OSPAR COMMISSION

Annual OSPAR report on dumping of wastes or other matter at sea in 2009

Denmark had not sent any data for 2009 at the time of publication.

Revisions from the UK were included in this report in September 2011.

Biodiversity Series

2011

OSPAR Convention

The Convention for the Protection of the Marine Environment of the North-East Atlantic (the “OSPAR Convention”) was opened for signature at the Ministerial Meeting of the former Oslo and Paris Commissions in Paris on 22 September 1992. The Convention entered into force on 25 March 1998. 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 Union and Spain.

Convention OSPAR

La Convention pour la protection du milieu marin de l'Atlantique du Nord-Est, dite Convention OSPAR, a été ouverte à la signature à la réunion ministérielle des anciennes Commissions d'Oslo et de Paris, à Paris le 22 septembre 1992. La Convention est entrée en vigueur le 25 mars 1998.
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 l’Union européenne et l’Espagne.

Contents

Part I - Tables

Report on Dumping Permits Issued in 2009

Table 1 Overview of number of permits issued, tonnes licensed and tonnes dumped in 2009

Contracting Party	Number of permits issued for waste category				Number of operations regulated by other means	Tonnes licensed (dry weight)	Tonnes dumped (dry weight)	Notes
	Dredged material	Inert material	Fish waste	Others				
Belgium	0						38 636 216	(1)
France	35					74 920 000	35 992 241	(1), (2)
Germany	17				32	34 714 000	34 714 000	(1)
Iceland	1					39 624	458 149	(1)
Ireland	5				6		249 491	(1) (2) (3) (4) (5) (6)
Netherlands	9				numerous	. 25 000 000 m^3	7 447 421	(1), (2), (3)
Norway	33					329 529	788 597	
		1				459 000		
			1			68		
Portugal						347 500	280 000	
Spain	28					3 338 876	3 338 876	(1) (2)
Sweden	13					97 600	42 725	(1)
United Kingdom	112					30 518 531	17 796 436	(1)(2)
			1			6 000		(3)

Table 2 Specific reporting on dumping operations of dredged material exceeding national action levels for sea disposal within 2009

OSPAR-codes	Contaminants of concern			Tonnes dumped	Reasons for allowing disposal	Notes
Deposit site code	Type	Upper action level (mg/kg)	Average concentration in the material (mg/kg)	(dry weight)		
FRANCE						
F/08508	Cd	2,4	3,3	57 780	(1)	
	Pb	200	390			
	ZN	552	660			
GERMANY	(1)					
D/55	y-HCH	0,0015	0,00355	1000	(2)	
D/55	pp DDT	0,003	0,00627	1000	(2)	
D/57	HCB	0,0055	0,01117	99000	(3)	
D/57	pp DDT	0,003	0,00698	99000	(3)	
D/57	pp DDE	0,003	0,00567	99000	(3)	
D/57	pp DDD	0,006	0,0165	99000	(3)	
D/88	HCB	0,0055	0,0076	374000	(4)	
D/88	pp DDT	0,003	0,00345	163000	(4)	
D/88	pp DDE	0,003	0,00348	374000	(4)	
D/88	pp DDD	0,006	0,00953	374000	(4)	
D/120	HCB	0,0055	0,00555	615000	(4)	
D/120	pp DDE	0,003	0,00363	615000	(4)	
D/120	pp DDD	0,006	0,00909	615000	(4)	
IRELAND						
6	Hg	0,7	0,33	6400	(1)	(2)
NORWAY						
NO/F11	TBT	0,005	0,203	0,0083	(1)	(2)(3)

Amounts of wastes or other matter dumped at sea in 2009

Table 3a Details of categories, origin of dredged material, dredging operation, deposit sites and dumping amounts

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit	dredged	inert	fish	others	origin	type of areas dredged			dredging operation type		(in metric tonnes)	
site	material	material	waste		name of watersystem	Harbour	Estuary	Sea	capital	maintenance	dry weight	notes
Belgium												
B/1	x				Pas van het zand			X		x	1 281 336	
B/1	x				CDNB Zeebrugge			X		x	640 729	
B/1	x				Voorhaven			X		x	26 820	
B/1	x				Scheur Oost			X		x	1 678 137	
B/1	x				Scheur West			X		x	2 012 209	
B/1	x				Pas van het zand			X	X		1 034 972	
B/3	x				Pas van het zand			X		x	375 416	
B/3	x				CDNB Zeebrugge			X		x	546 291	
B/3	x				Voorhaven			X		x	649 787	
B/3	x				Scheur Oost			X		x	264 519	
B/3	x				Scheur West			X		x	284 888	
B/6	x				Haven & voorhaven			X		x	2 802 200	
B/6	x				CDNB Zeebrugge			X		x	1 197 564	
B/6	x				Vlotkom Blankenbergen		X			x	7 627	
B/6	x				Vaargeul Blankenbergen			X		x	2 859	
B/6	x				Toegangsgeul Blankenbergen			X		x	13 945	
B/6	x				Spuikom Blankenbergen		X			x	2 043	
B/9	x				Ingangsgeul Oostende			X		x	14 116	
B/9	x				Montgomery		X			x	89 934	
B/9	x				Haven Oostende		X			x	78 819	
B/9	x				Nieuwe vaargeul Oostende			X	X		476 943	
B/99	x				Toegangsgeul Nieuwpoort			X		x	42 360	
B/99	x				Vaar-& havengeul Nieuwpoort			X		x	48 282	
B/99	x				Nieuwe Jachthaven			X		x	29 737	
B/99	x				Oude vlotkom		X			x	28 926	
B/98	x				Novus Portus		X			x	6 411	
B/int 1a	x				Dr. van Vlissingen		X			x	108 946	
B/int 1a	x				Pas van Terneuzen		X			x	125 814	
B/int 1a	x				Dr. van Borssele		X			x	1 077 548	
B/int 1a	x				Put van Terneuzen		X			x	266 228	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
B/int 1a	x				Dr. van Valkenisse		X			x	37 152	
B/int 1b	x				Dr. van Vlissingen		X			x	99 100	
B/int 1b	x				Pas van Terneuzen		X			x	107 068	
B/int 1b	x				Dr. van Borssele		X			x	810 582	
B/int 1b	x				Put van Terneuzen		X			x	234 190	
B/int 4	x				Overl. Hansweert		X			x	74 706	
B/int 4	x				Dr. van Hansweert		X			x	694 410	
B/int 4	x				Dr. van Walsoorden		X			x	60 320	
B/int 4	x				Ov. Valkenisse 54-58		X			x	44 784	
B/int 4	x				Ov. Valkenisse 58-62		X			x	370 412	
B/int 4	x				Dr. van Valkenisse		X			x	189 506	
B/int 4	x				Nauw van Bath		X			x	61 410	
B/int 4	x				Dr. van Bath		X			x	124 172	
B/int 4	x				Vaarwater boven Bath		X			x	38 182	
B/int 7	x				Overl. Hansweert		X			x	10 152	
B/int 7	x				Dr. van Hansweert		X			x	611 908	
B/int 7	x				Dr. van Valkenisse		X			x	35 924	
B/int 8	x				Dr. van Borssele		X			x	962 234	
B/int 8	x				Pas van Terneuzen		X			x	370 312	
B/int 8	x				Put van Terneuzen		X			x	187 028	
B/int 8	x				Overl. Hansweert		X			x	513 906	
B/int 8	x				Dr. van Hansweert		X			x	663 580	
B/int 8	x				Ov. Valkenisse 58-62		X			x	180 556	
B/int 8	x				Dr. van Valkenisse		X			x	1 087 532	
B/int 8	x				Dr. van Bath		X			x	278 310	
B/int 9	x				Dr. van Hansweert		X			x	1 909 558	
B/int 9	x				Dr. van Walsoorden		X			x	221 958	
B/int 9	x				Ov. Valkenisse 54-58		X			x	167 260	
B/int 9	x				Ov. Valkenisse 58-62		X			x	811 104	
B/int 9	x				Dr. van Valkenisse		X			x	575 618	
B/int 9	x				Nauw van Bath		X			x	127 542	
B/int 9	x				Dr. van Bath		X			x	1 595 992	
B/int 9	x				Vaarwater boven Bath		X			x	118 548	
B/int 15	x				Dr. van Valkenisse		X			x	392	
B/int 17	x				Wielingen		X			x	655 612	
B/int 0	x				Toeg. Kallosluis		X			x	81 306	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
B/int 0	x				Toeg. Bou/Cau-sluis		X			x	29 034	
B/int 0	x				Deurganckdok		X			x	356 052	
B/int 1bis	x				Dr. van Zandvliet		X			x	1 568 444	
B/int 1bis	x				Dr. van Frederik		X			x	690 470	
B/int 1bis	x				Dr. van Lillo		X			x	264 474	
B/int 1bis	x				Dr. van De Parel		X			x	220 550	
B/int 1bis	x				Krankeloon		X			x	56 236	
B/int 12	x				Dr. van Zandvliet		X			x	2 354	
B/int 12	x				Toeg. Zand/Beren-sluis		X			x	663 974	
B/int 12	x				Dr. van Frederik		X			x	34 258	
B/int 12	x				Dr. van Lillo		X			x	84 582	
B/int 12	x				Vaarwater PI. Lillo		X			x	10 346	
B/int 12	x				Toeg. Kallosluis		X			x	303 052	
B/int 12	x				Toeg. Bou/Cau-sluis		X			x	80 938	
B/int 12	x				Deurganckdok		X			x	962 292	
B/int 13	x				Dr. van Zandvliet		X			x	62 088	
B/int 13	x				Toeg. Zand/Beren-sluis		X			x	670 340	
B/int 13	x				Dr. van Frederik		X			x	50 048	
B/int 13	x				Dr. van Lillo		X			x	87 474	
B/int 13	x				Vaarwater PI. Lillo		X			x	16 436	
B/int 13	x				Toeg. Kallosluis		X			x	245 076	
B/int 13	x				Toeg. Bou/Cau-sluis		X			x	48 578	
B/int 13	x				Deurganckdok		X			x	674 772	
B/int 0	x				Dr. van Frederik		X		X		1 432	
B/int 1 bis	x				Dr. van Zandvliet		X		X		501 202	
B/int 1 bis	x				Dr. van Frederik		X		X		1 246 744	
B/int 1 bis	x				Vaarwater PI. Lillo		X		X		243 096	
B/int 1 bis	x				Dr. van Deurganckdok		X		X		121 640	
B/int 12	x				Vaarwater PI. Lillo		X		X		578	
B/int 13	x				Dr. van Frederik		X		X		11 924	
Total											**38 636 216**	

France												
F/05901	x					x				x	928 523	
F/05902	x					x				x	437 443	
F/05903	x					x				x	66 978	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
F/05904	x					x				x	399 496	
F/06201	x					x				x	481 000	
F/06202	x					x				x	633 000	
F/07601	x					x				x	5 772 000	
F/07602	x					x	x			x	7 627 826	
F/07603	x					x				x	149 946	
F/07606	x					x				x	23 392	
F/01401	x					x				x	198 400	
F/01409	x					x				x	52 735	
F/05004	x					x				x	10 730	
F/02907	x					x				x	7 645	
F/05601	x					x				x	142 818	
F/05602	x					x				x	15 000	
F/04401	x						x			x	3 176 030	
F/04402	x					x				x	28 600	
F/04408	x					x				x	34 000	
F/04412	x					x				x	10 600	
F/08503	x					x				x	47 047	
F/08506	x					x				x	21 828	
F/08507	x					x				x	1 717	
F/08510	x					x				x	2 720	
F/01701a	x					x				x	182 521	
F/01702	x					x				x	7 994	
F/01704b	x					x				x	4 292	
F/01706	x					x				x	69 746	
F/01707	x					x				x	102 720	
F/01710	x					x				x	49 895	
F/01714b	x					x				x	3 031	
F/01715	x					x				x	21 458	
F/03325	x					x				x	7 500 000	
F/03317;F/03318	x					x				x	74 000	
F/03301;F/03303;F/03305;F/03307;F/03311	x					x				x	1 052 000	
F/03307;F/03308; F/03311;F/03309 ;F/03312	x					x				x	2 925 000	
F/03312	x					x				x	46 000	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
F/03314; F/03315; F/03316;F/03317	x					x				x	2 492 000	
F/03319	x					x				x	716 000	
F/03330	x					x				x	48 000	
F/06401	x					x				x	253 288	
F/06401;F/06403	x					x				x	174 820	
Total											**35 992 241**	

Germany												
D/10	x				Dagebüll harbour	H				x	1 000	
D/13	x				Harbour and outer harbour of Büsum	H				x	21 000	
D/20	x				Outer harbour of Hooksiel	H				x	17 000	
D/21	x				Wangerooge harbour	H				x	2 000	
D/22	x				Spiekeroog harbour	H				x	6 000	
D/25	x				Baltrum harbour	H				x	1 000	
D/30	x				Norderney harbour	H				x	1 000	
D/32	x				Norddeich harbour	H				x	11 000	
D/36	x				Borkum, Minitrain harbour and approach channel of Borkum island	H				x	1 000	
D/40	x				Harbour basin of river Eider flood gate system	H				x	53 000	
D/45	x				Approach channel of Juist harbour	H				x	2 000	
D/54	x				Friedrichskoog harbour	H				x	40 000	
D/55	x				Amrum /Wittdün approach channel of harbour	H				x	1 000	
D/56	x				Niedersachsenbrücke Wilhelmshaven (seaward mooring berth)	H,E				x	11 000	
D/56	x				Niedersachsenbrücke Wilhelmshaven (landside mooring berth)	H,E				x	29 000	
D/56	x				Wilhelmshaven	H,E				x	18 000	
D/57	x				Hamburg harbour	H				x	99 000	
D/58	x				Langeoog harbour, Bensersiel harbour and approach channel to Bensersiel harbour	H				x	4 000	
D/59	x					H,E				x	422 000	
D/63	x				Ems estuaray, navigation channel km 40,7-74,6	E				x	2 469 000	
D/65	x				Ems estuaray, navigation channel km 31-53	E				x	2 935 000	
D/70	x				Jade bay / navigation channel km 6,0-15,0; Neuer Vorhafen WHV	H,E				x	104 000	
D/72	x				Jade bay / navigation channel km 6,0-15,0	H,E				x	427 000	
D/74	x				Jade bay / navigation channel km 35-54,0	H,E				x	170 000	
D/75	x				Jade bay / navigation channel km 41,0-54,0	H,E				x	1 294 000	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
D/78	x				Jade bay / navigation channel Neuer Vorhafen WHV	E				x	144 000	
D/79	x					H,E				x	101 000	
D/80	x				Weser estuary / navigation channel km 78,0-91	E				x	534 000	
D/82	x				Weser estuary / navigation channel km 70,4-78,0; km 91 - 110	E				x	694 000	
D/84	x				Weser estuary / navigation channel km 70,4-78,0; km 91 - 130	E				x	878 000	
D/85	x				Weser estuary / navigation channel km 55,0-58	E				x	993 000	
D/86	x				Weser estuary / navigation channel km 55,0-58	E				x	1 204 000	
D/87	x				Weser estuary / navigation channel km 70,4-78,0	E				x	1 464 000	
D/88	x				Elbe estuary / navigation channel; km 638-717	H,E				x	1 720 000	
D/88	x				Elbe estuary / navigation channel; km 638,9-644	H,E				x	163 000	
D/88	x				Elbe estuary / navigation channel; km 649,5-654,5	H,E				x	211 000	
D/91	x				Elbe estuary / navigation channel; okm 689,8-726,0; Weststrecke	H,E				x	119 000	
D/92	x				Elbe estuary / navigation channel; km 689,9-732,0	H,E				x	784 000	
D/93	x				Elbe estuary / navigation channel; km 698,5-739,0	H,E				x	693 000	
D/94	x				Elbe estuary / navigation channel; km 698,5-748,0	H,E				x	2 911 000	
D/96	x				Elbe estuary / navigation channel; km 717,0-739,0	H,E				x	190 000	
D/98	x				Elbe estuary / navigation channel; Altenbruch km 717,0-726,0; km 732,0-748,0	H,E				x	4 135 000	
D/101	x				outer port of the lock to the "Nord-Ostsee-Kanal" (Kiel-Canal); inner part of "Nord-Ostsee-Kanal"	H,E				x	3 596 000	
D/119	x				Cuxhaven harbour	H				x	1 115 000	
D/120	x										615 000	
D/121	x					H,E				x	1 500 000	
D/122	x					E				x	1 160 000	
D/123	x					E				x	864 000	
D/124	x					E				x	87 000	
D/125	x					E				x	624 000	
D/126	x					H,E				x	53 000	
D/127	x					S				x	23 000	
Total											**34 714 000**	

Iceland												
IS/45	x					x			x		18 666	
IS/56	x					x			x		263 520	
IS/59	x					x			x		175 963	
Total											**458 149**	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
Ireland												
IRL/6	x				Howth	x				x	6 400	
IRL/8	x				Waterford		x			x	174 216	
IRL/20	x				Drogheda		x			x	6 235	
IRL/47	x				Drogheda		x			x	51 105	
IRL/52	x				Castletownbere	x			x		7 680	
IRL/55	x				Magheraroarty	X				X	3 855	
Total											**249 491**	
Netherlands												
NL-6	x				Scheveningen	x				x	0	(1)
NL-7	x				IJmuiden	x					1 077 038	
NL-8	x				Rotterdam	x			x	x	6 369 883	
NL-10	N/A				Eastern Scheldt							(2)
NL-11	N/A				Western Scheldt							(2)
NL-13	N/A				Waddensea West							(2)
NL-14	N/A				Waddensea East							(2)
NL-15	N/A				Ems-Dollard							(2)
NL-15	x				Ems-Dollard	x	x			x	500	
Total											**7 447 421**	
Norway												
NO7			x			NI	NI	NI	NI	NI	68	(1)
TE1	x					NI	NI	NI	NI	NI	723	(1)
TE2	x					NI	NI	NI	NI	NI	382	(1)
TE3	x					NI	NI	NI	NI	NI	1 526	(1)
TE4	x					NI	NI	NI	NI	NI	750	(1)
VE1	x					NI	NI	NI	NI	NI	2 720	(1)
VE3	x					NI	NI	NI	NI	NI	2 320	(1)
VE4	x					NI	NI	NI	NI	NI	2 928	(1)
HO3	x					NI	NI	NI	NI	NI	240	(1)
HO4	x					NI	NI	NI	NI	NI	160	(1)
HO5	x					NI	NI	NI	NI	NI	2 160	(1)
OS3	x					NI	NI	NI	NI	NI	20 500	(1)
OS2	x					NI	NI	NI	NI	NI	35 500	(1)
OS4	x					NI	NI	NI	NI	NI	13 100	(1)
OS1	x					NI	NI	NI	NI	NI	4 000	(1)
MR8	x					NI	NI	NI	NI	NI	800	(1)
MR9	x					NI	NI	NI	NI	NI	600	(1)

