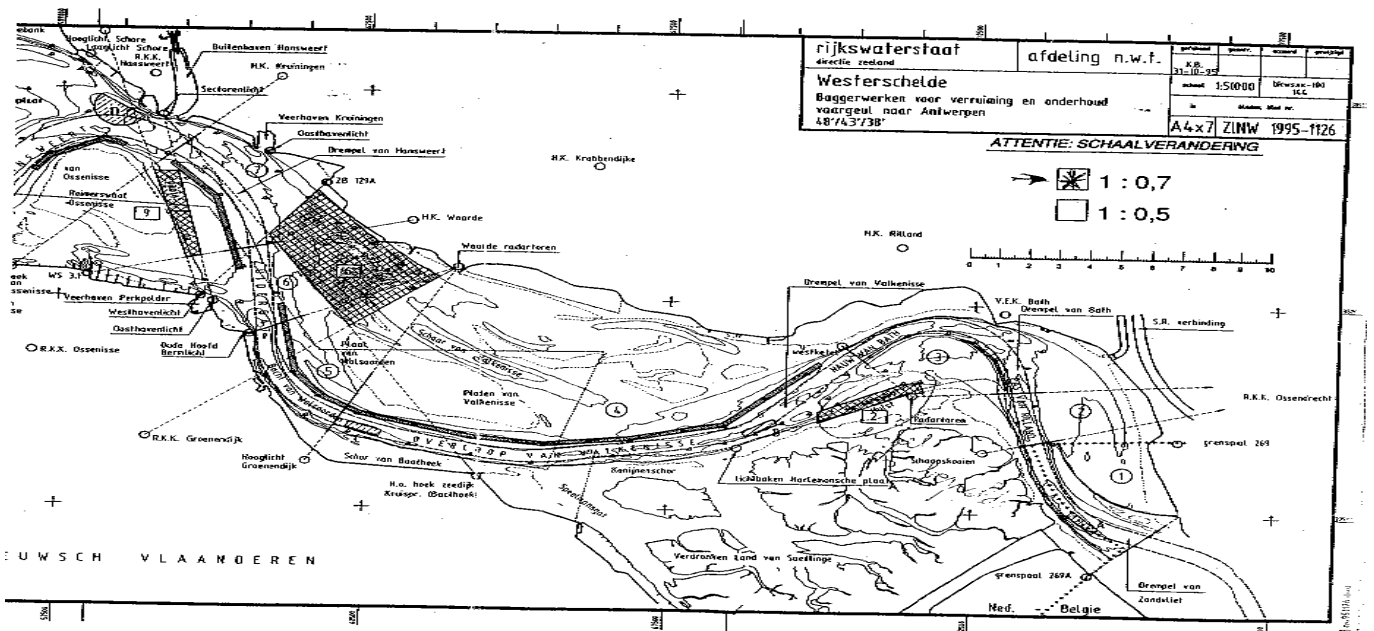
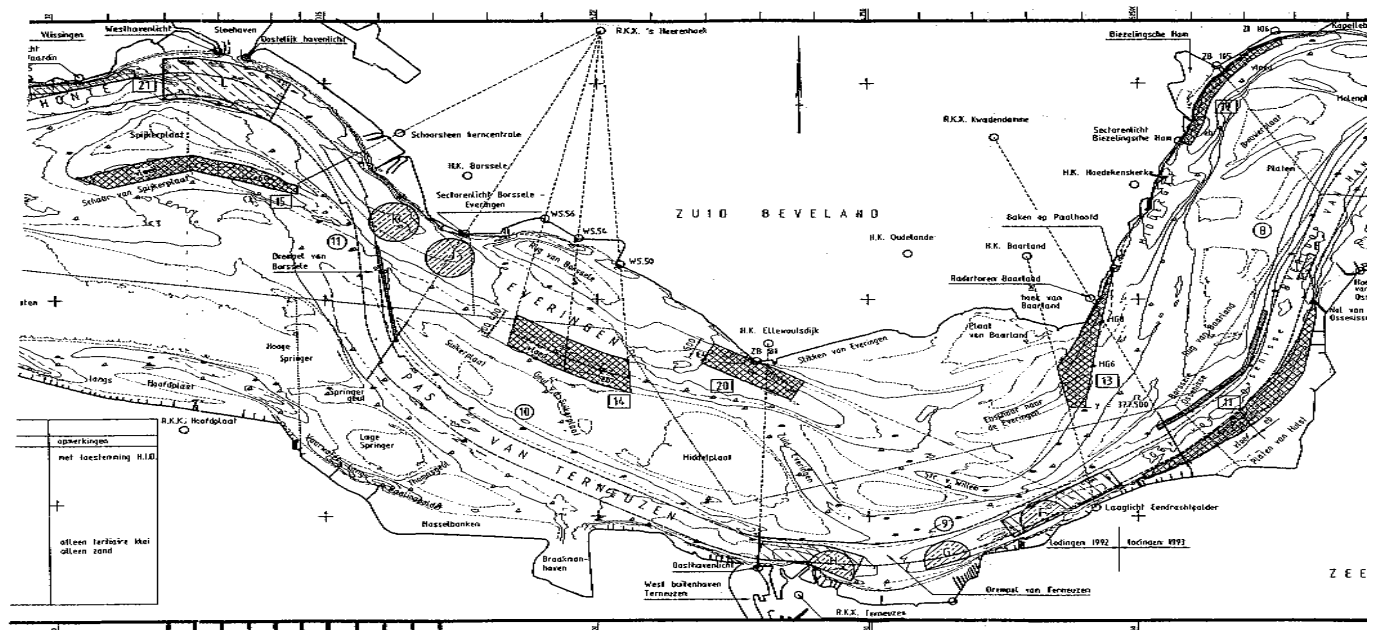
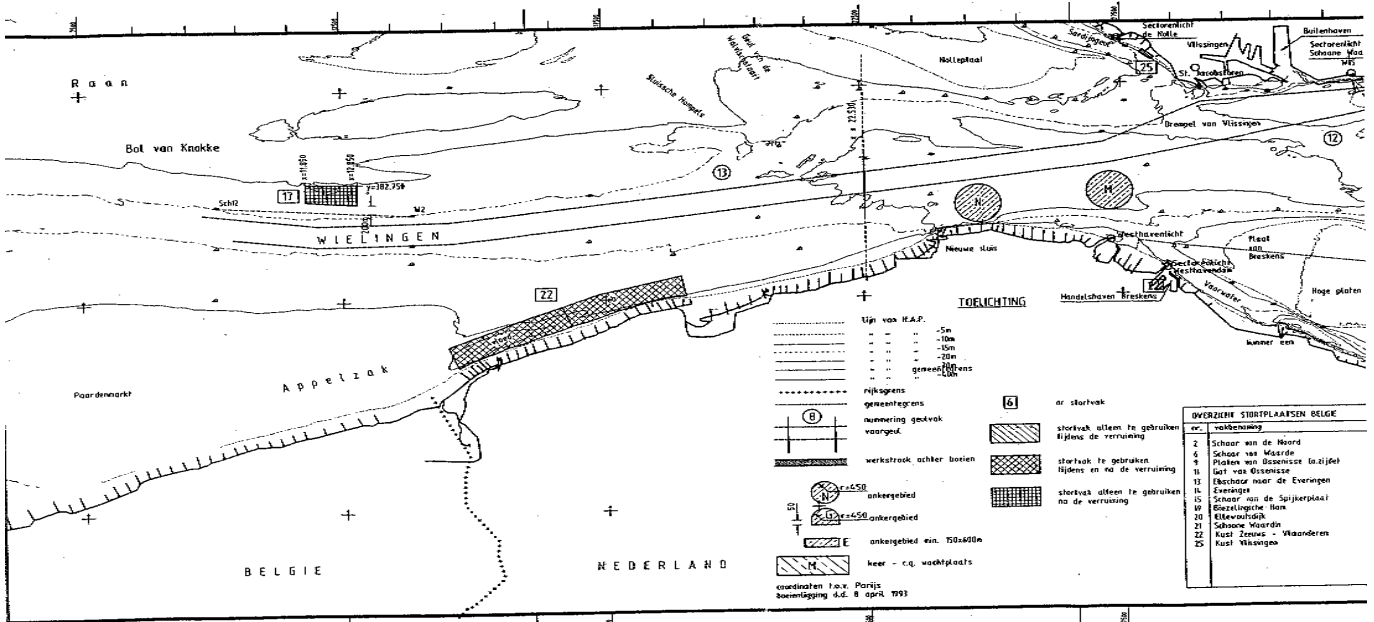