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit	dredged	inert	fish	others	origin	type of areas dredged			dredging operation type		(in metric tonnes)	
site	material	material	waste		name of watersystem	Harbour	Estuary	Sea	capital	maintenance	dry weight	notes
MR10		x				NI	NI	NI	NI	NI	459 000	(1)
NT5	x					NI	NI	NI	NI	NI	990	(1)
SF6	x					NI	NI	NI	NI	NI	500	(1)
FI1	x					NI	NI	NI	NI	NI	163 800	(1)
FI2	x					NI	NI	NI	NI	NI	11 430	(1)
TR6	x					NI	NI	NI	NI	NI	50 000	(1)
TR7	x					NI	NI	NI	NI	NI	2 000	(1)
TR8	x					NI	NI	NI	NI	NI	6 400	(1)
TR9	x					NI	NI	NI	NI	NI	6 000	(1)
Total											**788 597**	
Portugal												
P/1	x			1	Vila Praia de Âncora	x				x	7 500	
P/2	x			2	Póvoa de Varzim	x				x	272 500	
Total											**280 000**	
Spain												
E/1	x				Pasajes		x			x	25 781	
E/2C	x				Ondarroa		x			x	25 751	
E/3	x				Santander	x				X	6 825	
E/3B	x				Laredo	x				x	39 467	
E/3B	x				Colindres		x			x	57 940	
E/3C	x				Suances		x			x	43 750	
E/3D	x				San Vicente de la Barquera	x				x	10 057	
E/3E	x				Comillas	x				x	3 500	
E/4B	x				Llanes		x			x	20 550	
E/4C	x				Candás	x				x	24 227	
E/4D	x				Lastres	x				x	4 897	
E/4E	x				Ribadesella		x			x	116 866	
E/5	x				Avilés		x		x		640 236	
E/5B	x				San Esteban de Pravia		x			x	96 600	
E/5B	x				San Juan de la Arena		x			x	20 300	
E/5C	x				Navia		x			x	107 625	
E/5D	x				Luarca	x				x	36 238	
E/5E	x				Puerto de Vega	x				x	569	
E/5F	X				Figueras		x			x	94 500	
E/6B	X				Burela	x			x		112 875	
E/6B	X				Ribadeo		x			x	168 000	
E/7	X				A Coruña		x		x		58 889	
E/7B	X				Laxe		x			x	10 850	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
E/8	X				Vilagarcía	x			x		569 201	
E/8	X				Moaña		x		x		34 662	
E/10	X				Huelva		x		x		151 058	
E/12	X				Cádiz	x				x	2 250	
E/12	X				Rota	x			x		830 213	
E/12C	X				Barbate	x			x		25 200	
Total											**3 338 876**	
Sweden												
SWE/1					Sydkoster, Skagerrak	x				x	120	(1)
SWE/1					Daftö, Skagerrak	x				x	150	(2)
SWE/2					Hällsö, Skagerrak	x				x	60	(3)
SWE/2					Skagerrak	x				x	1 320	(4)
SWE/2					Grebbestad, Skagerrak	x			x		750	(5)
SWE/2					Galtö, Skagerrak	x			x		700	(6)
SWE/5					Orust, Skagerrak	x				x	125	(7)
SWE/27					Ulvön, Skagerrak	x				x	2 500	(8)
SWE/28					Härmanö, Skagerrak	x				x	600	(9)
SWE/11					Göteborg, Kattegat	x				x	18 600	(10)
SWE/10					Göteborg, Kattegat	x				x	4 150	(11)
SWE/26					Kullsvik, Kattegat	x				x	150	(12)
SWE/17					Varberg, Kattegat	x				X	13 500	(13)
Total											**42 725**	
United Kingdom												
CR019	x				Cromarty Firth	x				x	50 000	
CR027	x				Beauly Firth			x		x	0	
CR030	x				Moray Firth	x				x	5 800	
CR040	x				Spey Bay/Moray Firth	x				x	5 798	
CR050	x				Grampian Coast	x				x	2 513	
CR060	x				Grampian Coast	x				x	16 890	
CR070	x				Grampian Coast	x				x	0	
CR080	x				Grampian Coast	x			x		179 413	
CR080	x				Grampian Coast	x				x	4 262	
CR110	x				Dee River	x			x		3 578	
CR110	x				Dee River	x				x	381 243	
DV010	x				Kent Coast			x	x		0	
DV010	x				Kent Coast	x				x	173 712	
DV011	x				Kent Coast	x				x	0	
DV040	x				Rother River and Kent Coast	x				x	28 431	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
FI002	x				Dounrey burn, Caithness			x		x	5	
FI080	x				Shetland Coast	x			x		0	
FO007	x				Grampian Coast	x				x	0	
FO010	x				South Esk River	x			x		49 232	
FO010	x				South Esk River		x			x	49 232	
FO020	x				Tayside Coast	x				x	6 201	
FO028	x				Firth of Tay	x	x			x	51 774	
FO036	x				Firth Of Forth	x			x		325 080	
FO036	x				Firth Of Forth			x		x	4 650	
FO038	x				Firth Of Forth	x				x	20 560	
FO041	x				Firth Of Forth	x		x		x	70 814	
FO042	x				Firth Of Forth	x		x		x	28 568	
FO043	x				Firth Of Forth	x		x		x	28 949	
FO044	x				Firth Of Forth	x				x	490 447	
FO080	x				Tweed River	x	x			x	0	
HU015	x				Humberside Coast	x				x	1 889	
HU020	x				Humber River	x				x	44 223	
HU030	x				Humber River	x				x	235 234	
HU040	x				Humber River	x				x	2 346	
HU041	x				Humber River	x				x	6 922	
HU060	x				Humber River	x			x		0	
HU060	x				Humber River	x	x	x		x	2 862 328	
HU080	x				Humber River	x	x			x	0	
HU090	x				Humber River	x	x			x	191 683	
HU090	x				Humber River	x				x	18 673	
HU143	x				Great Ouse River	x	x			x	44 950	
HU150	x				Yare River	x	x			x	3 245	
HU170	x				Witham River	x				x	9 519	
HU199	x				Orwell River	x				x	0	
HU203	x				north Sea			x	x		98 144	
IS035	x				Deganwy/ River Conwy	x				x	1 180	
IS040	x				Anglesey Coast	x				x	39 290	
IS065	x				Deganwy/ River Conwy	x				x	11 598	
IS102	x				Dee River, Wales		x			x	157 476	
IS110	x				Mersey River	x	x			x	156 665	
IS120	x				Mersey River/Liverpool Bay	x	x	x		x	215 883	
IS128	x				Mersey River	x	x	x		x	14 962	
IS140	x				Mersey River	x	x	x		x	1 077 479	
IS150	x				Mersey River/Liverpool Bay	x		x		x	0	
IS164	x				River Ribble	x				x	0	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
IS170	x				Wyre River	x				x	405 664	
IS192	x				Lune River	x				x	5 934	
IS200	x				Morecambe Bay	x	x			x	220 014	
IS205	x				Cumbria Coast	x		x		x	1 146 799	
IS231	x				Cumbria Coast	x				x	0	
IS240	x				Cumbria Coast			x	x		0	
IS240	x				Cumbria Coast	x				x	0	
IS241	x				Cumbria Coast	x				x	73 771	
IS400	x				Douglas/ Peel (IOM)	x				x	1 050	
IS420	x				Douglas/ Peel (IOM)	x				x	150	
IS591	x				Belfast Lough	x			x		103 015	
IS591	x				Belfast Lough	x	x			x	298 989	
IS620	x				Down Coast	x				x	1 082	
IS650	x				Down Coast	x				x	7 093	
IS671	x				Carlingford Lough	x			x		106 565	
LU010	x				Camel River	x				x	2 222	
LU055	x				Somerset Coast	x				x	1 996	
LU070	x				Avon River	x	x			x	60 087	
LU080	x				Avon River	x	x			x	61 082	
LU083	x				Avon River	x	x			x	0	
LU084	x				Avon River	x	x			x	7 469	
LU085	x				Avon River	x	x			x	0	
LU086	x				Avon River	x	x	x		x	0	
LU087	x				Avon River	x				x	0	
LU110	x				Taff R./Severn Est.	x				x	221 026	
LU115	x				Severn Estuary	x				x	17 155	
LU130	x				Tawe & Neath Rivers/Swansea Bay	x			x		0	
LU130	x				Tawe & Neath Rivers/Swansea Bay	x		x		x	1 059 589	
LU140	x				Usk River	x				x	99 755	
LU168	x				Milford Haven		x		x		0	
LU169	x				Milford Haven		x		x		0	
LU169	x				Milford Haven	x	x			x	1 062	
LU190	x				Milford Haven		x			x	2 101	
MA010	x				Loch Ryan	x				x	0	
MA016	x				Firth of Clyde	x			x		9 450	
MA021	x				Firth Of Clyde	x			x		0	
MA021	x				Firth Of Clyde	x	x			x	150 482	
MA050	x				Firth Of Clyde	x				x	42 100	
MA051	x				Foyle River	x				x	10 251	
MA545	x				Foyle River	x				x	830	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
NS100	x				Suffolk Coast			x	x		22 140	(1)
PL031	x				Tamar River & Kingsbridge Estuary	x	x			x	17 626	
PL060	x				Fowey River/Cornwall Coast South	x				x	17 273	
PL075	x				Falmouth Harbour/Truro River/Mounts Bay	x				x	0	
PO070	x				Teign River	x				x	3 848	
PO090	x				Teign River	x				x	0	
RB001	x				River Ribble	x				x	1 386	(2)
TH005	x				Waveney River	x				x	19 953	
TH034	x				Orwell River		x		x		0	
TH034	x				Orwell River	x				x	15 793	
TH052	x				Orwell/Stour Rivers + Thames Estuary	x			x		108 566	
TH052	x				Orwell/Stour Rivers + Thames Estuary	x	x	x		x	1 594 651	
TH052	x				Orwell/Stour Rivers + Thames Estuary	x				x	0	
TH056	x				River Orwell	x			x		2 279 629	
TH062	x				Blackwater River		x			x	0	
TH070	x				Thames Estuary		x	x		x	74 980	
TH070	x				Thames Estuary	x				x	0	
TH140	x				Kent Coast	x				x	39 922	
TH211	x				Orwell River	x	x			x	32 494	
TH216	x				River Orwell/ Stour	x	x			x	24 616	
TH217	x				River Orwell/ Stour	x				x	9 715	
TH218	x				River Orwell/ Stour	x	x			x	7 249	
TH219	x				River Orwell/ Stour	x	x			x	7 249	
TY022	x				Coquet River		x			x	21 166	
TY025	x				Coquet River		x			x	0	
TY042	x				Northumberland Coast	x				x	111 311	
TY070	x				Tyne River	x			x		0	
TY070	x				Tyne River		x			x	97 521	
TY081	x				Tyne River	x	x		x		0	
TY081	x				Tyne River	x	x			x	68 784	
TY085	x				Tyne River	x			x		0	
TY090	x				River Wear	x		x		x	169 171	
TY130	x				Durham Coast	x		x		x	18 635	
TY150	x				Tees River/Hartlepool Bay	x	x		x		6 467	
TY150	x				Tees River/Hartlepool Bay	x	x	x		x	0	
TY160	x				Tees River/Hartlepool Bay	x	x		x		110 232	
TY160	x				Tees River/Hartlepool Bay	x	x	x		x	845 280	
TY180	x				Esk River	x	x			x	26 263	
TY181	x				North Yorkshire Coast			x		x	30 746	
TY190	x				North Yorkshire Coast	x				x	3 776	

OSPAR-codes	categories				In case of dredged material						total quantity	
Deposit site	dredged material	inert material	fish waste	others	origin name of watersystem	type of areas dredged Harbour	Estuary	Sea	dredging operation type capital	maintenance	(in metric tonnes) dry weight	notes
WI010	x				Ouse River (E.Sussex)	x		x		x	240 835	
WI020	x				East Sussex Coast	x				x	22 773	
WI031	x				Sussex Coast	x				x	44 259	
WI035	x				Sussex Coast			x		x	0	
WI045	x				Chichester Harbour	x				x	0	
WI046	x				Chichester Harbour	x				x	1 967	
WI060	x				So'ton Water, IoW, Portsmouth...	x			x		3 952	
WI060	x				So'ton Water, IoW, Portsmouth...	x	x	x		x	303 415	
WI060	x				So'ton Water, IoW, Portsmouth...	x				x	515	
WI071	x				IoW		x			x	1 075	
WI080	x				So'ton Water, IoW etc.	x			x		0	
WI080	x				So'ton Water, IoW etc.	x	x			x	17 866	
WI090	x				So'ton Water, IoW etc.	x	x	x		x	0	
WI110	x				Poole Harbour	x			x		9 482	
WI110	x				Poole Harbour	x	x	x		x	68 173	
WI110	x				Poole Harbour	x				x	0	
WI111	x				Poole Harbour	x				x	6 174	
IS015			x		New Quay, Wales						1 887	
Total											**17 796 436**	

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

OSPAR-codes	in tonnes													in kilogrammes													
Deposit site	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	ΣPAH9	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	ΣPCB7	Total CB	HCB	g-HCH	DDT	TBT	DBT	other/ notes
Belgium																												
B/1	0,769	0,128	16,914	59,582	12,557	32,033	17,554	90,334			26,139										0,123					0,007		
B/1	0,404	0,109	10,892	39,725	9,803	23,707	12,174	64,073			8,848										0,346					0,007		
B/1	0,027	0,033	0,429	1,636	0,526	0,939	0,510	2,923			1,373										0,014					0,002		
B/1	0,839	0,185	21,816	68,804	14,096	38,597	21,816	104,044			48,300										0,000					0,013		
B/1	1,006	0,221	26,159	82,501	16,903	46,281	26,159	124,757			57,952										0,000					0,016		
B/1	0,621	0,103	13,662	48,126	10,143	25,874	14,179	72,966			21,113										0,099					0,006		
B/3	0,225	0,038	4,950	17,457	3,679	9,385	5,143	26,467			7,658										0,036					2,065		
B/3	0,344	0,093	9,287	33,870	8,358	20,213	10,380	54,629			7,544										0,295					0,006		
B/3	0,396	0,130	10,397	39,637	12,736	22,743	12,346	70,827			16,628										0,170					0,029		
B/3	0,132	0,029	3,439	10,845	2,222	6,084	3,439	16,400			7,618										0,000					0,002		
B/3	0,142	0,031	3,704	11,680	2,393	6,552	3,704	17,663			8,205										0,000					0,002		
B/6	1,709	0,560	44,835	170,934	54,923	98,077	53,241	305,440			71,708										0,734					0,126		
B/6	0,754	0,204	20,359	74,249	18,323	44,310	22,754	119,756			16,538										0,647					0,013		
B/6	0,008	0,002	0,229	0,839	0,264	0,503	0,275	1,434			0,459										0,004					0,000		
B/6	0,001	0,000	0,029	0,043	0,014	0,029	0,014	0,040			0,048										0,049					0,000		
B/6	0,011	0,003	0,279	0,418	0,139	0,279	0,139	0,390			0,465										0,474					0,000		
B/6	0,001	0,000	0,031	0,112	0,035	0,067	0,037	0,192			0,061										0,000					0,000		
B/9	0,006	0,002	0,212	0,706	0,158	0,423	0,226	1,087			0,342										0,003					0,000		
B/9	0,049	0,015	1,529	6,385	1,799	3,777	1,979	10,792			2,698										0,000					0,000		
B/9	0,043	0,013	1,340	5,596	1,576	3,310	1,734	9,458			2,365										0,000					0,000		
B/9	0,215	0,067	7,154	23,847	5,628	14,308	7,631	36,725			11,542										0,091					0,001		
B/99	0,017	0,004	0,424	0,212	0,593	0,424	0,297	0,805			3,791										0,037					0,000		
B/99	0,019	0,005	0,483	0,676	0,241	0,483	0,338	0,917			4,321										0,042					0,000		
B/99	0,015	0,004	0,446	1,695	0,476	0,981	0,565	2,855			0,572										0,000					0,000		
B/99	0,015	0,004	0,434	1,649	0,463	0,955	0,550	2,777			0,560										0,000					0,000		
B/99	0,003	0,001	0,096	0,365	0,103	0,212	0,122	0,615			0,123										0,000					0,000		
B/int 1a	<d.l.	0,000	1,130	2,420	<d.l.	0,620	0,310	2,590	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 1a	<d.l.	0,030	7,000	22,360	3,340	6,950	7,000	30,550	<d.l.		116,910										0,590					6,470		
B/int 1a	<d.l.	<d.l.	1,740	2,580	0,190	1,140	0,550	3,850	<d.l.		1,130										<d.l.					<d.l.		
B/int 1a	<d.l.	<d.l.	2,960	5,060	0,430	1,860	0,990	7,290	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 1a	<d.l.	0,000	0,170	0,500	0,080	0,170	0,130	0,820	<d.l.		0,890										0,010					<d.l.		
B/int 1b	<d.l.	0,000	1,030	2,200	<d.l.	0,560	0,280	2,360	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 1b	<d.l.	0,020	5,270	16,820	2,510	5,230	5,270	22,980	<d.l.		87,950										0,450					4,860		
B/int 1b	<d.l.	<d.l.	1,480	2,190	0,160	0,970	0,470	3,280	<d.l.		0,960										<d.l.					<d.l.		
B/int 1b	<d.l.	<d.l.	2,600	4,450	0,370	1,640	0,870	6,420	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 4	<d.l.	<d.l.	0,760	1,410	<d.l.	0,420	0,240	1,790	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 4	<d.l.	<d.l.	3,580	12,530	<d.l.	2,120	2,430	11,080	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 4	<d.l.	<d.l.	0,240	0,640	<d.l.	0,170	0,140	0,780	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 4	<d.l.	<d.l.	0,190	0,570	0,070	0,160	0,140	0,790	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 4	<d.l.	<d.l.	1,670	5,190	<d.l.	1,520	1,330	7,330	<d.l.		<d.l.										<d.l.					2,040		
B/int 4	<d.l.	0,000	0,880	2,570	0,390	0,850	0,680	4,160	<d.l.		4,550										0,040					<d.l.		
B/int 4	<d.l.	0,010	0,530	1,340	0,410	0,740	0,400	3,320	5,780		13,760										0,460					<d.l.		
B/int 4	<d.l.	0,000	0,660	1,800	0,210	0,640	0,420	3,120	<d.l.		2,300										<d.l.					<d.l.		
B/int 4	<d.l.	0,000	0,350	0,640	0,290	0,550	0,230	2,420	<d.l.		9,010										<d.l.					0,210		
B/int 7	<d.l.	<d.l.	0,100	0,190	<d.l.	0,060	0,030	0,240	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 7	<d.l.	<d.l.	3,150	11,040	<d.l.	1,870	2,140	9,760	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 7	<d.l.	0,000	0,170	0,490	0,070	0,160	0,130	0,790	<d.l.		0,860										0,010					<d.l.		
B/int 8	<d.l.	0,030	6,250	19,970	2,980	6,210	6,250	27,280	<d.l.		104,400										0,530					5,770		
B/int 8	<d.l.	<d.l.	5,110	7,590	0,560	3,370	1,630	11,330	<d.l.		3,330										<d.l.					<d.l.		
B/int 8	<d.l.	<d.l.	2,080	3,550	0,300	1,310	0,690	5,120	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 8	<d.l.	<d.l.	5,240	9,710	<d.l.	2,880	1,640	12,280	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 8	<d.l.	<d.l.	3,420	11,980	<d.l.	2,020	2,320	10,580	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 8	<d.l.	<d.l.	0,810	2,530	<d.l.	0,740	0,650	3,580	<d.l.		<d.l.										<d.l.					0,990		
B/int 8	<d.l.	0,010	5,060	14,740	2,230	4,890	3,920	23,870	<d.l.		26,100										0,220					<d.l.		
B/int 8	<d.l.	0,010	1,490	4,040	0,470	1,430	0,950	7,000	<d.l.		5,150										<d.l.					<d.l.		
B/int 9	<d.l.	<d.l.	9,830	34,470	<d.l.	5,820	6,680	30,460	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 9	<d.l.	<d.l.	0,870	2,350	<d.l.	0,640	0,530	2,860	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 9	<d.l.	<d.l.	0,720	2,120	0,270	0,600	0,520	2,960	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 9	<d.l.	<d.l.	3,650	11,360	<d.l.	3,330	2,920	16,060	<d.l.		<d.l.										<d.l.					4,460		
B/int 9	<d.l.	0,010	2,680	7,800	1,180	2,590	2,070	12,630	<d.l.		13,810										0,120					<d.l.		
B/int 9	<d.l.	0,020	1,100	2,790	0,860	1,530	0,820	6,890	12,010		28,570										0,960					<d.l.		
B/int 9	<d.l.	0,030	8,540	23,140	2,710	8,220	5,430	40,140	<d.l.		29,530										<d.l.					<d.l.		
B/int 9	<d.l.	0,010	1,080	1,980	0,890	1,700	0,700	7,530	<d.l.		27,980										<d.l.					0,640		
B/int 15	<d.l.	0,000	0,000	0,010	0,000	0,000	0,000	0,010	<d.l.		0,010										0,000					<d.l.		
B/int 17	<d.l.	<d.l.	5,570	10,560	0,920	3,210	2,490	14,620	<d.l.		<d.l.										<d.l.					<d.l.		
B/int 0	0,260	0,060	2,320	8,000	5,790	7,980	2,720	36,130	38,950		339,400										3,610					2,520		