Figure 1b Dumping of dredged material in internal waters carried out in 1999 at B/INT 1-5, 6-9



The following maps "Approximate positions of the dumping sites for dredged material used by France (Atlantic Ocean / English Channel and North Sea)", indicate the approximate positions of the dumping sites used during 1999.



**Figure 2a:** Approximative positions of the dumping sites for dredged material used by France in 1999 (Atlantic Ocean)

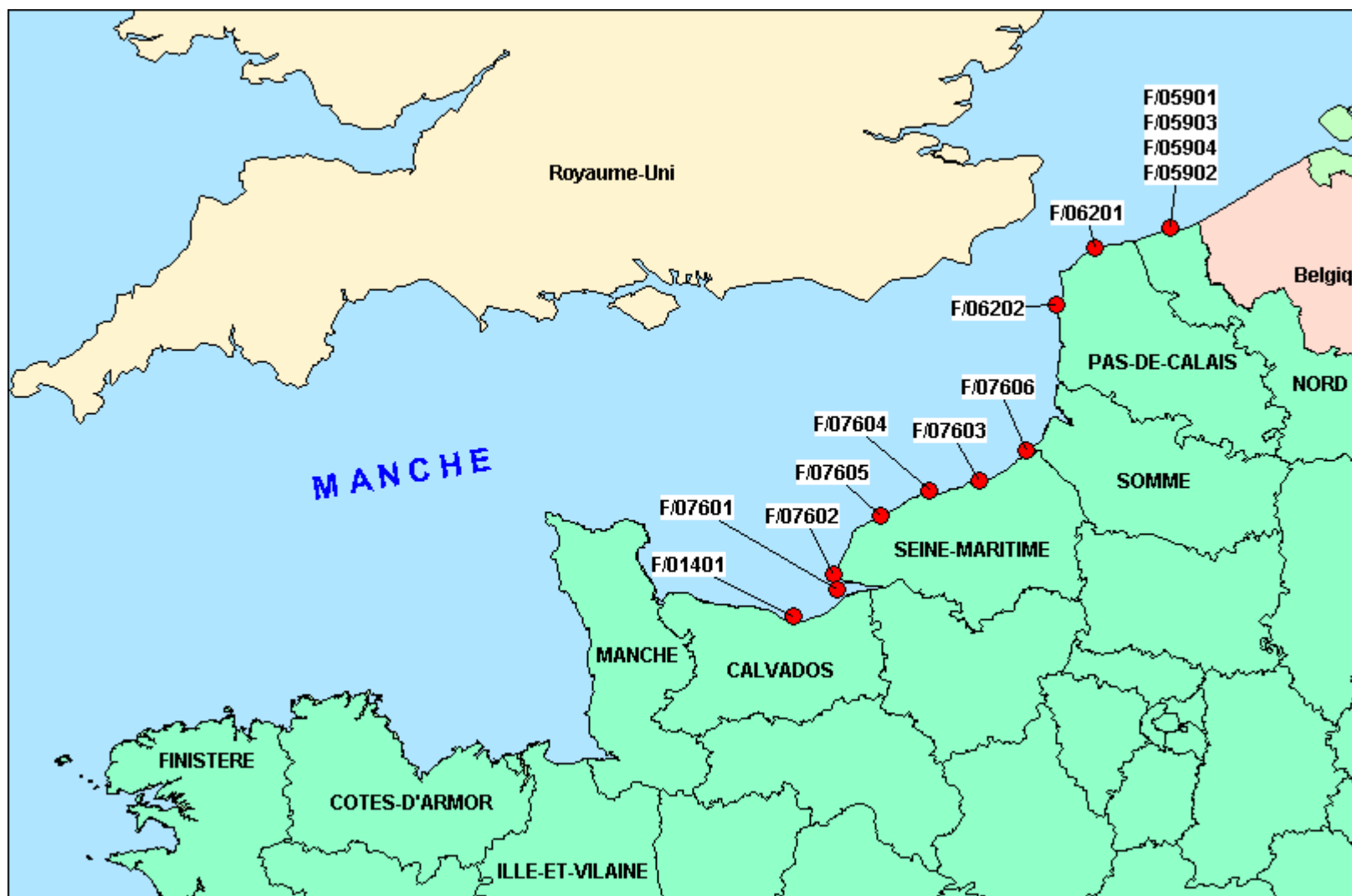
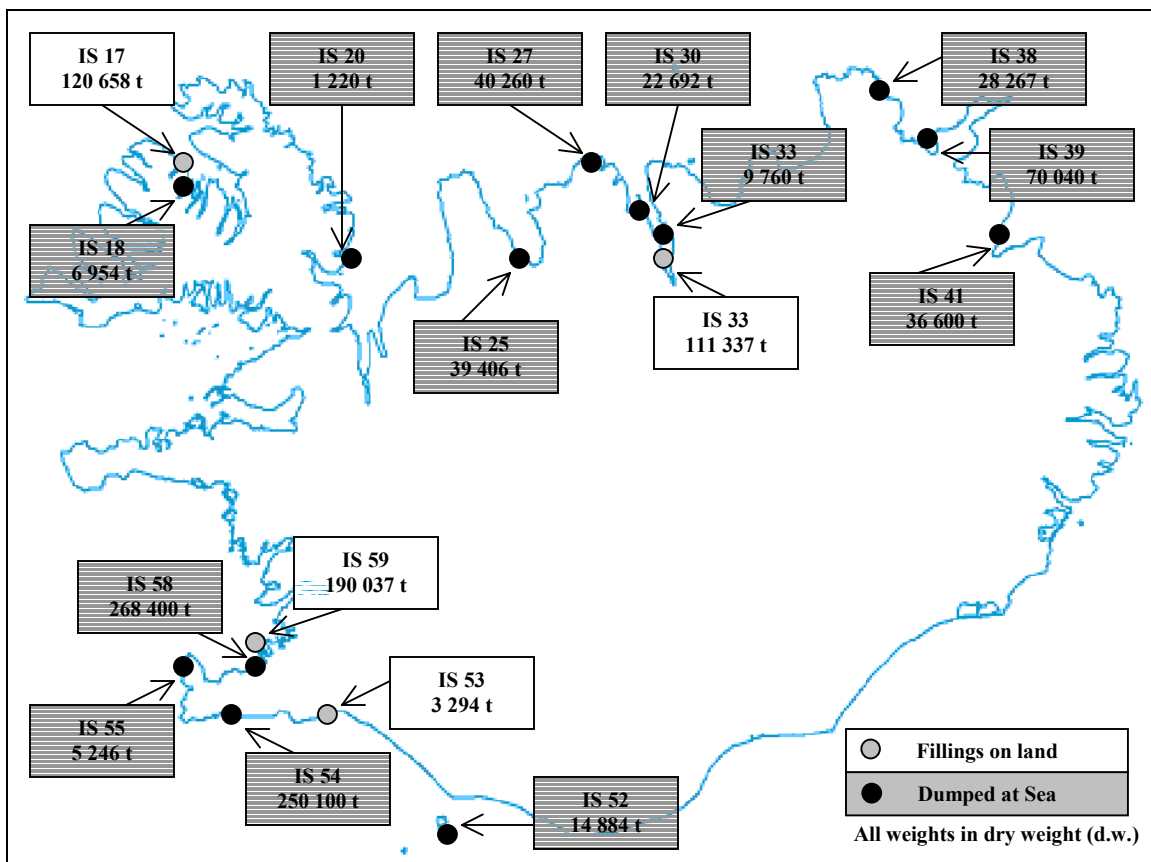