OSPAR-codes	in tonnes													in kilogrammes													
Deposit site	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	ΣPAH9	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	ΣPCB7	Total CB	HCB	g-HCH	DDT	TBT	DBT	other/ notes
B/int 0	0,080	0,020	0,720	2,150	1,530	2,240	0,760	10,700	11,210		114,770										0,990					0,900		
B/int 0	0,820	0,200	10,010	32,010	21,080	29,800	11,070	133,700	123,020		1 469,600										13,190					8,720		
B/int 1bis	<d.l.	0,190	15,370	37,960	19,060	32,150	14,740	146,020	144,300		873,620										12,860					11,450		
B/int 1bis	<d.l.	0,070	6,870	15,980	7,910	11,880	6,110	62,350	45,570		460,200										2,590					<d.l.		
B/int 1bis	0,180	0,040	3,320	8,120	3,700	6,430	2,530	32,930	<d.l.		227,320										2,090					1,350		
B/int 1bis	<d.l.	0,020	2,400	6,900	2,500	4,410	1,830	20,910	<d.l.		163,870										1,160					0,860		
B/int 1bis	0,040	0,010	0,800	1,460	0,210	0,830	0,310	6,830	<d.l.		24,100										0,190					<d.l.		
B/int 12	<d.l.	0,000	0,020	0,060	0,030	0,050	0,020	0,220	0,220		1,310										0,020					0,020		
B/int 12	1,330	0,440	17,530	42,390	34,930	49,860	16,830	212,800	207,160		2 033,090										16,170					16,930		
B/int 12	<d.l.	0,000	0,340	0,790	0,390	0,590	0,300	3,090	2,260		22,830										0,130					<d.l.		
B/int 12	0,970	0,010	1,060	2,600	1,180	2,060	0,810	10,530	<d.l.		72,700										0,670					0,430		
B/int 12	0,060	0,000	0,120	0,280	0,130	0,210	0,100	1,110	0,340		7,890										0,060					0,030		
B/int 12	2,970	0,220	8,650	29,830	21,580	29,730	10,130	134,660	145,160		1 265,040										13,470					9,390		
B/int 12	0,210	0,040	2,020	6,000	4,270	6,240	2,120	29,830	31,240		319,950										2,760					2,510		
B/int 12	2,210	0,530	27,040	86,510	56,970	80,540	29,930	361,340	332,470		3 971,860										35,650					23,580		
B/int 13	<d.l.	0,010	0,610	1,500	0,750	1,270	0,580	5,780	5,710		34,580										0,510					0,450		
B/int 13	1,340	0,450	17,700	42,800	35,260	50,340	16,990	214,840	209,150		2 052,580										16,320					17,090		
B/int 13	<d.l.	0,000	0,500	1,160	0,570	0,860	0,440	4,520	3,300		33,360										0,190					<d.l.		
B/int 13	0,060	0,010	1,100	2,690	1,220	2,130	0,840	10,890	<d.l.		75,180										0,690					0,450		
B/int 13	0,010	0,000	0,180	0,440	0,210	0,340	0,150	1,770	0,540		12,540										0,100					0,040		
B/int 13	0,780	0,170	6,990	24,120	17,450	24,040	8,190	108,900	117,390		1 023,030										10,890					7,600		
B/int 13	0,130	0,030	1,210	3,600	2,560	3,750	1,280	17,900	18,750		192,030										1,660					1,510		
B/int 13	1,550	0,370	18,960	60,660	39,950	56,480	20,990	253,380	233,130		2 785,120										25,000					16,530		
B/int 0	<d.l.	0,000	0,010	0,030	0,020	0,020	0,010	0,130	0,090		0,950										0,000					<d.l.		
B/int 1 bis	<d.l.	0,060	4,910	12,130	6,090	10,270	4,710	46,660	46,110		279,170										0,000					3,660		
B/int 1 bis	<d.l.	0,120	12,410	28,860	14,280	21,440	11,030	112,580	82,290		830,950										0,000					<d.l.		
B/int 1 bis	0,080	0,030	2,730	6,550	3,090	5,040	2,240	26,110	8,020		185,480										0,000					0,620		
B/int 1 bis	0,280	0,060	3,280	10,240	6,700	9,500	3,520	43,910	37,710		489,360										0,000					2,920		
B/int 12	0,000	0,000	0,010	0,020	0,010	0,010	0,010	0,060	0,020		0,440										0,000					0,000		
B/int 13	<d.l.	0,000	0,120	0,280	0,140	0,210	0,110	1,080	0,790		7,950										0,000					<d.l.		
Total	**21,13**	**5,32**	**468,00**	**1 445,39**	**509,60**	**930,14**	**453,10**	**3 550,95**	**1 862,69**		**20 174,44**										**167,52**					**157,30**		
France																												
F/05901	0,161	0,050	6,079	27,402	5,458	13,641	8,514	41,067	NI	NI	NI	2,92	471,53	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/05902	0,059	0,016	3,393	10,767	1,976	5,531	3,351	16,130	NI	NI	NI	0,09	199,09	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	<DL0	<DL0	<DL0	<DL0	<DL0	
F/05903	0,017	0,005	0,621	3,256	0,740	1,788	1,060	4,924	NI	NI	NI	0,02	57,29	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	<DL0	<DL0	<DL0	<DL0	<DL0	
F/05904	0,172	0,043	3,368	21,309	5,094	15,688	5,663	39,313	NI	NI	NI	0,09	272,25	0,341	<DL0	<DL0	<DL0	0,40299	0,46499	<DL0	1,208982	NI	<DL0	<DL0	<DL0	<DL0	<DL0	
F/06201	0,185	0,048	4,590	18,631	6,653	12,535	7,481	48,959	NI	NI	NI	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	0,521	0,066	
F/06202	0,205	0,046	3,934	21,967	6,128	21,870	9,477	48,027	NI	NI	NI	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	0,6048	<DL0	NI	NI	NI	NI	NI	6,682	1,790	
F/07601	1,144	0,830	28,148	146,437	53,665	142,980	57,194	279,252	NI	4,768	6,033	0,97	3204,32	6,14468	7,43364	10,583	11,157	13,4427	15,4597	8,8661	72,65628	NI	NI	NI	NI	13,135	17,453	
F/07602	3,600	3,022	74,063	406,548	165,773	293,141	112,151	785,450	NI	NI	NI	1,31	5758,45	55,3901	53,046	78,054	69,721	90,5699	98,5062	73,197	NI	NI	NI	NI	NI	32,242	20,421	
F/07603	0,013	0,005	0,692	2,421	1,639	1,715	1,297	6,302	NI	NI	NI	0,01	51,99	<DL0	0,00319	0,0277	0,0355	0,05426	0,06988	0,0285	NI	NI	NI	NI	NI	NI	NI	
F/07606	0,008	0,002	0,107	0,719	0,213	0,652	0,265	1,546	NI	NI	NI	0,00	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	0,442	0,080	
F/01401	NI	NI	0,581	2,200	1,227	2,121	1,455	7,642	NI	NI	NI	NI	70,34	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	<DL0	<DL0	
F/0149	0,027	0,025	0,480	3,148	1,601	2,600	1,109	7,467	NI	0,109	NI	<DL0	46,99	<DL0	<DL0	0,5274	0,5274	0,52735	0,79103	<DL0	0,56502	1,58206	NI	NI	NI	NI	NI	
F/05004	0,006	NI	0,178	0,461	0,349	0,236	0,215	0,687	NI	NI	0,000	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	0,225	NI	
F/02907	0,008	0,001	0,145	0,512	0,359	0,291	0,237	1,644	NI	NI	0,000	0,00	12,23	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	<DL0	<DL0	<DL0	0,153	0,046	
F/05601	0,063	0,025	2,649	8,219	5,093	4,567	3,399	21,556	NI	0,214	NI	0,00	113,47	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	8,947	1,312	
F/05602	0,005	0,001	0,180	0,975	0,525	0,645	0,375	2,100	NI	0,053	NI	0,00	11,10	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	2,250	0,525	
F/04401	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/04402	0,004	0,003	0,515	2,145	0,744	1,401	0,772	4,290	NI	NI	NI	0,01	24,60	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/04408	0,004	<DL0	0,340	1,394	0,680	1,020	0,476	3,366	NI	NI	NI	0,01	22,10	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/04412	0,001	0,001	0,244	0,806	0,424	0,509	0,297	1,590	NI	NI	NI	0,00	9,43	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/08503	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/08506	<DL0	0,001	0,207	0,872	0,287	0,442	0,454	1,743	NI	NI	NI	0,00	11,37	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	0,155	0,073	
F/08507	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/08510	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/01701a	0,000	0,000	0,010	0,029	0,010	0,017	0,014	0,082	NI	NI	0,000	NI	0,49	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/01702	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/01704b	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	<DL0	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/01706	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/01707	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/01710	0,013	0,011	0,944	4,202	1,610	2,455	1,638	9,065	NI	NI	NI	<DL0	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/01714b	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/01715	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
F/03325	0,537	0,107	16,110	21,480	9,666	16,110	10,203	64,440	NI	NI	4,940	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	<DL0	<DL0	
F/03317; F/03318	NI	NI	NI	NI	NI	NI	NI	NI	NI	<DL0	NI	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	<DL0	<DL0	

OSPAR-codes	in tonnes													in kilogrammes														
Deposit site	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	ΣPAH9	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	ΣPCB7	Total CB	HCB	g-HCH	DDT	TBT	DBT	other/ notes
F/03301; F/03303; F/03305; F/03307; F/03311	NI	NI	NI	NI	NI	NI	NI	NI	NI	<DL0	NI	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	<DL0	<DL0	
F/03307; F/03308; F/03311; F/03309; F/03312	NI	NI	NI	NI	NI	NI	NI	NI	NI	<DL0	NI	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	<DL0	<DL0	
F/03312	0,028	0,009	0,874	1,978	1,196	1,656	1,058	7,314	NI	<DL0	NI	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	NI	NI	
F/03314 ; F/03315 ; F/03316 ; F/03317	NI	NI	NI	NI	NI	NI	NI	NI	NI	<DL0	NI	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	<DL0	<DL0	
F/03319	NI	NI	NI	NI	NI	NI	NI	NI	NI	<DL0	NI	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	<DL0	<DL0	
F/03330	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	NI	NI	NI	NI	NI	<DL0	<DL0	
F/06401	<DL0	<DL0	1,627	1,741	0,289	1,660	1,384	8,109	NI	NI	0,212	0,01	55,31	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	9,23618	NI	NI	NI	1,514	0,738	
F/06401; F/06403	<DL0	<DL0	1,433	3,283	2,121	3,111	1,981	15,134	NI	NI	0,167	0,02	80,04	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	<DL0	6,06551	NI	NI	NI	0,815	0,500	
Total	**6,26**	**4,25**	**151,51**	**712,90**	**273,52**	**548,38**	**231,52**	**1 427,20**	**0,00**	**5,14**	**11,35**	**5,46**	**10 472,37**	**61,88**	**60,48**	**89,19**	**81,44**	**105,00**	**115,90**	**82,09**	**74,43**	**16,88**	**0,00**	**0,00**	**0,00**	**67,08**	**43,00**	

Germany																												pp DDD	pp DDE
D/10	0,000	0,000	0,002	0,006	0,005	0,008	0,006	0,017	0,049	0,000	0,001	0,867	0,373																
D/13	0,002	0,008	0,383	0,975	0,412	0,598	0,322	2,658	0,402	0,006	0,009	36,987	14,010	0,002	0,00	0,002	0,002	0,002	0,002	0,002	<0,015	ND	<0,002	<0,002	<0,002	0,064	<0,011	<0,002	<0,002
D/20	0,002	0,001	0,077	0,344	0,091	0,193	0,112	0,551	0,818	0,003	0,005	ND	ND	0,003	0,00	0,002	0,003	0,003	0,004	0,002	0,019	ND	0,001	0,001	0,002	0,092	0,026	0,002	0,002
D/21	0,001	0,000	0,029	0,056	0,039	0,083	0,050	0,272	0,062	ND	0,001	4,448	1,269	0,001	0,00	0,002	0,002	0,003	0,003	0,002	0,013	ND	0,006	<0,00006	0,001	0,009	0,004	<0,0002	0,000
D/22	0,002	0,000	0,062	0,108	0,099	0,186	0,102	0,553	0,169	ND	0,001	10,836	3,630	0,000	0,00	0,002	0,002	0,003	0,003	0,001	0,011	ND	0,001	<0,0001	<0,0001	0,068	0,016	<0,0001	0,000
D/25	0,000	0,000	0,010	0,018	0,013	0,028	0,023	0,093	0,032	ND	0,000	2,482	0,651	0,000	0,00	0,000	0,000	0,001	0,001	0,000	0,003	ND	0,000	<0,00002	0,000	0,003	0,001	<0,00004	0,000
D/30	0,001	0,000	0,019	0,037	0,036	0,053	0,032	0,079	0,053	ND	0,001	3,153	1,506	0,001	0,00	0,001	0,002	0,002	0,002	0,001	0,010	ND	0,001	<0,00003	0,000	0,017	0,005	0,000	0,000
D/32	0,004	0,000	0,152	0,284	0,263	0,386	0,235	0,235	0,387	ND	0,006	21,063	10,925	0,010	0,00	0,011	0,016	0,011	0,016	0,010	0,080	ND	0,0061	<0,0003	0,0011	0,117	0,034	0,000	<0,001
D/36	0,000	0,000	0,003	0,001	0,004	0,007	0,005	0,023	0,001	ND	0,000	0,490	0,200	0,000	0,00	0,000	0,000	0,000	0,000	0,000	0,001	ND	0,000	ND	ND	0,002	0,001	ND	ND
D/40	0,013	0,013	0,864	2,407	1,821	1,944	1,296	6,851	1,581	0,022	0,017	ND	ND	0,016	0,02	0,021	0,016	0,047	0,066	0,028	0,211	ND	0,045	0,003	0,016	0,949	0,126	0,032	0,016
D/45	0,000	0,000	0,022	0,042	0,032	0,055	0,033	0,221	0,068	ND	0,001	3,253	1,762	0,001	0,00	0,002	0,002	0,004	0,004	0,003	0,016	ND	0,001	<0,00005	0,000	0,006	0,003	<0,00005	<0,00005
D/54	0,007	0,008	0,361	1,381	0,417	0,712	0,540	2,972	0,492	0,027	0,044	43,626	14,495	0,012	0,01	0,019	0,015	0,029	0,052	0,032	0,164	ND	0,019	<0,002	<0,002	<0,02	<0,02	0,044	0,017
D/55	0,001	0,000	0,023	0,061	0,017	0,038	0,028	0,131	0,116	0,000	0,001	5,631	1,179	0,001	0,00	0,002	0,001	0,002	0,002	0,001	0,011	ND	0,002	0,003	0,006	0,003	0,002	0,003	0,001
D/56	0,006	0,004	0,286	1,418	0,349	0,849	0,469	2,288	2,624	0,019	0,024	ND	ND	0,010	0,01	0,008	0,010	0,016	0,019	0,007	0,077	ND	0,004	0,002	0,003	0,415	0,107	0,004	0,006
D/57	0,107	0,063	1,423	3,203	2,606	3,055	1,805	21,081	9,292	0,100	0,130	66,310	24,339	0,049	0,05	0,126	0,073	0,223	0,307	0,200	1,068	ND	0,529	0,012	0,330	6,877	1,576	0,781	0,268
D/58	0,001	0,000	0,054	0,088	0,067	0,146	0,082	0,417	0,123	ND	0,001	9,844	3,186	0,001	0,00	0,002	0,002	0,004	0,003	0,002	0,014	ND	0,002	<0,00009	<0,0002	0,036	0,026	<0,0001	0,000
63	0,365	0,174	15,425	47,354	13,167	29,671	24,897	106,687	98,740	1,210	1,648	3 533,574	ND	0,7825	0,46	0,889	0,898	1,452	1,975	0,729	7,183	ND	1,210	<0,085	0,276	11,293	6,408	0,505	0,496
65	0,638	0,323	28,358	77,289	24,455	59,840	43,600	198,820	99,973	1,743	2,347	7 098,562	3 396,214	1,265	0,64	1,477	1,544	2,679	3,687	1,653	12,945	ND	1,5115	0,1387	0,5311	18,399	8,414	0,667	0,662
70	0,018	0,011	0,980	3,200	1,113	2,146	1,778	7,635	5,175	0,032	0,045	192,552	ND	0,040	0,02	0,038	0,046	0,058	0,080	0,026	0,308	ND	0,0378	0,004	0,0036	0,424	0,318	0,022	0,019
72	0,042	0,029	2,998	9,433	3,097	5,543	5,075	20,582	31,385	0,132	0,129	794,395	ND	0,136	0,10	0,131	0,147	0,199	0,218	0,108	1,035	ND	0,1313	0,029	0,0609	0,982	0,763	0,099	0,092
74	<0,017	0,011	1,190	3,744	1,229	2,200	2,015	8,170	12,458	0,052	0,051	315,339	ND	0,054	0,04	0,052	0,058	0,079	0,087	0,043	0,411	ND	0,052	0,012	0,024	0,390	0,303	0,039	0,037
78	<0,0028	0,004	0,659	1,909	0,541	0,753	0,949	3,259	13,968	ND	0,023	ND	ND	<0,036	<0,036	<0,036	<0,036	0,054	<0,036	<0,036	0,270	ND	<0,036	<0,0144	<0,036	<0,072	<0,072	<0,036	<0,036
79	0,037	0,014	0,847	2,860	1,296	3,397	1,699	11,826	6,244	0,049	0,066	268,133	ND	0,033	0,03	0,075	0,051	0,132	0,190	0,097	0,606	ND	0,030	0,003	0,021	1,519	0,471	0,066	0,039
85	0,299	0,129	7,096	23,729	10,739	27,540	14,093	97,541	58,648	0,380	0,513	ND	ND	0,282	0,26	0,682	0,462	1,182	1,680	0,855	5,407	ND	0,265	0,035	0,164	14,560	5,154	0,566	0,349
86	0,363	0,157	8,608	28,786	13,027	33,408	17,097	118,327	71,145	0,460	0,622	ND	ND	0,342	0,32	0,827	0,560	1,434	2,038	1,037	6,559	ND	0,321	0,042	0,199	17,663	6,253	0,686	0,424
88	0,315	0,224	5,107	11,812	13,421	13,816	8,071	115,445	29,427	0,459	0,591	1 228,988	506,102	0,258	0,29	0,665	0,364	1,025	1,409	0,873	4,889	ND	2,447	0,070	0,944	19,790	6,047	3,060	1,120
92	0,399	0,380	12,171	31,466	17,753	33,310	19,117	146,468	45,639	0,551	0,726	ND	ND	0,344	0,29	0,788	0,507	1,342	1,851	1,041	6,164	ND	2,194	0,100	0,482	22,134	7,061	3,643	1,234
93	0,353	0,337	10,765	27,831	15,703	29,462	16,909	129,550	40,367	0,487	0,642	ND	ND	0,304	0,26	0,697	0,449	1,187	1,637	0,921	5,452	ND	1,940	0,088	0,426	19,577	6,246	3,222	1,091
101	1,831	1,746	55,854	144,396	81,470	152,860	87,730	672,144	209,438	2,529	3,331	ND	ND	1,578	1,33	3,618	2,328	6,157	8,494	4,778	28,288	ND	10,067	0,458	2,211	101,573	32,404	16,719	5,663
120	0,340	0,242	5,799	12,194	10,437	14,249	7,053	87,323	1,290	0,435	0,589	5 899,334	3 656,358	0,269	0,33	0,590	0,366	1,198	1,290	0,799	4,787	ND	1,874	0,164	0,676	29,497	7,118	3,073	1,228
121	0,752	0,717	22,929	59,276	33,444	62,751	36,014	275,924	85,977	1,038	1,368	ND	ND	0,648	0,55	1,485	0,956	2,528	3,487	1,961	11,612	ND	4,133	0,188	0,908	41,697	13,302	6,863	2,325
124	<0,0017	0,002	0,396	1,147	0,325	0,452	0,570	1,958	8,391	ND	0,014	ND	ND	<0,022	<0,022	<0,022	<0,022	0,032	<0,022	<0,022	0,162	ND	<0,022	<0,009	<0,022	<0,043	<0,043	<0,022	<0,022
126	0,002	0,002	0,050	0,134	0,119	0,181	0,129	0,408	1,142	0,007	0,013	20,255	8,717	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total	**5,917**	**4,598**	**182,997**	**496,990**	**247,606**	**479,919**	**291,936**	**2 040,510**	**835,675**	**9,741**	**12,960**	**19 560,124**	**7 644,917**	**2,385**	**5,01**	**12,214**	**8,881**	**21,087**	**28,611**	**15,213**	**97,776**		**26,830**	**1,354**	**7,287**	**308,157**	**102,191**	**40,095**	**15,091**

Ireland																												
IRL/6	0,002	0,002	0,094	0,308	0,406	0,292	0,187	0,994	1,052	0,006	0,012	NI	NI	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	NI	<LoD	<LoD	0,000	0,850	<LoD	(1)
IRL/8	0,037	<LoD	1,253	4,479	1,471	3,532	2,336	11,929	7,465	<LoD	< LoD	NI	NI	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	NI	<LoD	<LoD	<LoD	<LoD	<LoD	(1)
IRL/20	0,003	0,000	0,053	0,151	0,093	0,146	0,155	0,715	0,631	2,680	3,343	NI	NI	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	NI	<LoD	<LoD	<LoD	<LoD	0,250	(1)
IRL/47	0,014	0,003	0,475	1,426	0,823	1,410	0,981	4,676	9,882	151,316	178,898	NI	NI	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	NI	<LoD	<LoD	<LoD	<LoD	<LoD	(1)
IRL/52	0,004	0,000	0,059	0,154	0,122	0,058	0,199	0,472	1,049	<LoD	0,000	NI	NI	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	NI	<LoD	<LoD	<LoD	<LoD	<LoD	(1)
IRL/55	0,000	<LoD	0,010	0,028	0,012	0,003	0,012	0,039	0,000	0,000	0,001	NI	NI	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	NI	<LoD	<LoD	<LoD	<LoD	<LoD	(1)
Total	**0,061**	**0,005**	**1,943**	**6,545**	**2,926**	**5,441**	**3,870**	**18,825**	**20,079**	**154,003**	**182,254**															**0,850**	**0,250**	

Netherlands																												
NL/6	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000			0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000		0,000	0,000	0,000	0,000		(1)

OSPAR-codes	in tonnes													in kilogrammes															
Deposit site	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	ΣPAH9	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	ΣPCB7	Total CB	HCB	g-HCH	DDT	TBT	DBT	other/ notes
NL-7	0,400	0,200	16,000	36,000	20,000	32,000	18,000	125,000	117,000	0,560				0,800	0,800	1,000	1,000	0,900	1,500	0,800	6,800		0,500	0,900	2,500	3,100		
NL-8	5,200	1,023	61,480	210,380	92,000	158,000	89,130	633,120	912,000	6,820	13,480			18,000	18,000	18,000	18,000	21,000	21,000	23,000	25,000		6,000	8,000	7,000	112,000		
NL-10																												(2)
NL-11																												(2)
NL-13																												(2)
NL-14																												(2)
NL-15																												(2)
NL/16	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000			0,000	0,00	0,000	0,000	0,000	0,000	0,000	0,000		0,000	0,000	0,000	0,000		(3)
Total	**5,600**	**1,223**	**77,480**	**246,380**	**112,000**	**190,000**	**107,130**	**758,120**	**1029,000**	**7,380**	**13,480**			**18,800**	**18,800**	**19,000**	**19,000**	**21,900**	**22,500**	**23,800**	**31,800**		**6,500**	**8,900**	**9,500**	**115,100**		
Norway																													
VE1	0,0011	0,0004				0,0199															0,0000								
VE3	0,0002	0,0000				0,0118																							
VE4	0,0000					0,0026															0,0001								
HO5		0,0583				0,0155																							
OS3		0,0008				0,2400																							
OS2		0,0017				0,5800																							
OS4		0,0006				0,1800																							
MR8						0,0048																							
MR9						0,0250																							
FI1											0,001															0,0083			
Total	**0,001**	**0,062**				**1,080**					**0,001**										**0,000**					**0,008**			
Spain																													
E/1	0,052	0,011	0,560	0,688	2,373	5,837	0,821	28,558	NI	NI	0,014	NI	NI	0,085	0,088	0,101	0,128	0,116	0,143	0,095	0,756	NI	NI	NI				
E/2C	0,025	0,010	NI	0,035	0,050	0,035	0,030	0,130	NI	0,000	0,000	NI	NI	NI	NI	NI	NI	NI	NI	NI	0,005	0,005	NI	NI				
E/3	0,014	0,004	NI	0,143	0,266	0,791	0,160	1,874	NI	NI	0,000	NI	NI	NI	NI	NI	NI	NI	NI	NI	0,001	NI	NI	NI				
E/3B	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/3B	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/3C	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/3D	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/3E	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/4B	0,001	0,007	0,016	0,062	0,065	0,060	0,045	0,170	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	0,035	NI	NI	NI				
E/4C	0,000	0,001	0,027	0,070	0,021	0,076	0,021	0,232	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	0,001	NI	NI	NI				
E/4D	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/4E	0,009	0,018	0,621	0,875	0,595	0,695	0,501	7,012	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	0,182	NI	NI	NI				
E/5	0,069	0,069	0,092	0,401	0,432	1,773	0,066	12,505	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/5B	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/5B	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/5C	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/5D	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/5E	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/5F	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/6B	0,000	0,000	0,000	0,001	0,000	0,000	0,000	0,001	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	0,001	NI	NI	NI				
E/6B	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/7	0,034	0,043	0,612	1,826	2,803	3,611	0,813	7,774	NI	NI	NI	NI	NI	0,006	0,006	0,312	1,095	1,920	2,238	2,114	7,691	NI	NI	NI				
E/7B	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/8	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/8	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/10	0,223	0,414	0,474	4,227	74,502	21,623	2,562	93,460	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/12	0,001	0,001	0,010	0,059	0,053	0,029	0,042	0,116	NI	NI	NI	NI	NI	0,003	0,002	0,002	0,002	0,002	0,002	0,016	0,030	NI	NI	NI				
E/12	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
E/12C	0,004	0,003	NI	0,360	0,320	0,180	0,230	0,650	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI				
Total	**0,433**	**0,581**	**2,412**	**8,746**	**81,480**	**34,710**	**5,291**	**152,482**		**0,000**	**0,014**			**0,095**	**0,096**	**0,415**	**1,226**	**2,038**	**2,383**	**2,225**	**8,702**	**0,005**						
Sweden																													
SWE/1	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	0,0002	0,0002	(1)	
SWE/1	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	(2)	
SWE/2	<0,00001	NI	NI	NI	0,000	0,000	NI	0,001	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	(3)	
SWE/2	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX		
SWE/2	0,000		<	0,005	0,006	0,005	0,004	0,020		<		NI	NI	<	<	<	<	<	<	<	<0,0		NI	NI	NI	NI	NI	(4)	
SWE/2	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX		
SWE/5	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX		
SWE/27	<	ND	0,007	0,040	0,030	0,020	0,020	0,100	ND		ND	ND	ND								<0,1		ND	ND	ND	0,007	ND		
SWE/28	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX		
SWE/11	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI		
SWE/10	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI		

OSPAR-codes	in tonnes													in kilogrammes														
Deposit site	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	ΣPAH9	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	ΣPCB7	Total CB	HCB	g-HCH	DDT	TBT	DBT	other/ notes
SWE/26	ND	ND	ND	ND	ND	ND	ND	ND	ND		<	ND	ND	<	<	<	<	<	<	<	<		ND	ND	ND	<	<	
SWE/17	0,004	ND	0,053	0,148	0,736	0,203	0,082	2,077			ND												ND	ND	ND	1	1,6	
Total	**0,004**			**0,193**	**0,772**	**0,228**	**0,106**	**2,198**													**<0,1**					**1,007**	**1,600**	
United Kingdom																												
CR019																												
CR027																												
CR030																												
CR040	0,000313	8E-05	0,0059		0,00885	0,00679	0,009377	0,029499																				
CR050																												
CR060																												
CR070																												
CR080																												
CR080	0,0007	0,0002	0,0137	0,0699	0,0204	0,0431	0,0368	0,1254																				
CR110	0,0010	0,0004	0,0278	0,1076	0,0757	0,0643	0,0756	0,2387																		0,104		
CR110																												
DV010																												
DV010	0,0091	0,0343	3,2182	6,2439	3,0204	3,2440	4,0859	12,0952	1,2057	0,0115	0,0217															9,251	0,379	
DV011																												
DV040	0,0023	0,0040	0,5190	0,8074	0,2537	0,3806	0,5190	0,7497																		0,231	0,173	
FI002																												
FI080																												
FO007																												
FO010																												
FO010																												
FO020																												
FO028	0,0017	0,0012	0,0798	0,3359	0,1597	0,2142	0,2700	0,7260																				
FO036																												
FO038																												
FO041	0,0079	0,0318	0,7812	2,9255	1,3354	1,4413	2,9160	5,2232																		0,035		
FO042	0,0076	0,0305	0,7484	2,7984	1,2774	1,3792	2,7920	4,9960																		0,032		
FO043	0,0076	0,0307	0,7541	2,8241	1,2891	1,3913	2,8150	5,0420																		0,034		
FO044		0,3160	5,4963	26,6219	15,1223	13,3220	25,5344	52,3548																		9,92		
FO080																												
HU015	0,0005	0,0001	0,0250	0,0213	0,0158	0,0199	0,0397	0,1071	2,1905	0,0057	0,0338															0,031	0,006	
HU020	0,0106	0,0075	0,8087	2,3868	1,4756	1,2830	2,6033	7,6618	55,2008	0,4897	1,3732															1,749	0,306	
HU030	0,0562	0,0401	4,3017	12,6962	7,8493	6,8246	13,8475	40,7556	293,6304	2,6047	7,3043															9,305	1,63	
HU040	0,0018	0,0009	0,0509	0,1654	0,1807	0,0876	0,2025	0,5958	3,4499	0,0169	0,0666															0,641	0,068	
HU041	0,0052	0,0027	0,1503	0,4879	0,5333	0,2584	0,5975	1,7580	10,1793	0,0498	0,1965															1,892	0,199	
HU060																												
HU060	1,4354	0,5391	68,7619	172,6563	83,4369	89,2291	186,0397	445,7877	772,5516	2,3107	9,1454															44,263	17,94	
HU080																												
HU090	0,1006	0,0317	4,1611	11,6212	4,9054	5,8568	12,2154	28,6281																		3,131	1,265	
HU090	0,0056	0,0042	0,6224	1,7316	0,7975	1,0015	2,0779	4,0763																		0,14	0,094	
HU143	0,0039	0,0031	0,5580	1,1625	0,5038	0,6898	1,7360	3,1698																		0,194	0,078	
HU150	0,0002	0,0002	0,0451	0,0464	0,0420	0,0322	0,0675	0,1795																				
HU170	0,0045	0,0013	0,1888	0,3621	0,2583	0,2955	0,4964	1,9633	5,6869	0,0213	0,0898			0,009	0,01	0,007	0,006	0,008	0,009	0,006	0,051	0,091				0,482	0,189	
HU199																												
HU203																												
IS035	0,0009	0,0003	0,0215	0,0463	0,0292	0,0359	0,0557	0,2581	0,2671	0,0015	0,0040															0,016	0,007	
IS040	0,0034	0,0025	0,3677	0,8406	0,5815	0,7072	1,1103	2,8867																				
IS065	0,0057	0,0013	0,1341	0,2893	0,1955	0,2063	0,3235	1,6735	1,8214	0,0106	0,0265															0,076	0,043	
IS102	0,0063	0,0010	0,8060	0,6274	0,2557	0,3476	0,9944	4,3785																				
IS110	0,0764	0,1207	2,3414	6,0745	4,6944	2,7645	8,5046	32,4954	90,1894	0,4699	1,0210															1,676	1,398	
IS120	0,0346	0,0710	3,0523	4,5901	3,1677	2,5446	7,0185	22,5210	38,1078	0,1851	0,4295			0,221	0,16	0,146	0,156	0,158	0,168	0,105	1,072	2,364			922	3,77	1,1	
IS128	0,0070	0,0177	0,2899	0,8283	0,6691	0,3525	1,2387	3,8819	10,9945	0,0581	0,1270			0,067	0,05	0,045	0,049	0,051	0,057	0,038	0,356	0,782			0,239	0,114	0,146	
IS140	0,1406	0,2673	14,4570	16,4008	10,5688	9,5102	26,5327	89,1126	128,8879	0,6712	1,4821			0,776	0,57	0,52	0,567	0,587	0,647	0,428	4,074	8,958			2,859	5,309	2,822	
IS150																												
IS164																												
IS170	0,0104	0,0380	2,5785	3,7124	1,3403	2,6684	3,9830	13,5532																		1,25	1,359	
IS192	0,0009	0,0011	0,0421	0,1830	0,1352	0,1234	0,2221	0,6457	1,3570	0,0067	0,0165			0,001	0,00	0,001	0,001	0,002	0,001	0,001	0,008	0,014				0,098	0,012	
IS200	0,0103	0,0198	2,2656	1,9418	0,7474	1,3054	3,3745	5,9357																				
IS205	0,4339	0,7466	13,6105	34,4857	87,3857	25,8672	178,1781	354,5957	207,0102	1,0121	2,2227			0,208	0,41	1,169	1,182	1,603	1,34	0,536	6,449	12,778				35,713	37,393	
IS231																												
IS240																												
IS240																												
IS241	0,0148	0,0066	1,5074	2,3980	1,5408	1,7038	3,1844	7,5403																		0,206	0,113	
IS400	0,0010	0,0008	0,0364	0,0758	0,2419	0,0473	0,3450	0,6150																				

OSPAR-codes	in tonnes													in kilogrammes														
Deposit site	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	ΣPAH9	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	ΣPCB7	Total CB	HCB	g-HCH	DDT	TBT	DBT	other/ notes
IS420	0,0001	0,0001	0,0029	0,0061	0,0194	0,0038	0,0276	0,0492																				
IS591	0,2114	0,0734	2,0501	10,6313	11,2767	8,8341	12,0640	23,1952																				
IS591	0,6595	0,1750	6,1291	44,7120	33,0993	27,6168	39,4407	140,9470																				
IS620	0,0011	0,0001	0,0170	0,1059	0,2311	0,0546	0,0870	0,7507																				
IS650	0,0082	0,0011	0,1767	1,9917	1,5156	1,0505	1,3892	3,7589																				
IS671	0,0212	0,4246	1,4775	11,1022	6,1137	7,7270	13,2038	29,4857																				
LU010	0,0004	0,0001	0,0761	0,0485	0,0801	0,0447	0,0710	0,2045																		0,093	0,009	
LU055	0,0005	0,0006	0,0318	0,1104	0,0600	0,0721	0,1431	0,4571	0,7399	0,0067	0,0166															0,01	0,01	
LU070	0,0244	0,0205	1,0533	3,5522	1,7332	2,2723	3,8117	14,2691	19,9660	0,4375	0,7464			0,339	0,14	0,141	0,161	0,294	0,274	0,24	1,587	3,651						
LU080	0,0248	0,0208	1,0708	3,6111	1,7619	2,3100	3,8748	14,5055	20,2968	0,4448	0,7588			0,345	0,14	0,143	0,164	0,299	0,279	0,244	1,614	3,712						
LU083																												
LU084	0,0030	0,0025	0,1309	0,4416	0,2154	0,2825	0,4738	1,7737	2,4819	0,0544	0,0928			0,042	0,02	0,017	0,02	0,037	0,034	0,03	0,197	0,454						
LU085																												
LU086																												
LU087																												
LU110	0,0614	0,0823	3,9833	11,3164	6,8439	9,0832	15,2888	58,9998	66,5931	0,8923	1,8077			1,518	0,63	0,592	0,7	1,104	0,975	0,844	8,414	20,112				1,265	0,419	
LU115	0,0046	0,0056	0,3090	0,8925	0,5235	0,7724	1,5960	4,0409	6,2809	0,0656	0,1483			0,112	0,05	0,045	0,053	0,087	0,074	0,064	0,479	1,141						
LU130																												
LU130	0,3470	0,2213	19,8539	37,9251	26,0451	36,1488	45,7202	199,6958	309,9236	3,7926	7,3268			3,759	1,39	1,541	1,923	2,689	2,47	2,022	15,791	37,808						
LU140	0,0381	0,0272	1,6037	5,7624	3,2346	4,4849	10,2473	27,3985	39,2767	0,4448	0,9596																	
LU168																												
LU169																												
LU169	0,0001	0,0002	0,0147	0,0334	0,0229	0,0261	0,0400	0,1172																		0,011	0,004	
LU190	0,0003	0,0004	0,0315	0,0757	0,0588	0,0631	0,1093	0,3027																		0,029	0,245	
MA010																												
MA016																												
MA021																												
MA021																												
MA050	0,0118	0,0068	0,3337	2,5495	0,4872	3,5562	1,4611	4,4286																				
MA051	0,0018	0,0136	0,1255	0,5592	0,2087	0,2554	0,1527	0,7001																				
MA545	0,0001	0,0011	0,0102	0,0453	0,0169	0,0207	0,0124	0,0567																				
NS100																												
PL031	0,0066	0,0175	1,0681	0,5736	3,2142	0,5458	2,2880	4,2508	7,2668	0,0721	0,1234			0,011	1,36	1,836	1,309	0,868	1,215	0,159	6,757	13,696				1,567	0,085	
PL060	0,0043	0,0019	0,3914	0,3421	0,8035	0,3817	0,6724	2,1510	4,5133	0,0438	0,0676				0,00	0,008	0,009	0,019	0,022	0,027	0,086	0,167				0,503	0,148	
PL075																												
PO070	0,0003	0,0003	0,0271	0,0574	0,0427	0,0444	0,0739	0,1774																		0,019	0,008	
PO090																												
RB001	0,0006	0,0008	0,0179	0,0587	0,0354	0,0361	0,0676	0,1934	0,5315	0,0028	0,0067			0,001	0,00	0,001	0,001	0,001	0,002	0,001	0,008	0,016				0,01	0,004	
TH005	0,0058	0,0045	0,4248	0,5696	1,5448	0,4975	1,2809	2,8063																		3,862	4,506	
TH034																												
TH034	0,0098	0,0045	0,4136	1,3011	1,7899	0,7370	1,8275	4,5124	18,4784	0,1233	0,2831			0,016	0,01	0,022	0,021	0,024	0,024	0,016	0,134	0,04				1,504	0,752	
TH052	0,0104	0,0107	1,4613	4,6066	2,2302	3,4415	2,9057	8,9451	9,0845	0,0347	0,1277			0,024	0,02	0,024	0,026	0,026	0,024	0,024	0,034	0,036				10,871	0,982	
TH052	0,1445	0,5456	21,2579	26,2488	18,7333	31,6600	40,4740	101,0899																		11,513	8,646	
TH052																												
TH056	0,2174	0,2250	30,6833	96,7287	46,8298	72,2640	61,0127	0,2283	190,7529	0,7296	2,6819			0,506	0,51	0,506	0,543	0,543	0,506	0,506	0,723	0,76				228,267	20,62	
TH056																												
TH070	0,0057	0,0046	1,6523	0,7977	0,4900	0,6153	1,6865	3,7376																		0,228	0,228	
TH070																												
TH140	0,0068	0,0076	0,8476	1,6105	1,3562	0,8476	1,4409	4,1533																		2,543	0,169	
TH211	0,0034	0,0043	0,6154	1,2187	0,8412	0,9481	1,0481	2,5762																				
TH216	0,0026	0,0033	0,4662	0,9233	0,6373	0,7182	0,7940	1,9516																				
TH217	0,0010	0,0013	0,1840	0,3644	0,2515	0,2835	0,3134	0,7702																				
TH218	0,0008	0,0010	0,1373	0,2719	0,1877	0,2115	0,2338	0,5747																				
TH219	0,0008	0,0010	0,1373	0,2719	0,1877	0,2115	0,2338	0,5747																				
TY022	0,0044	0,0041	0,4833	1,6900	0,6946	0,6811	1,1408	2,8632																		1,115	0,237	
TY025																												
TY042	0,0235	0,0176	2,0185	2,6456	3,0571	2,5280	6,0751	10,7784	352,7460	1,2252	7,0967			0,137	0,08	0,118		0,157	0,157	0,078	0,705	1,646				1,96	0,588	
TY070																												
TY070	0,0818	0,0389	1,6357	3,2325	5,0435	2,5354	11,2632	29,9884																		8,958	1,752	
TY081																												
TY081	0,0577	0,0275	1,1537	2,2800	3,5573	1,7883	7,9442	21,1516																		6,318	1,237	
TY085																												
TY090	0,0602	0,0487	2,8673	4,5877	4,0142	3,4408	18,9242	23,2251	362,7135	1,7261	7,0432															10,036	2,007	
TY130	0,0091	0,0015	0,2375	0,5026	0,6084	0,3997	1,0728	1,8105																		1,47	0,294	
TY150	0,0019	0,0006	0,0743	0,2165	0,1325	0,2165	0,1875	0,5424														0,002				0,143	0,024	
TY150																												
TY160	0,0322	0,1253	2,6766	5,3766	8,1957	2,7708	9,0273	15,2523	26,6575	0,1669	0,7999			0,072	0,06	0,093	0,085	0,092	0,099	0,059	0,563	1,144				1,659	0,958	
TY160	0,6693	0,7285	23,1523	60,7879	62,3823	25,7990	137,4487	217,7994	1362,1160	6,7331	24,1796										8,349	8,832				55,912	115,92	
TY180	0,0037	0,0018	0,5572	0,8404	0,4430	0,6349	1,1419	2,2837																		0,228	0,091	