Figure 2b: Approximative positions of the dumping sites for dredged material used by France in 1999 (English Channel and North Sea)



## Disposal of dredged material 1999



Approximate position of the dumping sites for dredged material used by Iceland in 1999 (OSPAR codes of dumping sites and weights in tonnes dry weight)

**Figure 5:** Approximate positions of the dumping sites for dredged material used by Ireland in 1999. Co-ordinates of the sites are given in Table 1.

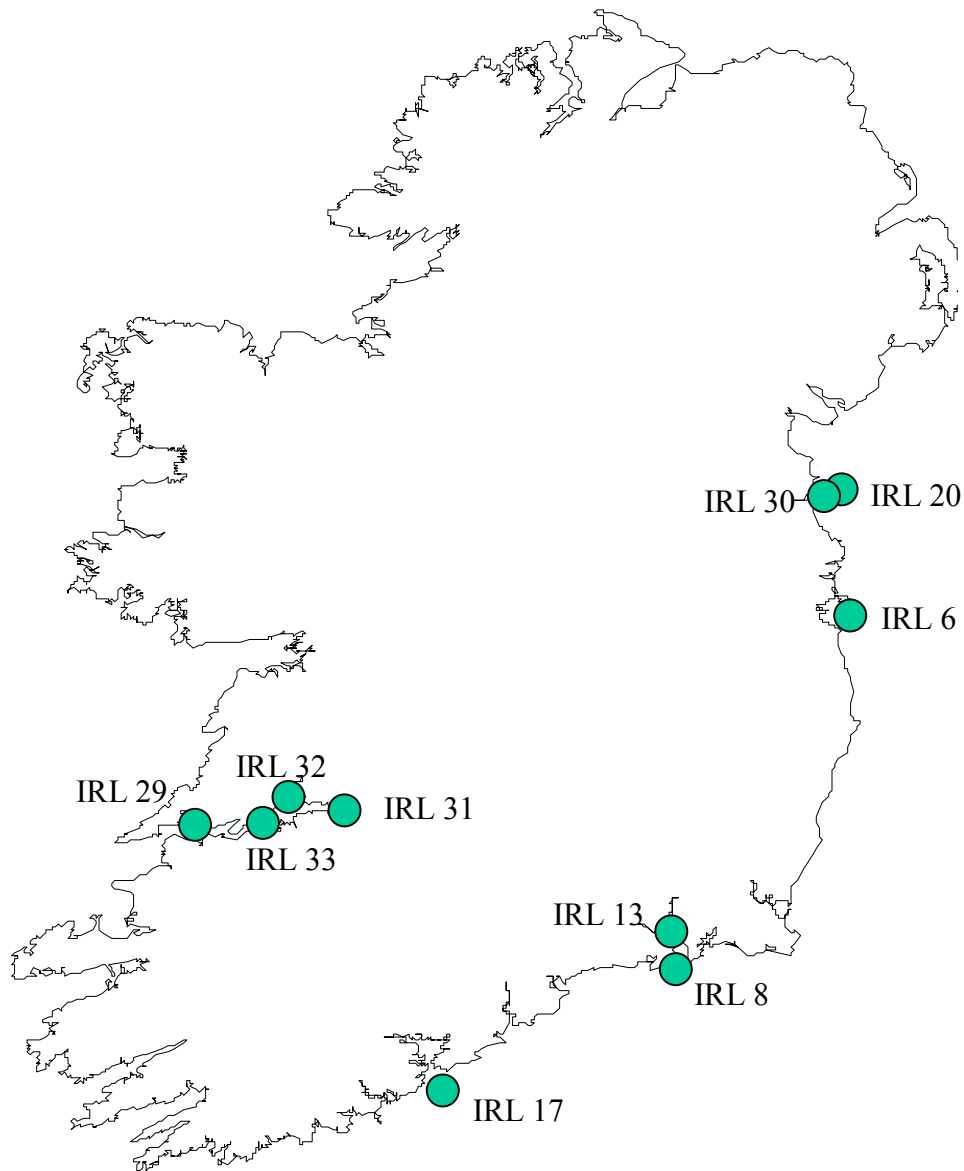
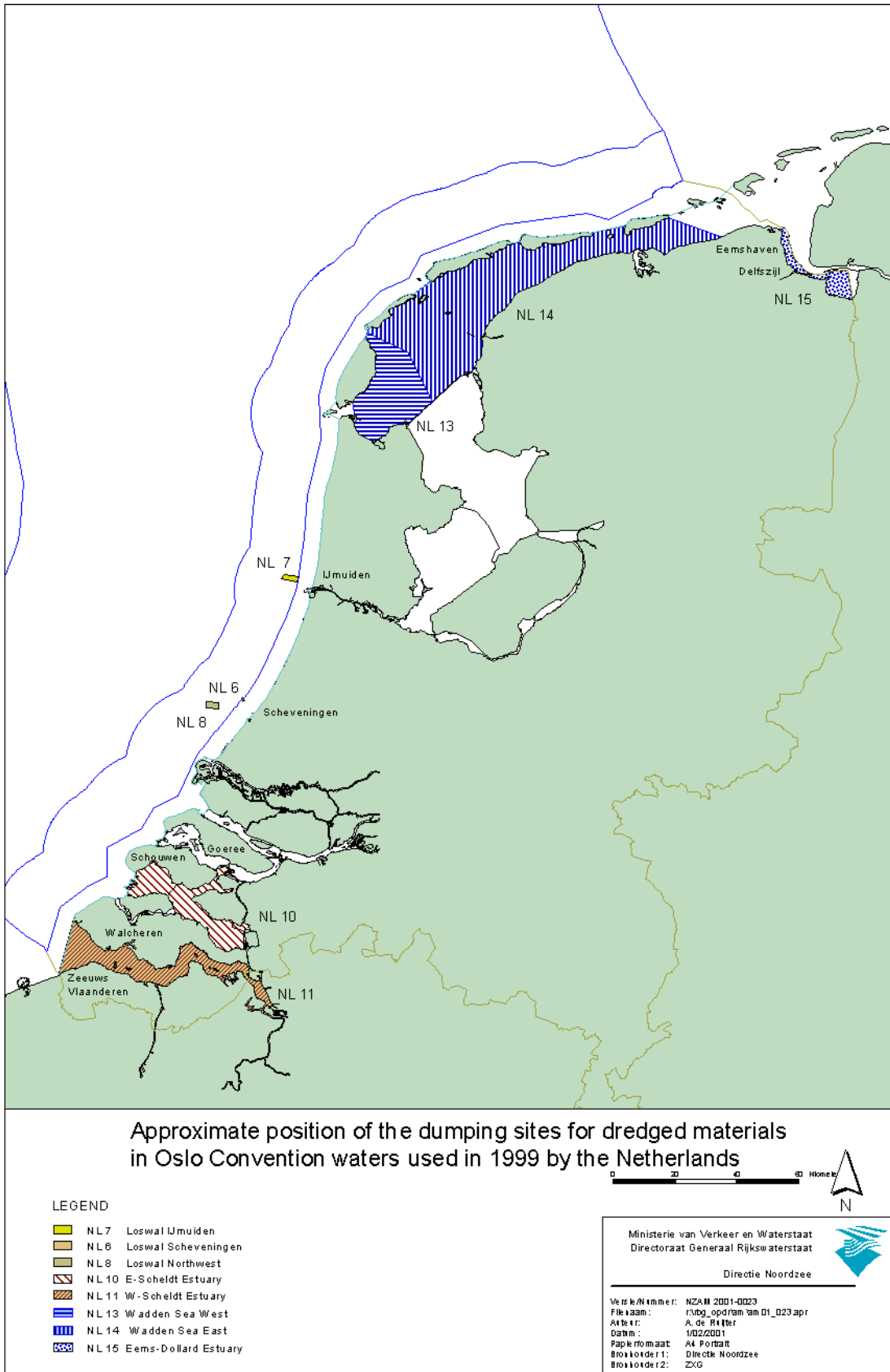
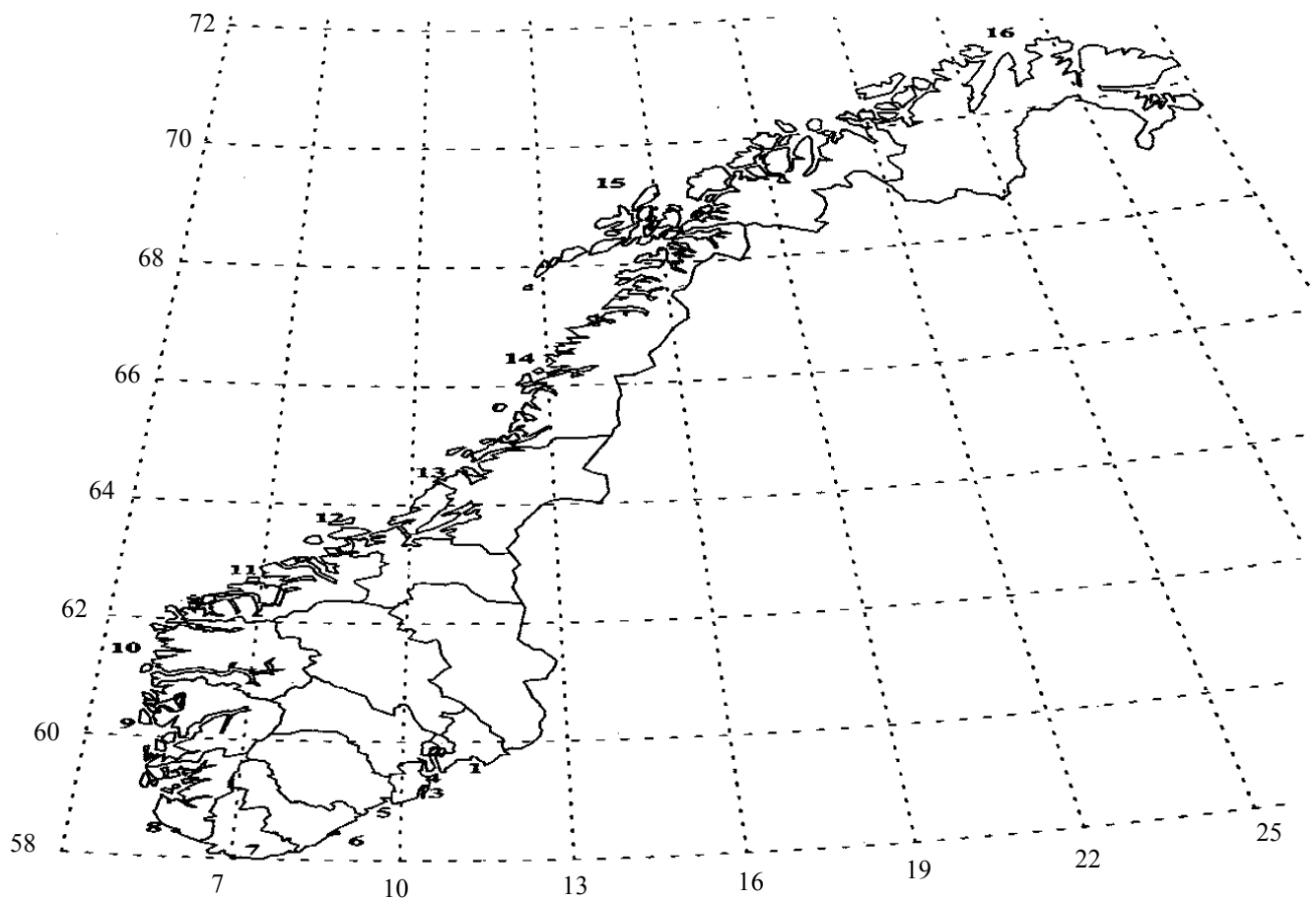


Table 1.