OSPAR-codes	**in tonnes**													**in kilogrammes**													
Deposit site	Cd	Hg	As	Cr	Cu	Pb	Ni	Zn	Oil	ΣPAH9	Total PAH	N	P	CB 28	CB 52	CB 101	CB 118	CB 138	CB 153	CB 180	ΣPCB7	Total CB	HCB	g-HCH	DDT	TBT	DBT	other/ notes
TY181	0,0018		0,1599	0,1507	0,0369	0,1045	0,2029	1,0761																			0,108	
TY190	0,0004	0,0026	0,0769	0,1126	0,0850	0,0745	0,2298	0,4515	7,3904	0,0142	0,0733															0,396	0,076	
WI010	0,0150	0,0120	2,5036	4,0952	6,5148	3,0204	3,6698	13,2222	34,3823	0,3233	0,5657			0,079	0,08	0,109	0,097	0,109	0,106	0,044	0,626	1,163				8,885	2,413	
WI020	0,0033	0,0008	0,2830	0,6321	0,2566	0,2938	0,3394	1,1667																		0,309	0,177	
WI031	0,0048	0,0012	0,5747	0,7783	0,3241	0,4085	0,4165	1,4797	1,7290	0,0193	0,0327															0,175	0,129	
WI035																												
WI045																												
WI046	0,0005	0,0043	0,0327	0,0948	0,3501	0,0457	0,0863	0,3125						0,001	0,00	0,004	0,004	0,004	0,004	0,001	0,019	0,035			0,016	0,356	0,112	
WI060	0,0008	0,0009	0,0630	0,1527	0,2053	0,0854	0,1288	0,4234	0,3703	0,0025	0,0048															0,035	0,091	
WI060	0,0405	0,0608	5,1574	7,7745	10,9263	5,4228	9,1552	28,3519	72,2535	0,2758	0,5033			0,327	0,44	0,366	0,237	0,667	0,681	0,481	5,718	3,63				31,004	5,246	
WI060	0,0001	0,0000	0,0131	0,0086	0,0035	0,0069	0,0064	0,0195																		0,019	0,002	
WI071		0,0000	0,0048	0,0048	0,0005	0,0024	0,0021	0,0071																		0,003	0,001	
WI080																												
WI080	0,0032	0,0027	0,4388	0,8371	0,7743	0,5170	0,6454	1,9891	1146,4137	0,0097	0,0213					0,001	0,001	0,001	0,001	0,001	0,005	0,008				0,503	0,196	
WI090																												
WI110	0,0025	0,0028	0,0689	0,1083	0,1268	0,0749	0,2642	0,4397	2,5188	0,0118	0,0413					0,005	0,005	0,005	0,005	0,002	0,013	0,008				0,312	0,081	
WI110	0,0065	0,0030	0,3993	0,6852	0,4517	0,3449	0,5995	2,1092	5,3532																	0,059	0,02	
WI110																												
WI111	0,0004	0,0002	0,0293	0,0446	0,0253	0,0223	0,0354	0,1328	0,5080																			
Total	**5,273**	**5,372**	**275,758**	**687,623**	**515,048**	**444,590**	**969,618**	**2197,063**	**5694,069**	**25,578**	**79,070**			**8,571**	**6,115**	**7,460**	**7,320**	**9,435**	**9,174**	**5,957**	**63,832**	**123,048**			**925,114**	**521,813**	**235,315**	

Part II - Information

1. 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.

2. Additional information

(Referring to section 4 of the Format for Annual Reporting on Dumping Operations at Sea (Agreement 2009-3)

2.1 Deposit site

2.1.1 France

New deposit sites in 2009:

- F/05004, F/02907, F/04402, F/04408, F/01701a, F/01702, F/01704, F/03325

Closing of existing deposit sites in 2009 or sites whose permit is outdated:

- F/07607, F/01408, F/05005, F/04409, F/04411, F/08501, F/08505, F/08508, F/08509, F/01705, F/01709

2.1.2 Germany

The following five new deposit sites are notified for the first time by the German Federal Shipping Directorate:

- "km 738, Elbe estuary" (new OSPAR-Code D/122)
- "km 753, Elbe estuary" (new OSPAR-Code D/123)
- "Vareler water way, Jade" (new OSPAR-Code D/124)
- "Beach nourichment Wangerooge" (new OSPAR-Code D/125)
- "Cannel near the island of Foehr" (new OSPAR-Code D/126)

new OSPAR code	deposit sites
D/122	km 738, Elbe estuary
D/123	km 753, Elbe estuary
D/124	Vareler water way, Jade
D/125	Beach nourichment, Wangerooge
D/126	Channel near island of Foehr

Co-ordinates of all newly reported deposit sites are summarized in the following table:

Deposit site	Co-ordinates							
	long	**lat**	**long**	**lat**	**long**	**lat**	**long**	**lat**
D/122	53°58'15,922"	8°36'40,887"	53°57'40,973"	8°38'19,95"	53°57'29,941"	8°38'9,075"	53°58'4,569"	8°36'31,117"
D/123	53°58'41,651"	8°24'13,77"	53°58'51,365"	8°25'15,827"	53°58'44,886"	8°25'20,127"	53°58'34,846"	8°25'17,522"
D/124	53°29'5,151"	8°11'42,061"	53°29'10,738"	8°11'54,973"	53°28'55,007"	8°12'13,167"	53°28'49,421"	8°12'0,256"
D/125	53°47'48,482"	7°54'20,707"	53°47'29,169"	7°56'8,513"	53°47'21,522"	7°56'3,516"	53°47'42,002"	7°54'19,619"
D/126	54°40'0,398"	8°33'15,17"						

2.1.3 Iceland

The following sites were used in 2008 but not in 2009:
IS /4, IS/5, IS/6, IS/8, IS/13, IS/27, IS/35, IS/39, IS/41, IS/45 IS/50, IS/53.

The following sites were not used in 2008, but used in 2009:
IS/29, IS/45. IS/56.

2.1.4 Ireland

Dumpsite IR/55 was new in 2009. It is in fact a beach where dredged sand was deposited in intertidal zone for beach nourishment.

2.1.5 Netherlands

NL-16 is a new dumpsite called Slijkgat.

2.1.6 Spain

The table below includes the OSPAR codes for new sites with their geographical coordinates and updated the information of sites used in 2008.

Geographical coordinates (WGS 84) for Spanish deposit sites

Name	OSCOM Code	Longitude	latitude
Pasajes	E/1	1º 53' W	43º 23' N
Ondarroa	E/2C	2º 20' W	43º 24' N
Santander	E/3	3º 36,9' W	43º 34,4' N
Laredo	E/3B	3º 24,1' W	43º 27,7' N
Colindres	E/3B	3º 24,1' W	43º 27,7' N
Suances	E/3C	4º 1,78' W	43º 26,8' N
San Vicente de la Barquera	E/3D	4º 22,6' W	43º 23,7' N
Comillas	E/3E	4º 13' W	43º 25,2' N
Llanes	E/4B	4º 44,384' W	43º 25,235' N
Candás	E/4C	5º 44’18’’ W	43º 35’18’’ N
Lastres	E/4D	5º 15' 33" W	43º 30' 34,2" N
Ribadesella	E/4E	5º 3' 30,6" W	43º 29' 7,2" N
Avilés	E/5	5º 56,8' W	43º 36,8' N
San Esteban de Pravia	E/5B	6º 3,7' W	43º 36' N
San Juan de la Arena	E/5B	6º 3,7' W	43º 36' N
Navia	E/5C	6º 42,5' W	43º 34,3' N
Luarca	E/5D	6º 30' W	43º 34,15' N
Puerto de Vega	E/5E	6º 38' W	43º 34,5' N
Figueras	E/5F	7º 2' W	43º 35' N
Burela	E/6B	7º 22' W	43º 49' N
Ribadeo	E/6B	7º 22' W	43º 49' N
A Coruña	E/7	8º 23' 30" W	43º 25' N
Laxe	E/7B	9º 15,22' W	43º 17,26' N
Vilagarcía	E/8	9º 02' W	42º 25' N
Moaña	E/8	9º 02' W	42º 25' N
Huelva	E/10	6º 53’ 8’’ W	36º 58’ 8’’ N
Cádiz	E/12	6º 24' 30" W	36º 30' 30" N
Rota	E/12	6º 24' 30" W	36º 30' 30" N
Barbate	E/12C	5º 55' 00" W	36º 05' 00" N

2.1.7 Sweden

Three dumping sites have not been previously reported:
SWE/21, SWE/26 and SWE/28.

Locations of Swedish dumping sites in the OSPAR Area, 2009

All coordinates (except, possibly, for a few that have been difficult to check) are in WGS84
Dumping sites marked "uncoded" were reported before 2000 without codes
Included in the reporting for 2009

Code	Dumping place	Latitude N degrees minutes	Latitude N degrees	Longitude E degrees minutes	Latitude E degrees	Depth (m)
SWE/1	Stora Björkholmen	58 55,8	58,930	11 09,8	11,163	
SWE/2	Stora Borgen	58 37,241	58,62068	11 11,606	11,19343	54
uncoded01	Ösöfjorden	58 27,2081	58,45347	11 16,0372	11,26728	
SWE/3	Bohus Malmön	58 21,0744	58,35124	11 21,1308	11,35218	
uncoded02	Byfjorden	58 20,1418	58,33570	11 52,4204	11,87367	
SWE/4	Norra hamnen, Lysekil	58 16,696	58,27827	11 25,273	11,42122	
uncoded03	Bårholmen	58 15,0925	58,25154	11 39,9500	11,66583	
SWE/5	Koljöfjorden	58 13,828	58,23047	11 34,670	11,57783	
SWE/27		58 13,122	58,21870	11 53,262	11,88770	
SWE/28		58 10,901	58,18168	11 25,665	11,42775	
uncoded04	Almön / Källön	58 03,4170	58,05695	11 46,7222	11,7787	
SWE/6	Räbbehuvud	58 02,0504	58,03417	11 29,1958	11,48660	
SWE/7	Holmen Grå	57 56,177	57,93628	11 32,731	11,54552	
SWE/8	Guleskären	57 50,013	57,83355	11 37,469	11,62448	
SWE/19	Öckerö	57 42,384	57,70640	11 40,486	11,67477	
SWE/9	Stora Kalvsund	57 42,0602	57,70100	11 40,4337	11,67390	
SWE/10	Hakefjorden	57 40,03	57,6672	11 45,21	11,7535	5-10
SWE/11	Vinga	57 36,64	57,6107	11 34,88	11,5813	45
SWE/26		57 32,293	57,53822	11 54,886	11,91477	4
SWE/23		57 27,50	57,45833	11 53,50	11,89167	18
SWE/21		57 19,29	57,3215	12 02,05	12,03417	
SWE/17		57 15,90	57,2650	12 03,97	12,0662	
SWE/12		57 04,747	57,07912	12 09,232	12,15387	
SWE/13		56 51	56,850	12 20,5	12,342	22
SWE/22		56 42,5	56,708	12 25,0	12,417	>25

SWE/24		56 35,681	56,59468	12 47,080	12,78467	
SWE/15		56 34,8	56,580	12 47,0	12,783	
SWE/25		56 34	56,567	12 27	12,450	30
SWE/14		56 33,802	56,56337	12 27,089	12,45148	
SWE/20		56 28	56,467	12 50	12,833	14
SWE/18		56 15,20	56,253	12 41,80	12,697	

2.1.8 United Kingdom

New disposal sites for 2009 are:

Disposal Site Code	*Disposal Site*	*Latitude*	*Longitude*	*Site Shape*
FI002	DOUNREAY MICRO SITE	58.5873	-3.7582	POLYGON
FI002	DOUNREAY MICRO SITE	58.5877	-3.7587	POLYGON
FI002	DOUNREAY MICRO SITE	58.5978	-3.732	POLYGON
FI002	DOUNREAY MICRO SITE	58.5982	-3.7325	POLYGON
HU203	BABBAGE	53.8329	1.1342	POLYGON
HU203	BABBAGE	53.8333	1.1645	POLYGON
HU203	BABBAGE	53.86	1.1454	POLYGON
HU203	BABBAGE	53.8605	1.1757	POLYGON
IS035	DEGANWY BENEFICIAL USE	53.2901	-3.8286	POINT
IS065	CONWY BENEFICIAL USE	53.2923	-3.8363	POINT
IS164	RIBBLE LINK	53.7557	-2.7885	POINT
LU087	OLDBURY POWER STATION	51.6464	-2.5767	POLYGON
LU087	OLDBURY POWER STATION	51.647	-2.5778	POLYGON
LU087	OLDBURY POWER STATION	51.6472	-2.5758	POLYGON
LU087	OLDBURY POWER STATION	51.6478	-2.5767	POLYGON
TY085	TYNE TUNNEL	54.9858	-1.4839	POLYGON
TY085	TYNE TUNNEL	54.9859	-1.4858	POLYGON
TY085	TYNE TUNNEL	54.989	-1.484	POLYGON
TY085	TYNE TUNNEL	54.9891	-1.4858	POLYGON
WI071	RYDE HARBOUR	50.73	-1.1511	POINT

2.2 Method of determination

2.2.1 France

Definition of assumptions made in calculating quantities of dry matter in Table 3a

Relationship between the saturated density of the mixture ρ_{sat} *and the concentration of dry matter* ρ_{ms}*:*

These two parameters are connected through the following relationship:

$$\rho_{ms} = \frac{\rho_{ss}}{\left(\rho_{ss} - \rho_{o}\right)} \times \left(\rho_{sat} - \rho_{o}\right)$$ in which:

- ρ_{sat} = density of the mixture (in kg/m^3)

- ρ_{ms} = concentration of dry matter in the mixture (in kg dry matter/m^3)

- ρ_o = density of water at 4°C (in kg/m^3)

- ρ_{ss} = density of the dry sediment (in kg/m^3).

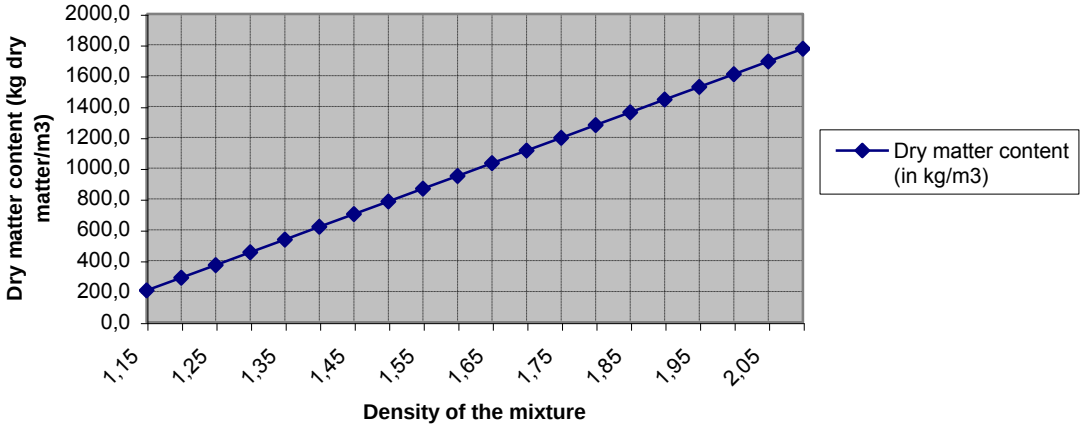
Assuming that ρ_{ss} = 2 600 kg/m^3 and ρ_o = 1 025 kg/m^3, the following simplified formula is obtained:

ρ_{ms} = 1 650,8 x (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^3)
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^3)
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

Hydrocarbons

Hydrocarbons (Table 3b) are analysed on 2mm fraction of marine sediments, by extraction with CC14 in Infra Red.

Total CB and Oil were not requested to laboratories in 2005.

2.2.2 Germany

For Germany where necessary, the quantities in Table 3a have been converted from cubic metres into tonnes dry weight. The following conversion factors (specific gravity) have been used:
in case of silt: 1,2
in case of sand: 1,8
in case of lacking information or composition of sand and silt: 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).

DDT:
From 2002 onwards, the figure given under DDT reflects the “pp-DDT-portion”. Additional information for pp-DDD and pp-DDE are given in the column “other” in Table 3b.

Total PAH:
Like in the preceding years, the figure under total PAH reflects the sum of PAH_6.(benzo[ghi]perylene; benzo[a]pyrene; fluoranthene; indeno[1,2,3-cd]pyrene; benzo[b]fluoranthene; benzo[k]fluoranthene)

2.2.3 Ireland

- Only CB 28; CB 52; CB 101; CB 118; CB 138; CB 153; and CB 180 measured
- For PAH, usually US EPA 16 PAH measured.
- Other CB congeners and PAH compounds requested in the event of a known problem or source.

PCB and OC determination:
Sample plus surrogate standards are extracted with DCM/Acetone by ASE. The solvent extract is reduced in volume and cleaned up using High Resolution Size Exclusion Chromatography (SEC/GPC). The extract is further cleaned up on Florisil and Silica columns. The cleaned up extract is analysed by GCMS in SIM mode.

PAH determination:
The sediment sample is extracted with an Accelerated Solvent Extraction system using a Dichloromethane/Acetone (50/50) solvent mixture. The extract is cleaned up with Gel Permeation chromatography and Silica gel and analysed via GC/MS in SIM mode.