Site No.	Latitude	Longitude
Irl 6	53.32	-6.05
Irl 8	52.13	-6.95
Irl 13	52.25	-6.99
Irl 17	51.72	-8.18
Irl 20	53.75	-6.18
Irl 29	52.6	-9.48
Irl 30	53.73	-6.23
Irl 31	52.653	-8.689
Irl 32	52.654	-9.055
Irl 33	52.622	-9.143



**Figure 6**

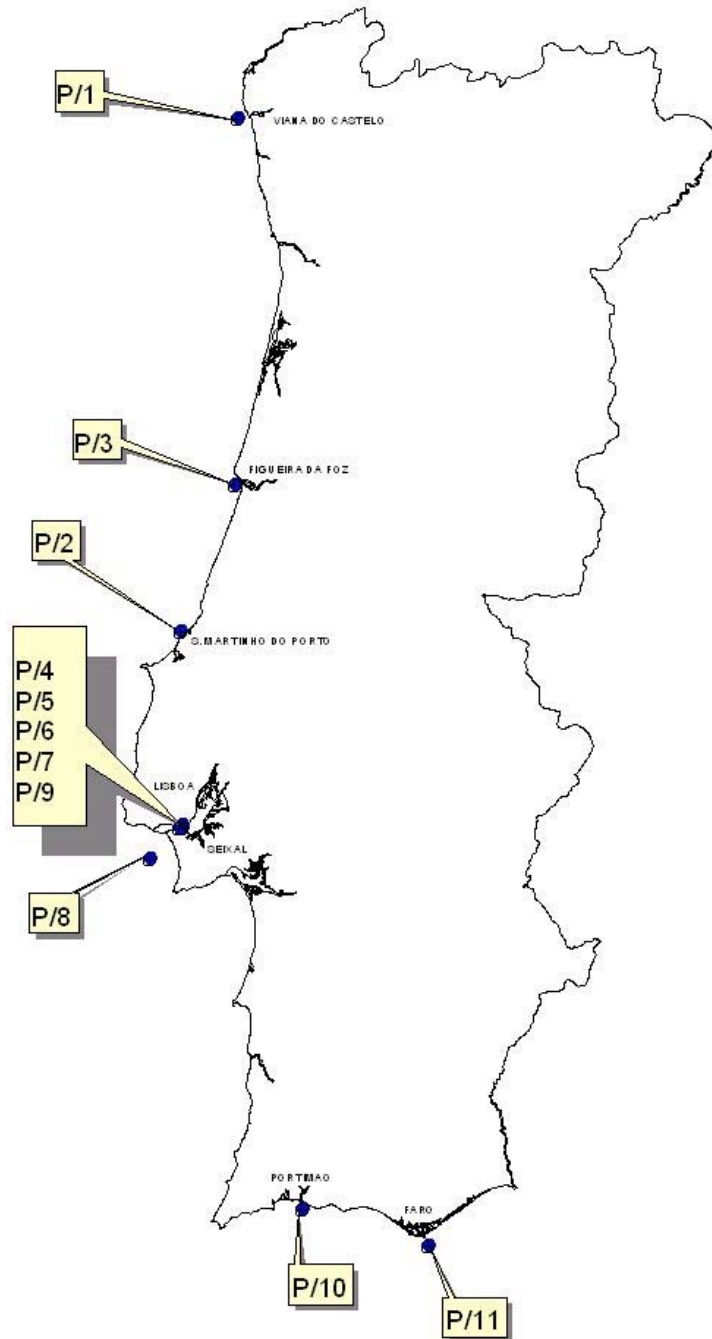


**Figure 1.** Map of Norway showing latitude (58-72°N, left side) and longitude (7-25°E, bottom). The different counties along the coast are indicated.  
 1:Østfold, 2:Akershus/Oslo, 3:Vestfold, 4:Buskerud, 5:Telemark, 6:Aust-Agder, 7:Vest-Agder, 8:Rogaland, 9:Hordaland, 10:Sogn og fjordane, 11:Møre og Romsdal, 12:Sør-Trøndelag, 13 Nord-Trøndelag, 14:Nordland, 15 Troms, 16:Finmark.

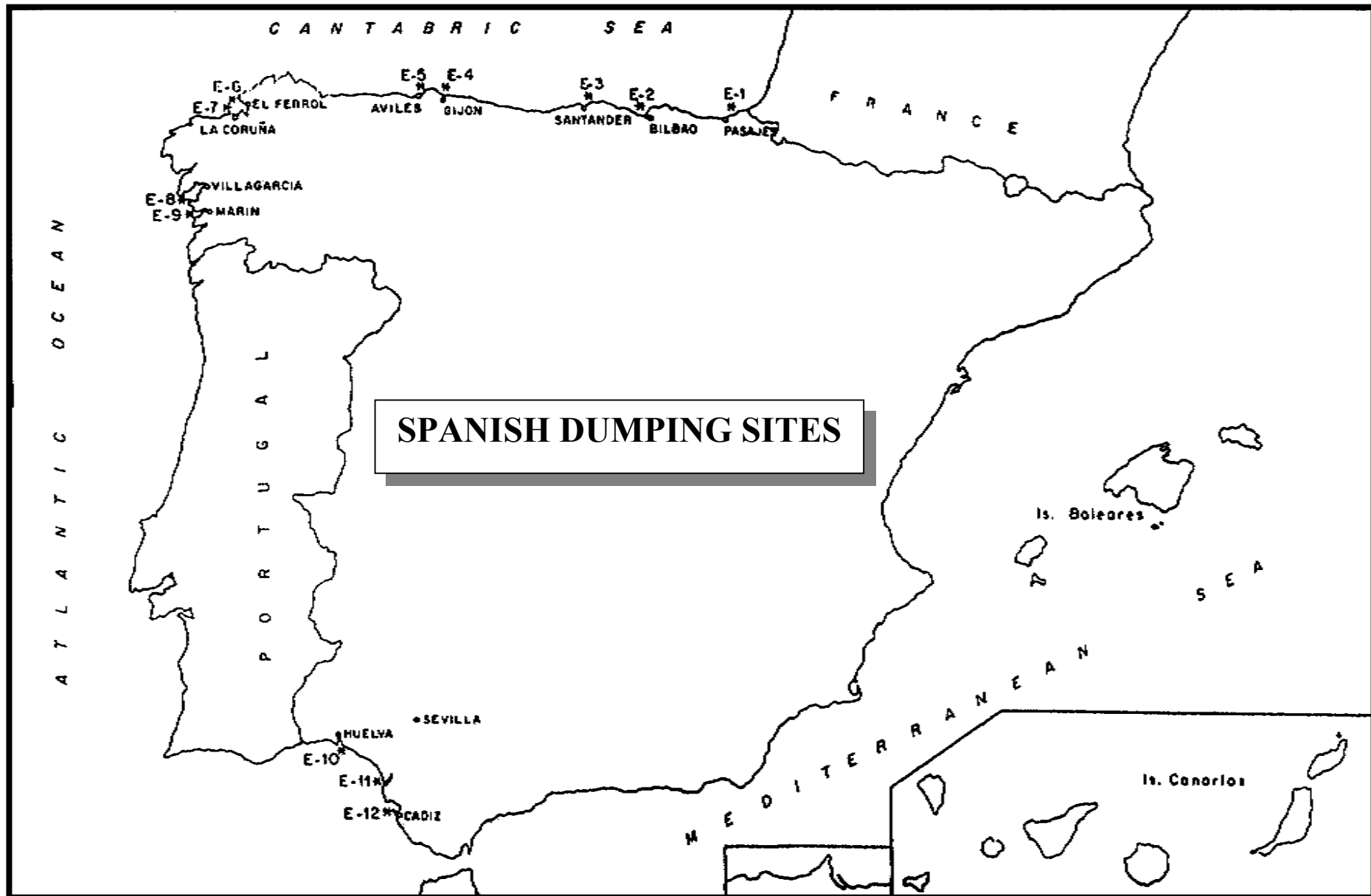
**Figure 7** Norwegian Counties bordering internal waters of Norway in which wastes were dumped in 1999.