Extractable hydrocarbons:
Sediment is extracted with pentane, dried and analysed by fluorescence spectroscopy.

The minimum limits of detection requested from laboratories are as follows. Occasionally, these cannot be me. Analysis are generally not sent elsewhere if known problems or sources do not exist in the dredged area.

Contaminant	**Concentration**	**Units (dry weight)**	**Contaminant**	**Concentration**	**Units (dry weight)**
Hg	0,05	mg kg^{-1}	CB28	1,0	µg kg^{-1}
As	1,0	mg kg^{-1}	CB52	1,0	µg kg^{-1}
Cd	0,1	mg kg^{-1}	CB101	1,0	µg kg^{-1}
Cu	5,0	mg kg^{-1}	CB118	1,0	µg kg^{-1}
Pb	5,0	mg kg^{-1}	CB138+163	1,0	µg kg^{-1}
Zn	10,0	mg kg^{-1}	CB153	1,0	µg kg^{-1}
Cr	5,0	mg kg^{-1}	CB180	1,0	µg kg^{-1}
Ni	15	mg kg^{-1}	DDE pp	1,0	µg kg^{-1}
TBT & DBT	0,01	mg kg^{-1}	DDT pp	1,0	µg kg^{-1}
PAHs	20	µg kg^{-1}	DDD pp	1,0	µg kg^{-1}
			Dieldrin	1,0	µg kg^{-1}
			Lindane	1,0	µg kg^{-1}
			HCB	1,0	µg kg^{-1}

All sample batches are required to have CRM analysed alongside, and results submitted as part of the report.

2.2.4 Spain

The grain size fraction analysed, in all cases, it has been smaller than 0,063 mm. The methodology used for the analysis is the following:

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

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.

2.2.5 United Kingdom

UK methods of determination are all as previously reported to EIHA/SEABED.

Total PCBs measured consists of the following congeners:

CB 18	CB 49	CB 110	CB 149	CB 170
CB 28	CB 52	CB 118	CB 151	CB 180
CB 31	CB 66	CB 128	CB 153	CB 183
CB 44	CB 101	CB 138	CB 156	CB 187
CB 47	CB 105	CB 141	CB 158	CB 194

Total PAHs measured consists of the following PAH compounds:

2, 3 Benzanthracene	Benzo[ghi]perylene	Fluoranthene
Acenaphene	Benzo [k] fluoranthene	Fluorene
Acenaphthylene	C1-Naphthalenes	Indeno[123-cd]pyrene
Anthracene	C1- Phenanthrenes	Naphthalene
Benzo[a]anthracene	C2-Naphthalenes	Perylene
Benzo[a]pyrene	C3-Naphthalenes	Phenanthrene
Benzo [b] fluoranthene	Chrysene	Pyrene
Benzo[e]pyrene	Dibenzo[a,h]anthracene	

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), pp.25.
- 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), pp. 29.

- Kelly, C.A., Law, R.J., and Emerson, H.S., 2000. Methods of analysing hydrocarbons and polycyclic aromatic hydrocarbons (PAH) in marine samples. Science Series, Aquatic Environmental Protection: Analytical Methods, CEFAS Lowestoft. (12), pp. 18.
- 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), pp. 25.
- 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), pp. 25.

2.3 Toxicity

Spain: In the case of Avilés Harbour (E/5), additionally to the chemical characterisation, two different bioassays using *Chlorella vulgaris* and Microtox (*Vibrio fischeri*), were conducted. The results indicated a negative toxicity.

2.4 Quality assurance of analyses of dumped material

a. Do the laboratories carrying out the analyses undertake: *Contracting Parties responding "Yes" to this question are indicated under the respective columns with their country abbreviation.*	All	None	Some
(i) the analysis of blank samples and laboratory reference materials with each batch of samples of waste and other material dumped in the maritime area that is analysed by that laboratory;	*Irl, Is, F, UK*		*De, Se,*
(ii) periodic comparative analysis of laboratory reference materials and certified reference materials;	*Irl, Is, F, Se, UK*		*De*
(iii) the compilation of quality control charts based upon the data resulting from the analyses of the laboratory reference materials and certified reference materials, and the use of those quality control charts to monitor analytical performance in relation to all samples of dumped wastes or other materials;	*Irl*, Is, F, Se, UK*		*De*
(iv) periodic participation in interlaboratory comparison exercises, including, where possible, international comparison exercises;	*Irl, Is, F (at least yearly), Se, UK*		*De*

a. Do the laboratories carrying out the analyses undertake: *Contracting Parties responding "Yes" to this question are indicated under the respective columns with their country abbreviation.*	All	None	Some
(v) periodic participation in national and, where possible, international laboratory proficiency schemes, under which: • participating laboratories are asked to analyse samples of substances which are provided by the organisers of the scheme; • the composition of those samples is not disclosed in advance; • the results of the scheme for each participating laboratory are made available to all participating laboratories.	*Irl, F (only in national comparison exercises), UK*		*De*

* *Ireland: compiled and maintained by analysing laboratory.*

b. If reporting "Some" in the table above, please indicate which parts of the data set are not subject to the full range of QA procedures.

In Germany, several laboratories, often commercial laboratories, are involved in analyses of dredged material. Most of these laboratories are accredited and apply the QA procedures (i) to (v).

c. Describe any practical action taken to apply the QA procedures described above (e.g. participation in interlaboratory comparison exercises and international QA/QC schemes).

Iceland: Analytical results obtained in international accredited laboratory, i.e. which has internal audit and is working according to ISO 17025.

Ireland: 5 out of 6 analyses were carried out by UK Environment Agency National Laboratory Service, which takes part in the QUASIMEME Laboratory Proficiency Scheme for sediment analysis.1 out of 6 analysis carried out by TES Bretby, UK. Sediments testing accredited by UKAS to ISO17025 and lab participates in MCERTS standards.

d. Are any special difficulties encountered in applying Quality Assurance procedures?

Ireland: No

2.5 Other relevant information

2.5.1 France

51 deposit sites were used in 2009 (among 88 issued).

3. Footnotes to all tables

3.1 Table 1

3.1.1 Belgium

(1) No new permits were issued during 2009 since all permits issued during 2008 are still valid.

3.1.2 France

One permit can be issued for one or several deposit sites

(1) 35 used in 2009 among the 72 valid permits.

(2) tonnes licensed represent the total amount licensed during the whole period of validity of the permit (most of the permits are granted for 5 or 10 years).

3.1.3 Germany

(1) Permits for dredging/disposing of dredged material are issued by the competent authorities of the Federal States. Permits are not issued for dredging/disposing activities of the German Federal Water and Shipping Directorate (the Directorate does not issue permits for its own activities). However, the dredging/disposing activities of the Directorate are governed by national regulations which are in accordance with OSPAR and LC requirements. Five deposit sites are notified for the first time.

(2) This quantity refers to silt.

(3) This quantity refers to sand.

(4) Additionally three areas are reported where Greenpeace dumped granite boulders illegally.

3.1.4 Iceland

(1) According to Iceland law, dumping of vessels and aircrafts are not permitted.

3.1.5 Ireland

(1) 2 permits issued for plough dredging. 5 multi-year permits active from previous years, 4 of which did not dredge in 2209. 1-year permit issued 2008 still active in 2009 but no dredging took place in 2009.

(2) Five new permits were issued in 2009.

(3) Four existing multi-annual permits still active from previous years although no dredging or dumping took place on most.

(4) Two permits applied to plough dredging, which is not reported to OSPAR. Sediment chemistry indicated no lower or upper actions exceeded.

(5) The amount licensed was substantially more than the amount dumped. This is because most applications contained substantial amounts for contingency.

(6) Total amount licensed is calculated in wet weight. Average moisture content was used to recalculate as dry wet.

3.1.6 Netherlands

(1) Since early 2009 a new system of regulating the disposal of dredged material is in effect in the Netherlands. The planned disposal needs to be announced and agreed upon within 5 working days after the announcement. This so called 'bbk-announcement' should at least give insight in the sediment quality and expected amounts. This information is identical to the application of a permit but a formal permit is no longer required.

(2) Announcements mentioned under 1) are based on the estimated amounts to be dredged in cubic metres (not metric tonnes) therefore total amounts are estimated.

(3) Permits (and announcements mentioned under 1) issued for dumping of dredged materials in national waters are numerous and are not taken into account in the overview of total amounts licensed in tables 1 and 2 but are specified in table 3.

3.1.7 Spain

(1) In 2009 the following new permits were issued for:

- *Pasajes* (E/1): 1 permit
- *Santander* (E/3): 1 permit
- *Puerto de Vega* (E/5E): 1 permit
- *Laxe* (E/7B): 1 permit
- *Vilagarcía* (E/8): 1 permit
- *Moaña* (E/8): 1 permit
- *Rota* (E/12): 1 permit
- *Barbate* (E/12C): 1 permit

(2) In the following cases the disposal operations of dredging works started (and licensed) in previous years:

- *Ondarroa* (E/2C) permit issued in 2008
- A joint permit was issued for the followings harbours: *Laredo* and *Colindres* with the same dumping site (E/3B), *Suances* (E/3C), *San Vicente de la Barquera* (E/3D) and *Comillas* (E/3E) in 2006 for the period 2006-2009
- *Llanes* (E/4B) permit issued in 2005 for the period 2005-2009
- *Candás* (E/4C) permit issued in 2006 for the period 2006-2010 and 1 permit issued in 2007
- *Lastres* (E/4D) permit issued in 2005 for the period 2005-2009
- *Ribadesella* (E/4E) permit issued in 2008 for the period 2008-2012
- *Avilés* (E/5) permit issued in year 2005
- *San Esteban de Pravia* (E/5B) permit issued in 2007 for the period 2008-2012
- *San Juan de la Arena* (E/5B) permit issued in 2008
- *Navia* (E/5C) permit issued in 2007 for the period 2008-2012
- *Luarca* (E/5D) permit issued in 2005 for the period 2005-2009
- *Figueras* (E/5F) permit issued in 2008 for the period 2008-2012
- *Burela* (E/6B) permit issued in 2008
- *Ribadeo* (E/6B) permit issued in 2008

- *A Coruña* (E/7) permit issued in 2008
- *Vilagarcía* (E/8) permit issued in 2008
- *Huelva* (E/10) permit issued in 2008
- *Cádiz* (E/12) permit issued in 2008
- *Rota* (E/12) permit issued in 2008

3.1.8 Sweden

(1) 13 new Swedish licenses were issued in 2009 for the OSPAR Area. 2 of these licenses (63 000 m^3, approximately 93 000 tonnes) are also reported to HELCOM. For Skagerrak alone 11 licenses (5 530 m^3, approximately 600 tonnes) were issued.

3.1.9 United Kingdom

(1) UK licensed tonnages are usually on a wet weight basis. These are the estimated dry weight equivalents.

(2) A significant number of UK dredged material licenses are now issued for 3 years, including some with very large tonnages.

(3) 6 000 tonnes dry weight of fish waste was licensed for deposit in the sea in 2008 under a 3 year licence issued in December 2005 to run from 1st February 2006 to 31st January 2009 *i.e.* 2 000 tonnes per annum. The material was licensed for deposit directly onto the intertidal zone but is not dumping under the terms of the Convention. 137 tonnes of fish waste was deposited under this licence during 2009. The license was renewed in 2009 to run from 5th February 2009 to 4th February 2012 at the same disposal quantities, i.e. 2 000 tonnes per annum. 1 750 tonnes of fish waste were deposited under this licence in 2009.

3.2 Table 2

3.2.1 France

(1) Favourable conclusions at the end of the Environmental Impact Assessment.

(2) Site F/05904: tonnes mentioned come from 3 particular dredging sites. On that same site, others dumping operations occurred without exceeding the level 2.

3.2.2 Germany

(1) Action levels and contaminant concentrations reported in footnotes (2), (3), (4) and (5) refer to the fine-grained fraction <20 µm for heavy metals and < 63 µm for organic pollutants.

(2) The amount of 1 000 tonnes dredged material of the access channel to the harbour Amrun/Wittdün is marginal and actually exempted from detailed characterisation. Analyses of dredged material in this area in June 2010 does not indicate an exceedance of any action level (reported in: "Unterhaltungsbaggerung Seezeichenhafen Wittdün WSV-ID: AF1_WSV_20100212080755_216"). The informations of analyses from the operator of harbour will be proved.

(3) The maintenance of the Hamburg Seaport requires continuous dredging of the access channels to the harbour basins. According to the concept of management of dredged material established by the authority for economic and environmental affairs of the City of Hamburg, disposal of dredged material not exceeding given quality criteria can be carried out in the Elbe downstream of Hamburg only during winter time. About 1 Mio m^3/a of highly contaminated dredged material is deposited on land, partially after mechanical treatment of the material. In summer 2005, there was an increasing need for dredging in order to keep accesses to the

harbour basins open. However, disposal in the river Elbe in summer was not permitted, since it could severely affect the water quality (e.g. oxygen depletion). Moreover, it is suspected that large amounts of dredged material disposed of downstream of Hamburg is transported back to the harbour area. In order to reduce the need for dredging, the Hamburg Port Authority intended to remove part of the material from the sediment cycle and deposit it on land. However, it was not possible to increase the capacity of the sediment treatment plant.

Thus, in summer 2005, the Federal State Schleswig-Holstein permitted disposing of 0,8 Mio m^3 of dredged material in 2005 and a further 3,7 Mio m^3 in the period 2006 to 2008 at a sediment disposal site in the Southern German Bight, provided the permit conditions of Schleswig-Holstein were met. A long term sediment management concept is being developed. Disposal of dredged material is accompanied by a comprehensive monitoring program.

The average concentrations of contaminants exceeding action level 2 and the related amount of dredged material are shown in Table 2 in column (4) + (5).

(4) dredging areas from Elbe-km 639 to 685,5

Part of the dredged material from the inner Elbe estuary beyond the OSPAR-Convention area was disposed of in the OSPAR area, since the capacity of deposits near the dredging sites was depleted. Furthermore, it is supposed that there is a return transport of dredged material from close-by deposits due to hydromorphological conditions. Disposal of part of the material at more seaward sites should reduce the increased sediment amounts to be dredged. A new concept for the management of dredged material is under development.
The average concentrations of contaminants exceeding action level 2 and the related amount of dredged material are shown in Table 2 in column (4) + (5).

3.2.3 Ireland

(1) Repeat and follow up sampling and analysis indicated 1 out of 20 samples with elevated Hg. Total quantity quite small, disposed of at well used dumpsite.

(2) Originally, 1 out of 10 samples had concentration higher than upper action level. Overall concentration between lower and upper AL. .Follow-up analysis indicated either hotspot or laboratory anomaly so dumping was permitted.

3.2.4 Norway

(1) Deepwater deposit site.

(2) Action level: over this limit the material is considered as contaminated.

(3) Wet weight

3.2.5 Sweden

No material dumped during 2009 was considered to have exceptionally high pollutant concentrations.

3.3 Table 3 a

3.3.1 Germany

(1) Sand, exempted from chemical analyses.

(2) Silt.

(3) Water injection dredging.

(4) Illegal dumping by Greenpeace of granite boulders (320 stones each 1-3 t).

3.3.2 Netherlands

(1) The amounts for deposit sites NL-10, 11 and 13 were not available at the time of reporting.

3.3.3 Norway

(1) All weights are wet weights.

3.3.4 Sweden

(1) 120 m^3 sand/mud. Permit issued in 2009. (Permit no. 523-1114-09)

(2) 100 m^3 sand, clay, stone, shells. Permit issued in 2009. (Permit no. 523-5767-09)

(3) 40 m^3, sand mainly. Permit issued in 2009 (Permit no. 523-131-09)

(4) Totally 2020 m^3 (Permit numbers 523-2066-09, 523-3866-09, 523-5005-09)

(5) 1 250 m^3. Permit issued in 2008. (Permit no. 523-2971-08)

(6) 500 m^3 sand and clay. Permit issued in 2008. (Permit no. 523-1321-08)

(7) 250 m^3 gyttja. Assumed to have taken place in 2009. (Permit no. 523-215-09)

(8) 2 580 m^3. Permit issued in 2008. New dumping site, SWE/27. (Permit no. 523-4716-08).

(9) 400 m^3 sand. Assumed to have taken place in 2009. Permit issued in 2008. New dumping site. (Permit no. 523-1246-08)

(10) 37 200 m^3. *Also reported to HELCOM.*

(11) 8 300 m^3. *Also reported to HELCOM.*

(12) 100 m^3 sand. Permit issued in 2008. New dumping site. (Permit no. 523-7497-07). *Also reported to HELCOM*

(13) 18 000 m^3. Permit issued in 2006. (Permit no. 523-2136-06). *Also reported to HELCOM.*

3.3.5 United Kingdom

(1) NS100 was a deposit site in the North Sea disposal of pipeline pre-sweep sediment.

(2) RB001 was opened in correctly and renamed IS164. The licence was varied to reflect this.

3.4 Table 3 b

3.4.1 Germany

(1) Sand which is exempted from analyses according to § 5.3 of the OSPAR Guidelines for the Management of Dredged Material is given as additional information in Table 3a.

3.4.2 Ireland

(1) IE - Limits of Detection indicated by < in Table 3b

- Dumpsite 8, Hg - <1 mg kg^{-1}
- Dumpsite 8, PAH - < 80 ug kg^{-1}
- Dumpsite 55, Hg - < 0.05 mg kg^{-1}
- Dumpsite 52, PAH - < 40 ug kg^{-1}
- All dumpsites, PCB < 1ug kg^{-1} or <0.1ug kg^{-1}
- All dumpsites, DDT < 1ug kg^{-1} or <0.1ug kg^{-1}
- Dumpsite 6, TBT - <0.003 mg kg^{-1}

- Dumpsite 8, TBT - <0.02 mg kg^{-1}
- Dumpsite 20, TBT - <0.002 mg kg^{-1}
- Dumpsite 47, TBT - <0.002 mg kg^{-1}
- Dumpsite 52, TBT - <0.005 mg kg^{-1}
- Dumpsite 55, TBT - <0.006 mg kg^{-1}

3.4.3 Netherlands

(1) In Scheveningen Harbour no dredging was done in 2009, therefore no amounts are stated for the deposit site NL-6.

(2 The amounts for deposit sites NL-10, 11, 13, 14 and 15were not available at the time of reporting.

(3) The amount for deposit site NL-16 Slijkgat is so small that relevant loads could not be calculated, therefore stated as 0.

3.4.4 Sweden

(1) Quantification for each PCB congener is 0,02 mg/kg.

(2) ΣPAH16: 0,5 kg. The quantification limits for Cd vary between <0,076 and <0,11.

(3) Quantification limits: TBT <1 µg/kg, TPhT <1 µg/kg, ΣPCB7 <20 mg/kg, individual congeners<3 mg/kg, ΣPAH16 <0,8 mg/kg.