Dredged material:	N/1 – 3, N5-12, N14-16
Inert material:	N7, N10
Fish waste	
Other waste:	N7-8, N10-12, N14-16

**Figure 8** Approximate positions of the dumping sites for dredged materials used by Portugal in 1999







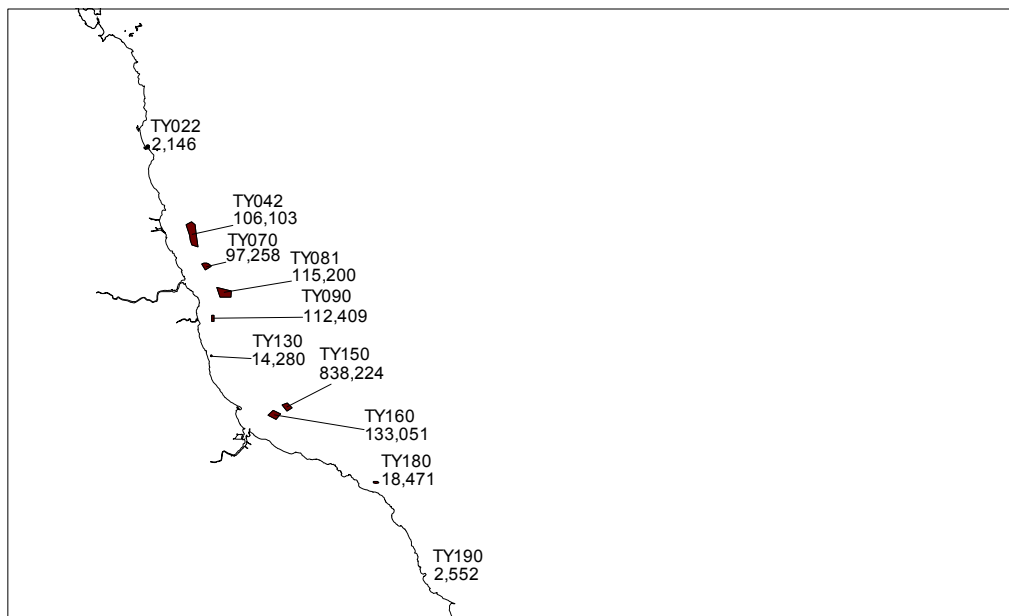
**Figure 9** Approximate positions of the dumping sites for dredged materials used by Spain in 1999

E/1- E/3, E/5-E/6, E/8-E/9, E/11

**Figure 10:** Approximate positions of the dumping sites for dredged material used by Sweden in 1999 (Kattegatt and Skagerrak)

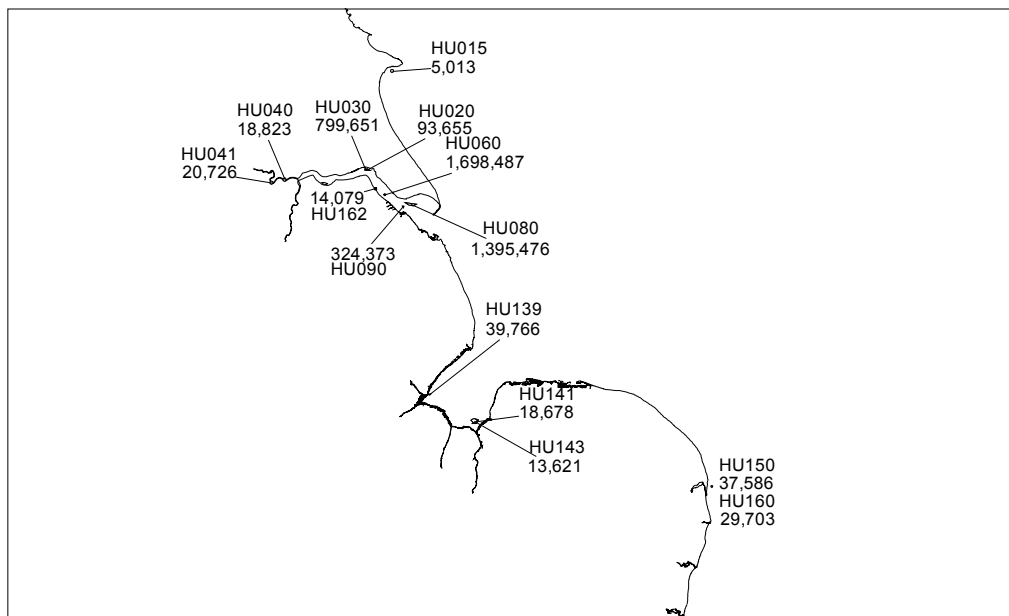


Marine disposal sites in Northeastern England.  
Site codes and quantities deposited in tonnes dry weight, in 1999.  
All tonnages are for dredged material unless stated otherwise.



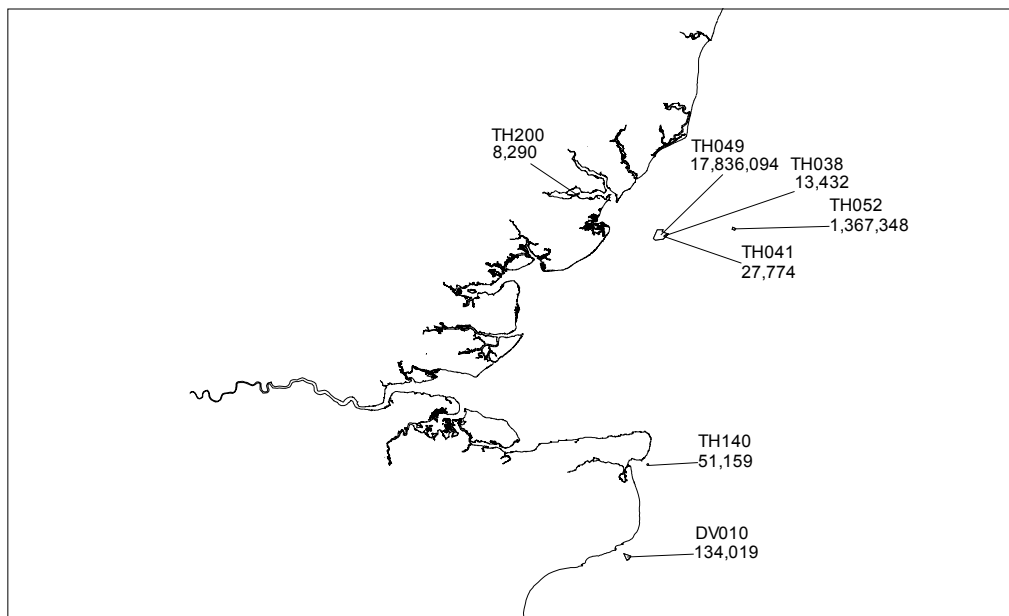
**Figure 11a** Approximate positions, site codes and quantities (in tonnes) disposed of by the UK in 1999 in North Eastern England

Marine disposal sites in Eastern England.  
 Site codes and quantities deposited in tonnes dry weight, in 1999.  
 All tonnages are for dredged material unless stated otherwise.