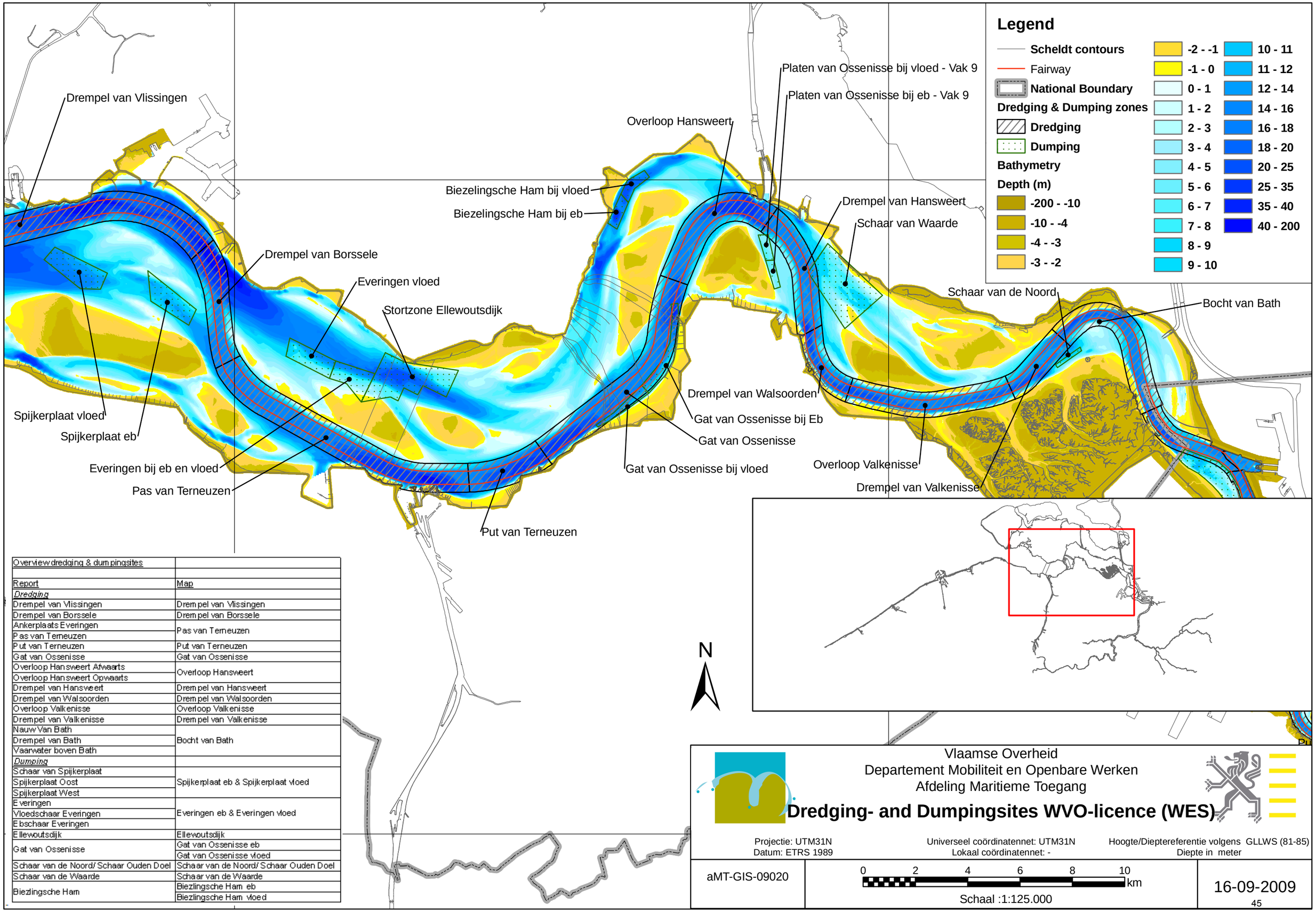
(4) ΣPAH16 18 kg. Analysis of ΣPCB7 and congeners has been made, although the results were not easily understandable.

4. Legend to all tables

NA Not applicable
ND Not determined
NI No information
DL Detection limit

FIGURE 1: LOCATION OF DUMPING SITES IN 2009

FIGURE 2a: Dredging and Dumping Sites in Belgium in 2009



Overview dredging & dumpingsites	
Report	Map
Dredging	
Drempel van Vlissingen	Drempel van Vlissingen
Drempel van Borssele	Drempel van Borssele
Ankerplaats Everingen	Pas van Terneuzen
Pas van Terneuzen	
Put van Terneuzen	Put van Terneuzen
Gat van Ossenisse	Gat van Ossenisse
Overloop Hansweert Afwaarts	Overloop Hansweert
Overloop Hansweert Opwaarts	
Drempel van Hansweert	Drempel van Hansweert
Drempel van Walsoorden	Drempel van Walsoorden
Overloop Valkenisse	Overloop Valkenisse
Drempel van Valkenisse	Drempel van Valkenisse
Nauw Van Bath	Bocht van Bath
Drempel van Bath	
Vaarwater boven Bath	
Dumping	
Schaar van Spijkerplaat	Spijkerplaat eb & Spijkerplaat vloed
Spijkerplaat Oost	
Spijkerplaat West	
Everingen	Everingen eb & Everingen vloed
Vloedschaar Everingen	
Ebschaar Everingen	
Ellewoutsdijk	Ellewoutsdijk
Gat van Ossenisse	Gat van Ossenisse eb
	Gat van Ossenisse vloed
Schaar van de Noord/ Schaar Ouden Doel	Schaar van de Noord/ Schaar Ouden Doel
Schaar van de Waarde	Schaar van de Waarde
Biezlingsche Ham	Biezlingsche Ham eb
	Biezlingsche Ham vloed

Vlaamse Overheid
Departement Mobiliteit en Openbare Werken
Afdeling Maritieme Toegang

Dredging- and Dumpingsites WVO-licence (WES)

Projectie: UTM31N
Datum: ETRS 1989

Universeel coördinatennet: UTM31N
Lokaal coördinatennet: -

Hoogte/Dieptereferentie volgens GLLWS (81-85)
Diepte in meter

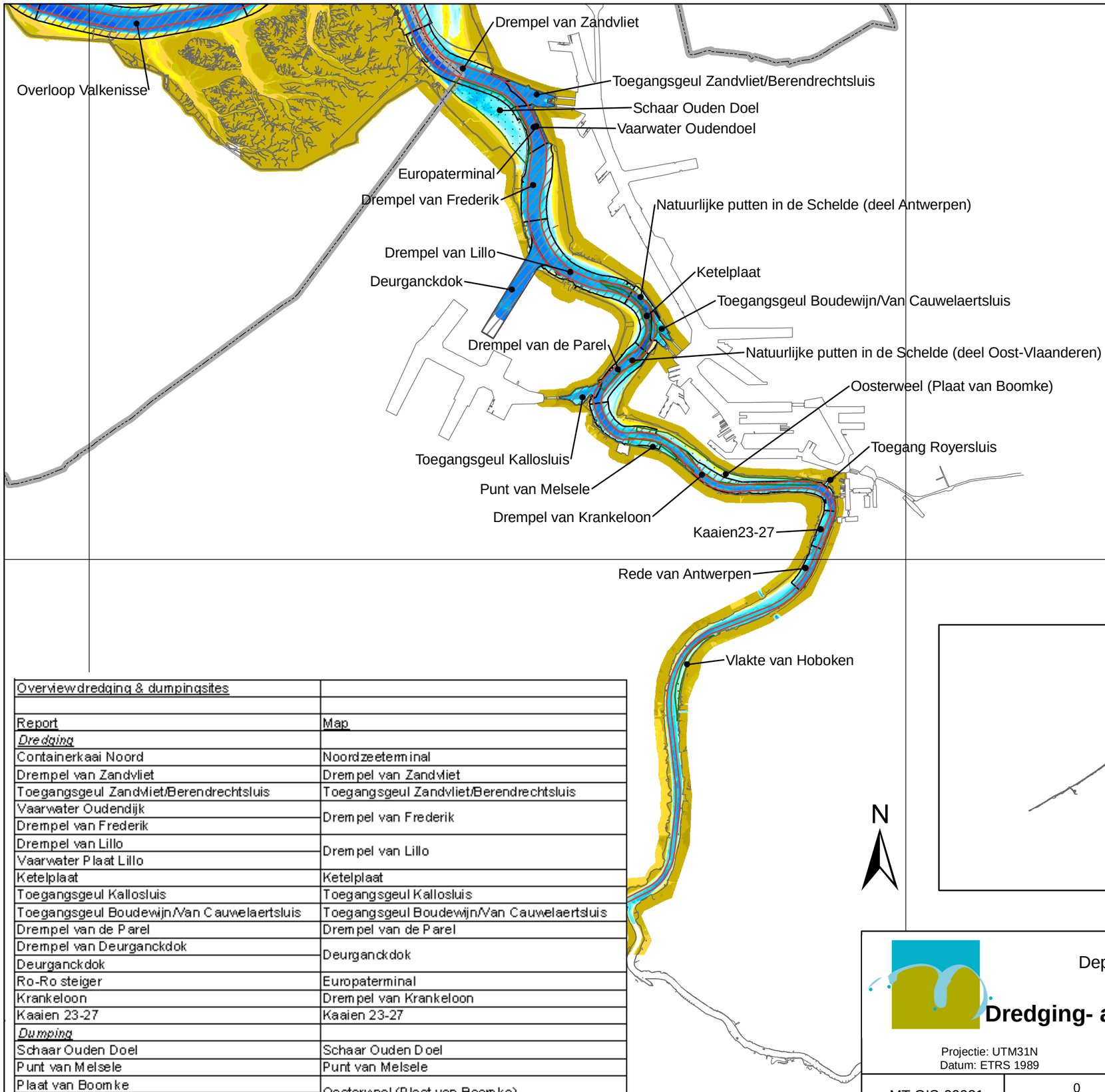
aMT-GIS-09020

0 2 4 6 8 10 km

Schaal :1:125.000

16-09-2009

FIGURE 2b: Dredging and Dumping sites in Belgium in 2009



Legend

- Scheldt contours
- Fairway
- National Boundary

Dredging & Dumping sites

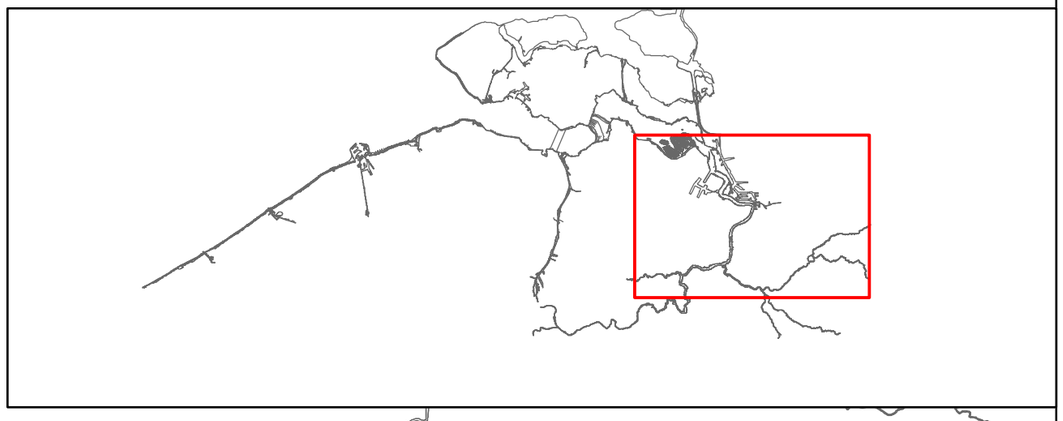
- Dredging
- Dumping

Bathymetry

Depth (m)

- -200 - -10
- -10 - -4
- -4 - -3
- -3 - -2
- -2 - -1
- -1 - 0
- 0 - 1
- 1 - 2
- 2 - 3
- 3 - 4
- 4 - 5
- 5 - 6
- 6 - 7
- 7 - 8
- 8 - 9
- 9 - 10
- 10 - 11
- 11 - 12
- 12 - 14
- 14 - 16
- 16 - 18
- 18 - 20
- 20 - 25
- 25 - 35
- 35 - 40
- 40 - 200

5675000



Overviewdredging & dumpingsites	
Report	Map
Dredging	
Containerkaai Noord	Noordzeeterminal
Drempel van Zandvliet	Drempel van Zandvliet
Toegangsgeul Zandvliet/Berendrechtsluis	Toegangsgeul Zandvliet/Berendrechtsluis
Vaarwater Oudendijk	Drempel van Frederik
Drempel van Frederik	
Drempel van Lillo	Drempel van Lillo
Vaarwater Plaat Lillo	
Ketelplaat	Ketelplaat
Toegangsgeul Kallosluis	Toegangsgeul Kallosluis
Toegangsgeul Boudewijn/Van Cauwelaertsluis	Toegangsgeul Boudewijn/Van Cauwelaertsluis
Drempel van de Parel	Drempel van de Parel
Drempel van Deurganckdok	Deurganckdok
Deurganckdok	
Ro-Ro steiger	Europaterminal
Krankeloon	Drempel van Krankeloon
Kaaien 23-27	Kaaien 23-27
Dumping	
Schaar Ouden Doel	Schaar Ouden Doel
Punt van Melsele	Punt van Melsele
Plaat van Boomke	Oosterweel (Plaat van Boomke)
Oosterweel	
Vlakte van Hoboken	Vlakte van Hoboken

Vlaamse Overheid
Departement Mobiliteit en Openbare Werken
Afdeling Maritieme Toegang

Dredging- and Dumpingsites WVO-licence (BEZ)