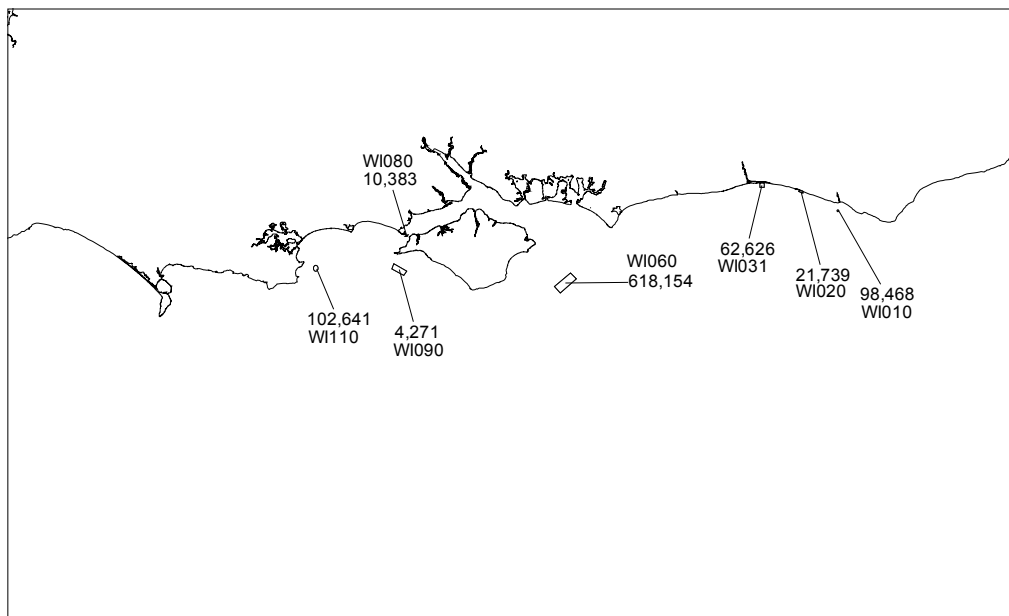
**Figure 11b** Approximate positions, site codes and quantities (in tonnes) disposed of by the UK in 1999 in Eastern England

Marine disposal sites in Southeastern England.  
Site codes and quantities deposited in tonnes dry weight, in 1999.  
All tonnages are for dredged material unless stated otherwise.



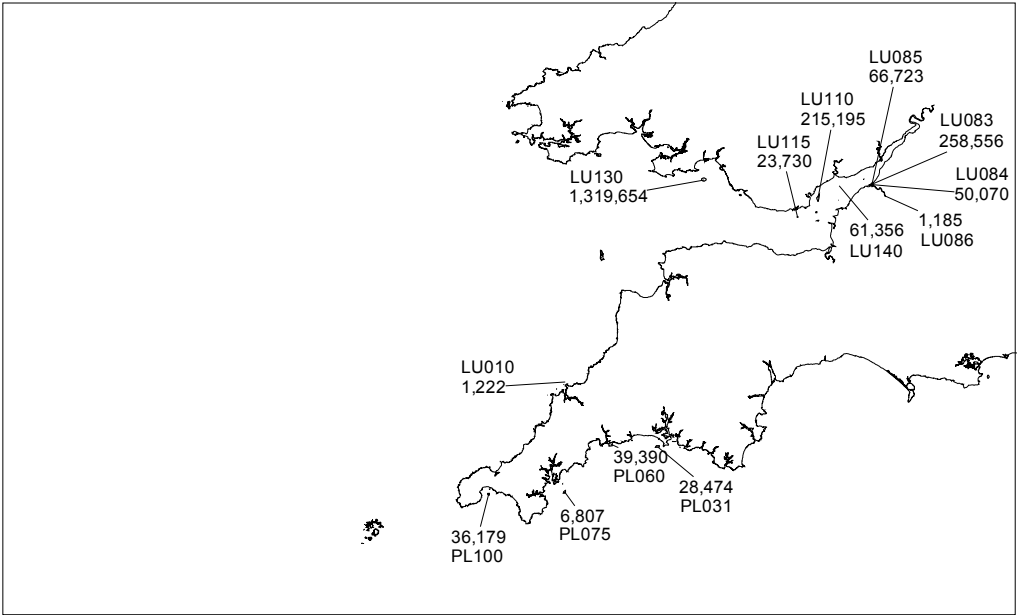
**Figure 11c** Approximate positions, site codes and quantities (in tonnes) disposed of by the UK in 1999 in South Eastern England

Marine disposal sites in Southern England.  
Site codes and quantities deposited in tonnes dry weight, in 1999.  
All tonnages are for dredged material unless stated otherwise.



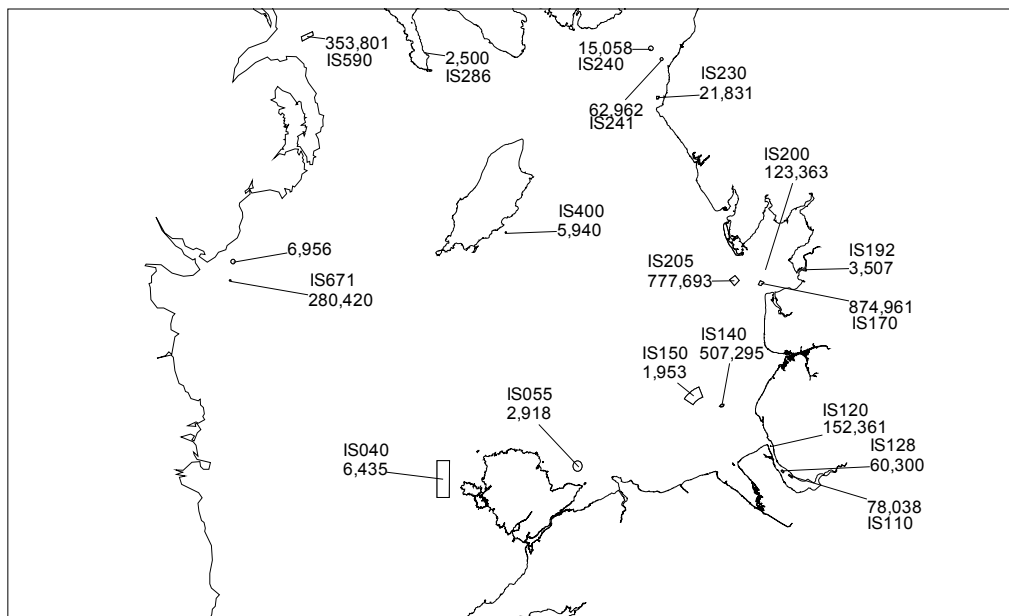
**Figure 11d** Approximate positions, site codes and quantities (in tonnes) disposed of by the UK in 1999 in Southern England

Marine disposal sites in Southwestern England and South Wales.  
Site codes and quantities deposited in tonnes dry weight, in 1999.  
All tonnages are for dredged material unless stated otherwise.



**Figure 11e** Approximate positions, site codes and quantities (in tonnes) disposed of by the UK in 1999 in South Western England and South Wales

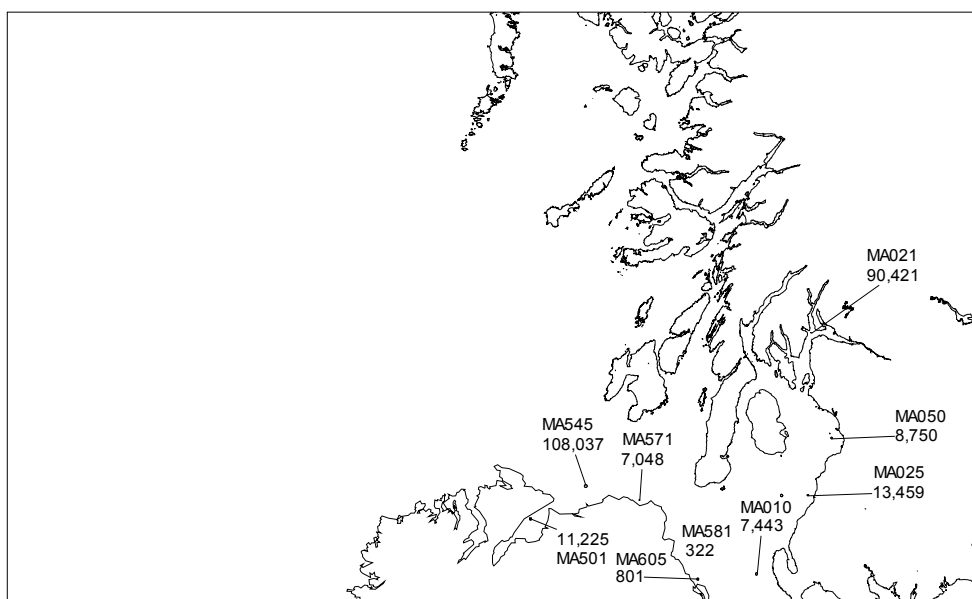
Marine disposal sites in the Irish Sea.  
 Site codes and quantities deposited in tonnes dry weight, in 1999.  
 All tonnages are for dredged material unless stated otherwise.



**Figure 11f** Approximate positions, site codes and quantities (in tonnes) disposed of by the UK in 1999 in Irish Sea

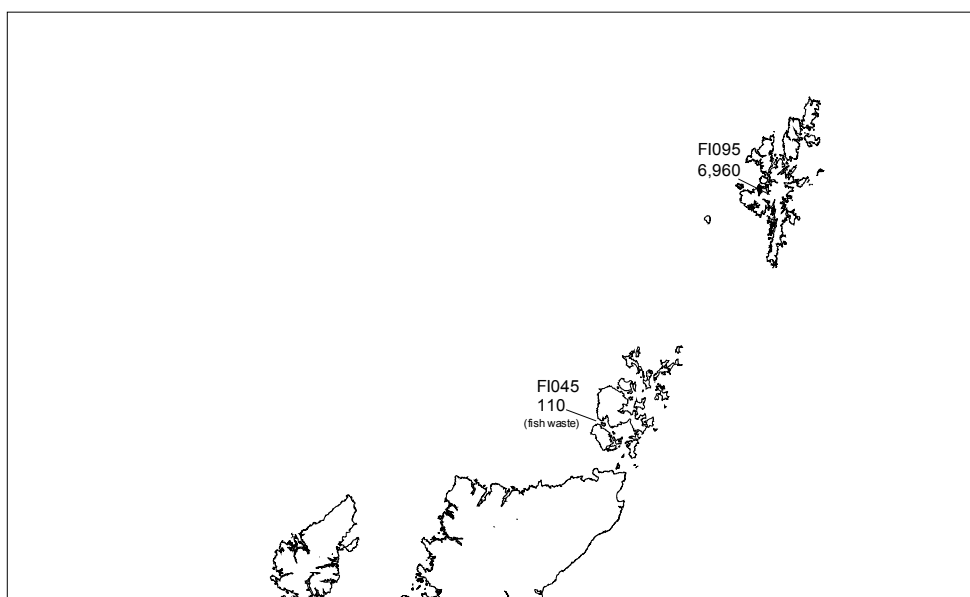


Marine disposal sites in Western Scotland.  
Site codes and quantities deposited in tonnes dry weight, in 1999.  
All tonnages are for dredged material unless stated otherwise.



**Figure 11g** Approximate positions, site codes and quantities (in tonnes) disposed of by the UK in 1999 in Western Scotland

Marine disposal sites in Northern Scotland.  
Site codes and quantities deposited in tonnes dry weight, in 1999.  
All tonnages are for dredged material unless stated otherwise.

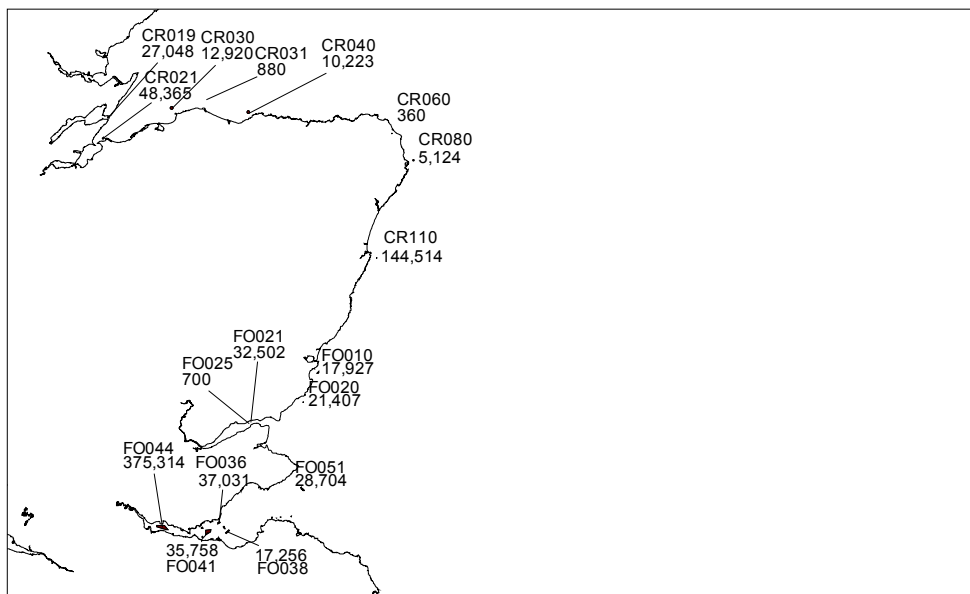


**Figure 11h** Approximate positions, site codes and quantities (in tonnes) disposed of by the UK in 1999 in Northern Scotland

Marine disposal sites in Eastern Scotland.

Site codes and quantities deposited in tonnes dry weight, in 1999.

All tonnages are for dredged material unless stated otherwise.



**Figure 11i** Approximate positions, site codes and quantities (in tonnes) disposed of by the UK in 1999 in Eastern Scotland