Projectie: UTM31N
Datum: ETRS 1989

Universeel coördinatennet: UTM31N
Lokaal coördinatennet: -

Hoogte/Dieptereferentie volgens GLLWS (81-85)
Diepte in meter

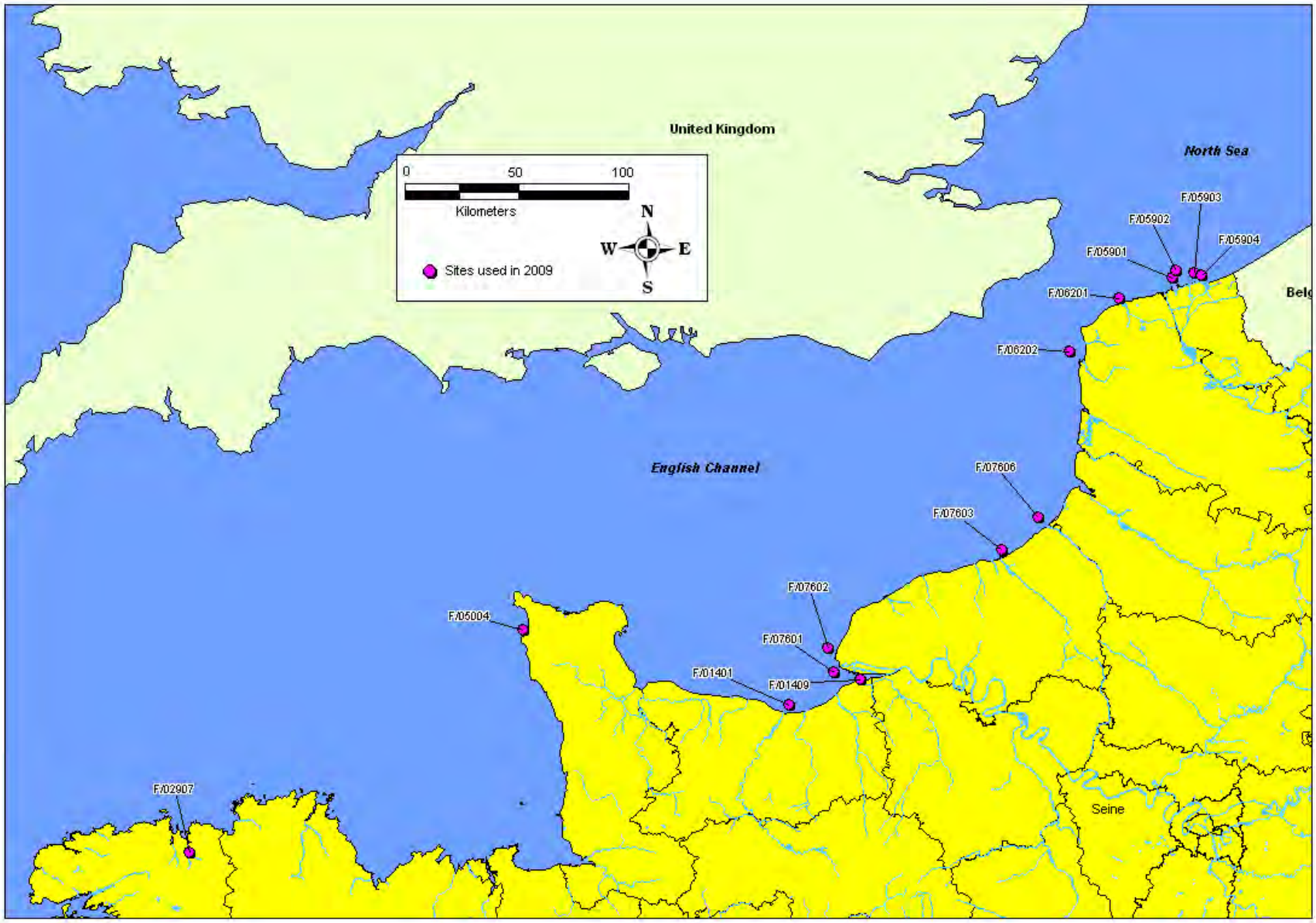
aMT-GIS-09021

0 2 4 6 8 10 km

Schaal :1:125.000

16-09-2009

FIGURE 3a: Locations of dumping sites in France (English Channel) in 2009



1

FIGURE 3b: Location of dumping sites in France (Atlantic Ocean) in 2009

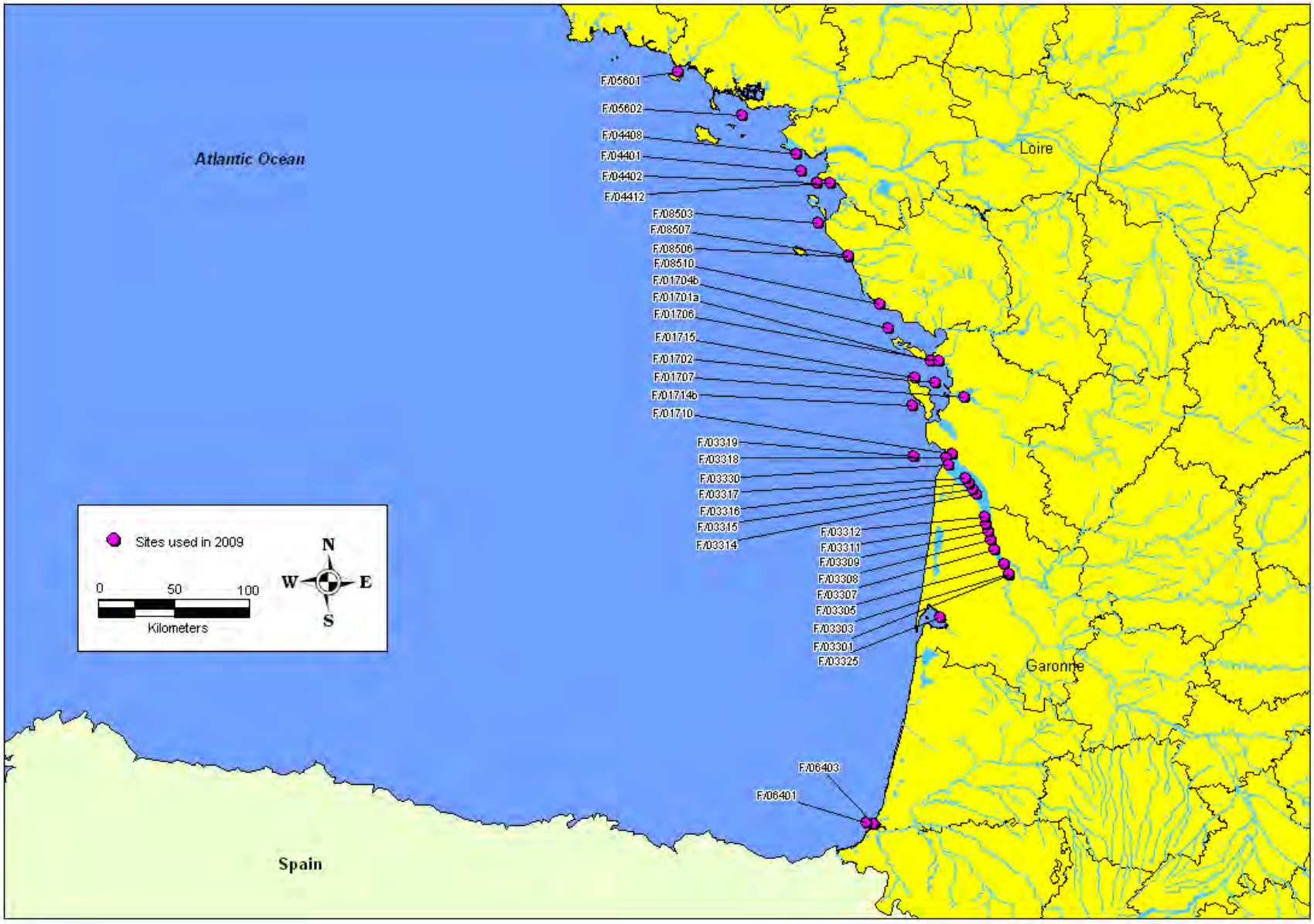


FIGURE 4: DUMPING SITES IN GERMANY IN 2009

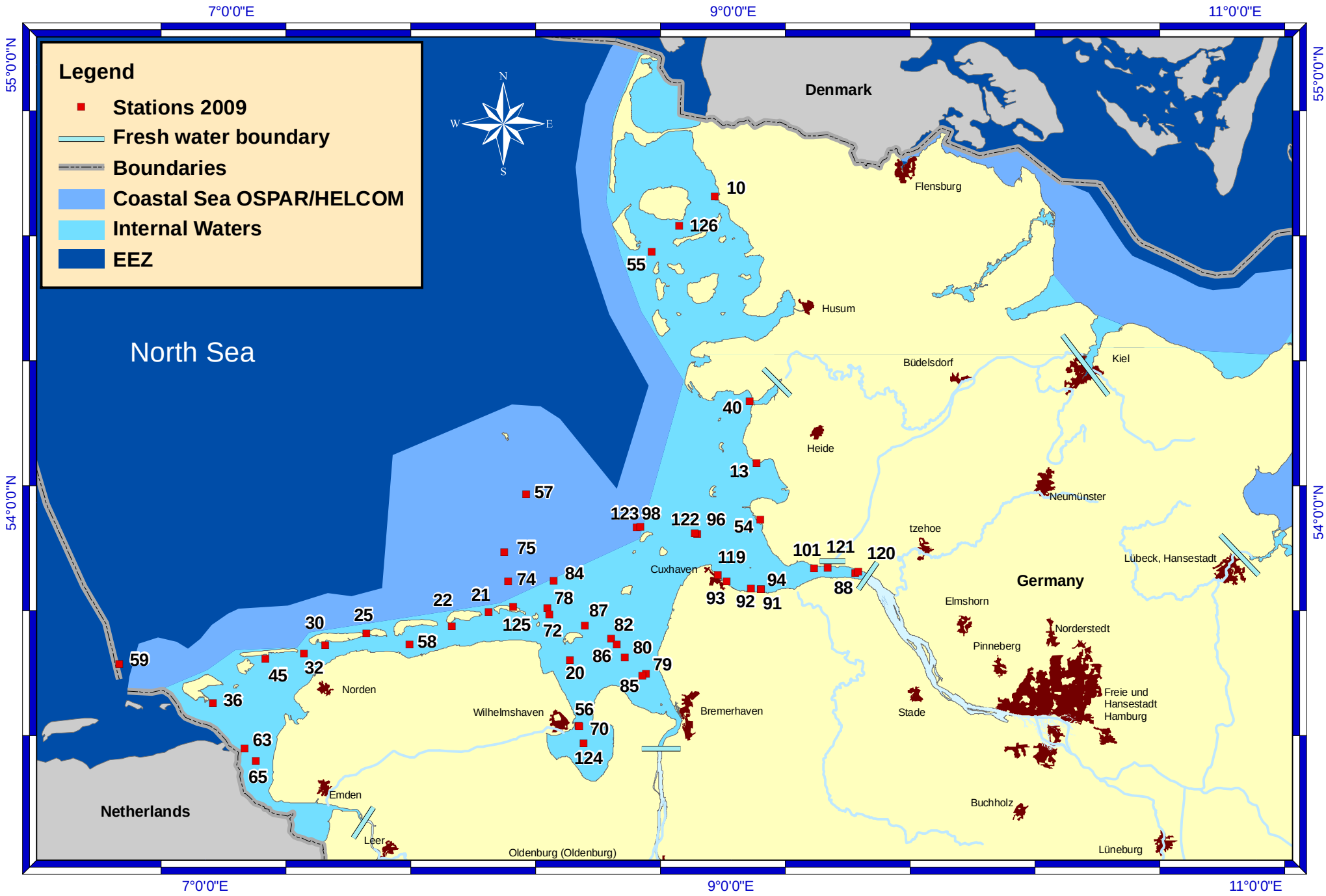
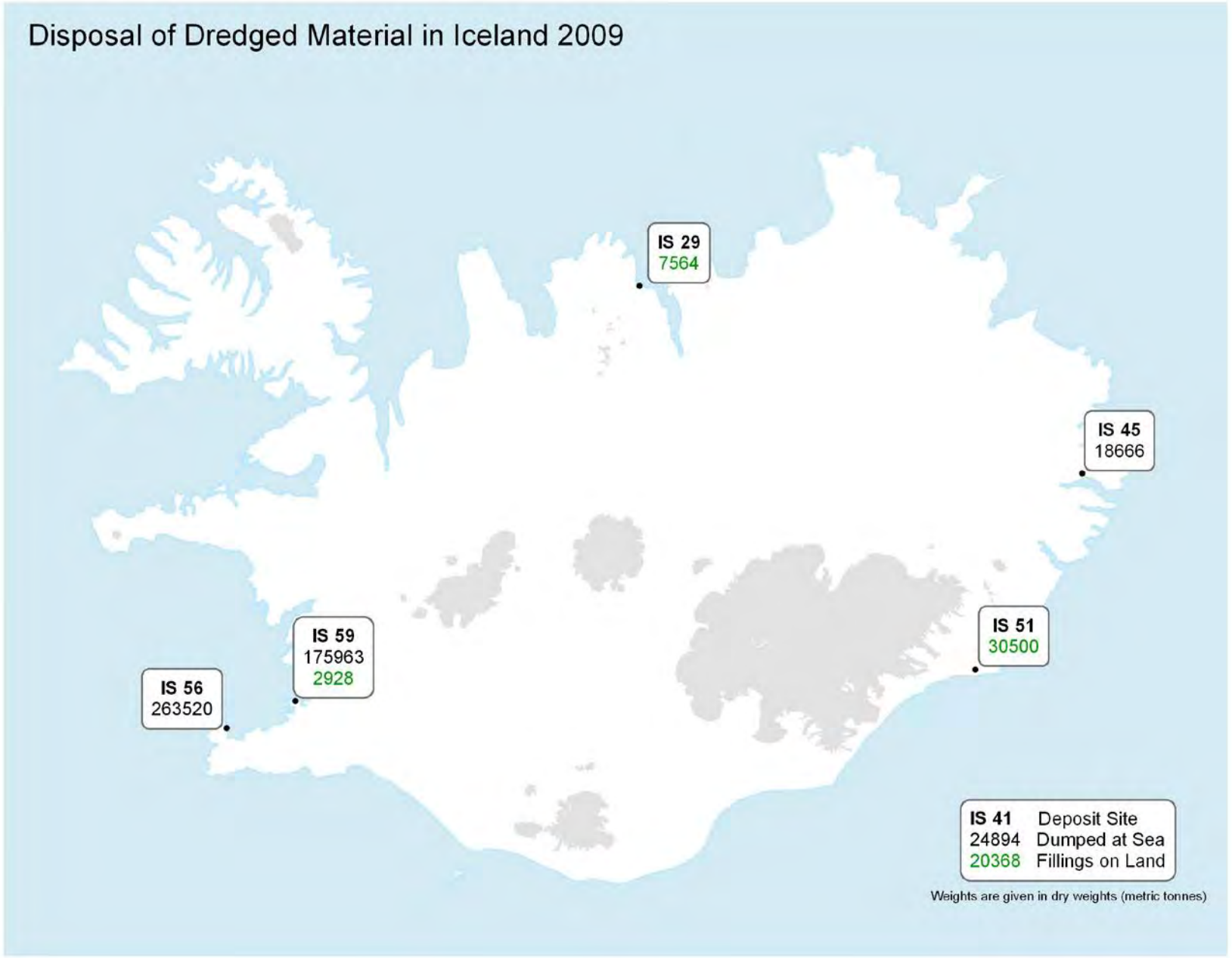


FIGURE 5: Locations of dumping sites in Iceland in 2009



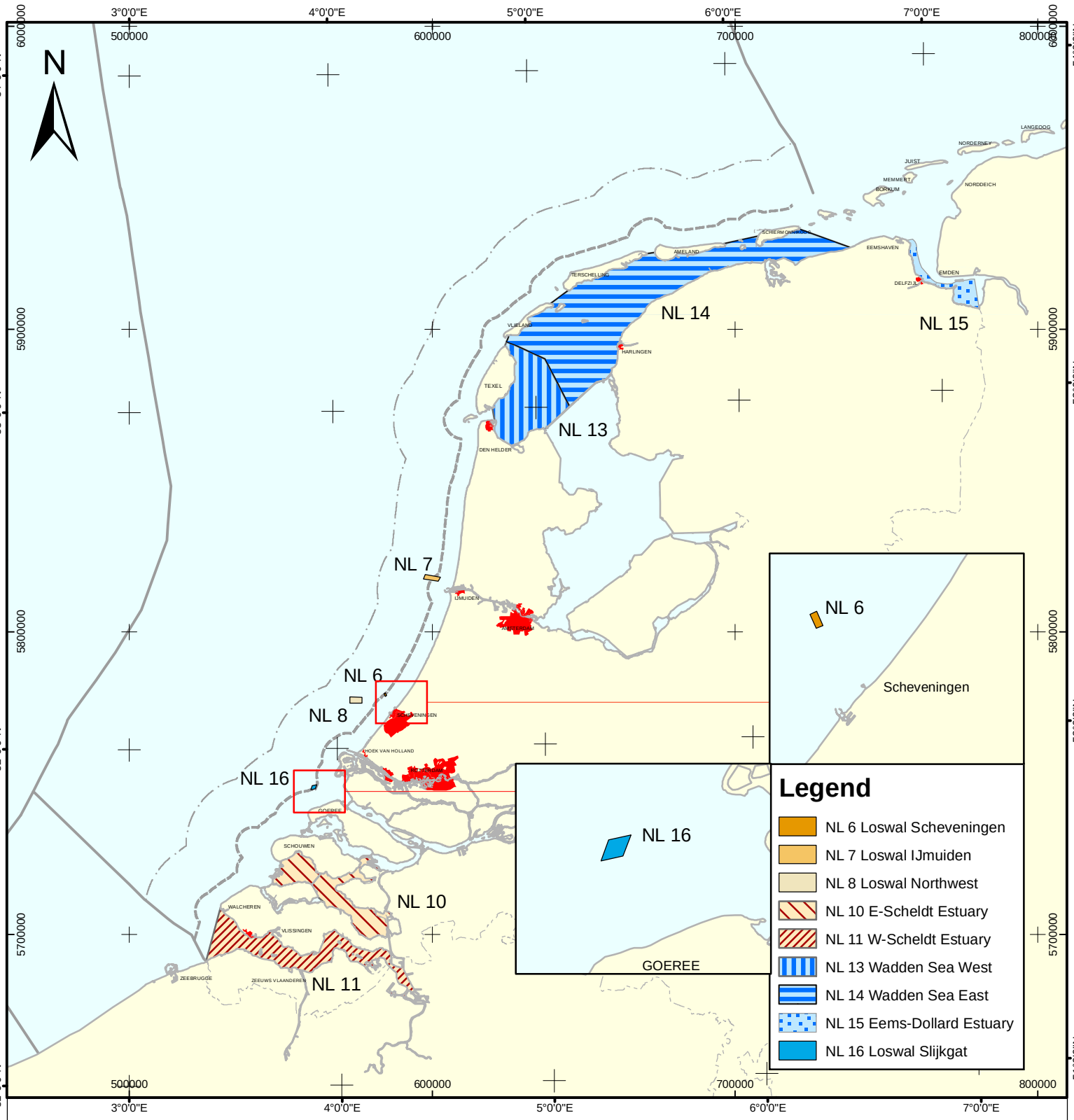
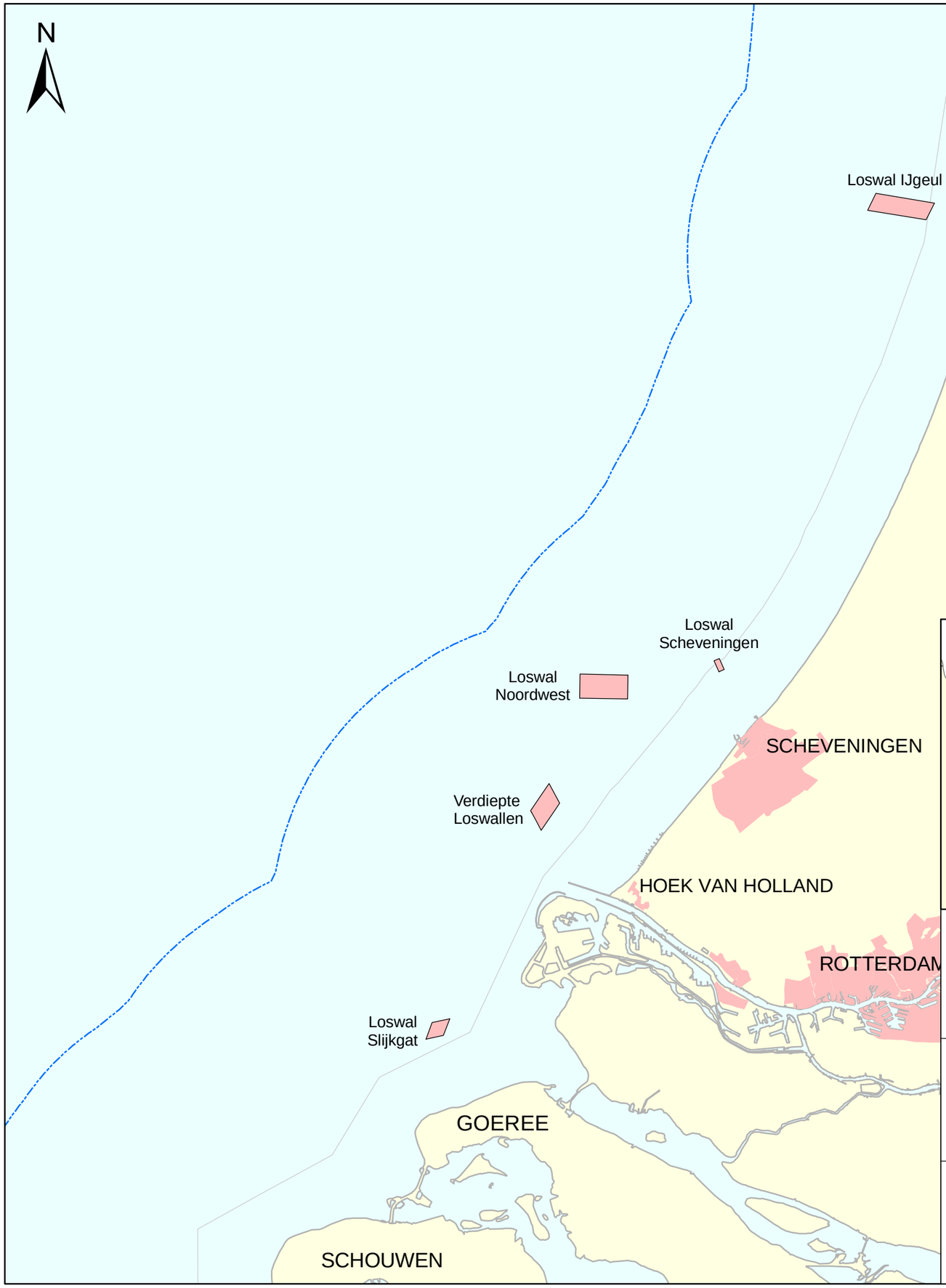
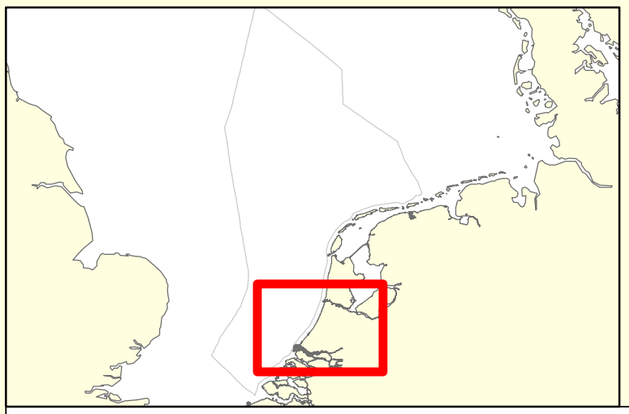


FIGURE 6a: **Approximate position of the dumping sites for dredged materials in Oslo convention waters used in 2009 by the Netherlands**

Opdrachtgever:	RWS Noordzee directie Water en Scheepvaart (WS) afdeling Vergunningverlening (WSV) S. de Jong 070-3366641	QMS projectcode	10 NZE 9639_01
		Kaartnummer	NZWS-2010 - 0140
		Kaartserie	Blad 1/1
		Coördinatenstelsel	ETRS89 UTM zone 31N
		Formaat	A4
Opdrachtnemer:	RWS Noordzee directie Water en Scheepvaart (WS) Meet- en Informatiedienst (WSM) HMCN 070-3366800	Schaal 1:1.750.000 0 12,5 25 50 75 100 km	

Getekend	Gezien	Akkoord
GM		51
14 - 04 - 2010		





Coördinaten in ED50

Verdiepte loswallen

Nr	Noorderbreedte	Oosterlengte	Easting	Northing
1	52 03 00 N	004 00 10 E	568773	5767207
2	52 04 13 N	004 01 33 E	570314	5769484
3	52 03 19 N	004 02 18 E	571195	5767827
4	52 02 06 N	004 00 55 E	569655	5765550

Loswal Noordwest

Nr	Noorderbreedte	Oosterlengte	Easting	Northing
1	52 08 05 N	004 03 54 E	572898	5776664
2	52 09 10 N	004 03 58 E	572936	5778684
3	52 09 05 N	004 07 29 E	576952	5778608
4	52 08 00 N	004 07 25 E	576914	5776588

Loswal Scheveningen

Nr	Noorderbreedte	Oosterlengte	Easting	Northing
1	52 09 11 N	004 14 11 E	584600	5778890
2	52 09 41 N	004 13 51 E	584195	5779810
3	52 09 47 N	004 14 15 E	584655	5780005
4	52 09 17 N	004 14 36 E	585055	5779085

Loswal IJgeul

Nr	Noorderbreedte	Oosterlengte	Easting	Northing
1	52 29 59 N	004 25 50 E	597122	5817698
2	52 30 44 N	004 26 28 E	597810	5819104
3	52 30 14 N	004 30 49 E	602743	5818291
4	52 29 29 N	004 30 11 E	602055	5816884

Loswal Slijkgat

Nr	Noorderbreedte	Oosterlengte	Easting	Northing
1	51 52 42 N	003 52 16 E	559972	5747991
2	51 53 28 N	003 52 44 E	560492	5749397
3	51 53 37 N	003 54 01 E	561958	5749713
4	51 52 52 N	003 53 33 E	561438	5748307

FIGURE 6b:

Overzicht Stortvakken

Datum 07 oktober 2008

Opdrachtgever:

RWS Noordzee
directie Water en Scheepvaart
Vergunningverlening
S. de Jong / sander.de.jong@rws.nl
070-33 66 641

Opdrachtnemer:

RWS Noordzee
directie Water en Scheepvaart
Meet- en Informatiedienst
HMCN
070-33 66 800

QMS projectcode	08 NZE 96.. dv 01
Kaartnummer	NZWS 2008-0155
Kaartserie	Blad 1 / 1
Coördinatenstelsel	QMS Norm 1
Formaat	A3

Schaal 1:375.000

0 3 6 12 18 24 km

Getekend	Gezien	Akkoord
RH		52
07 - 10 - 2008		

Figure 7: Dumping sites in Norway 2009

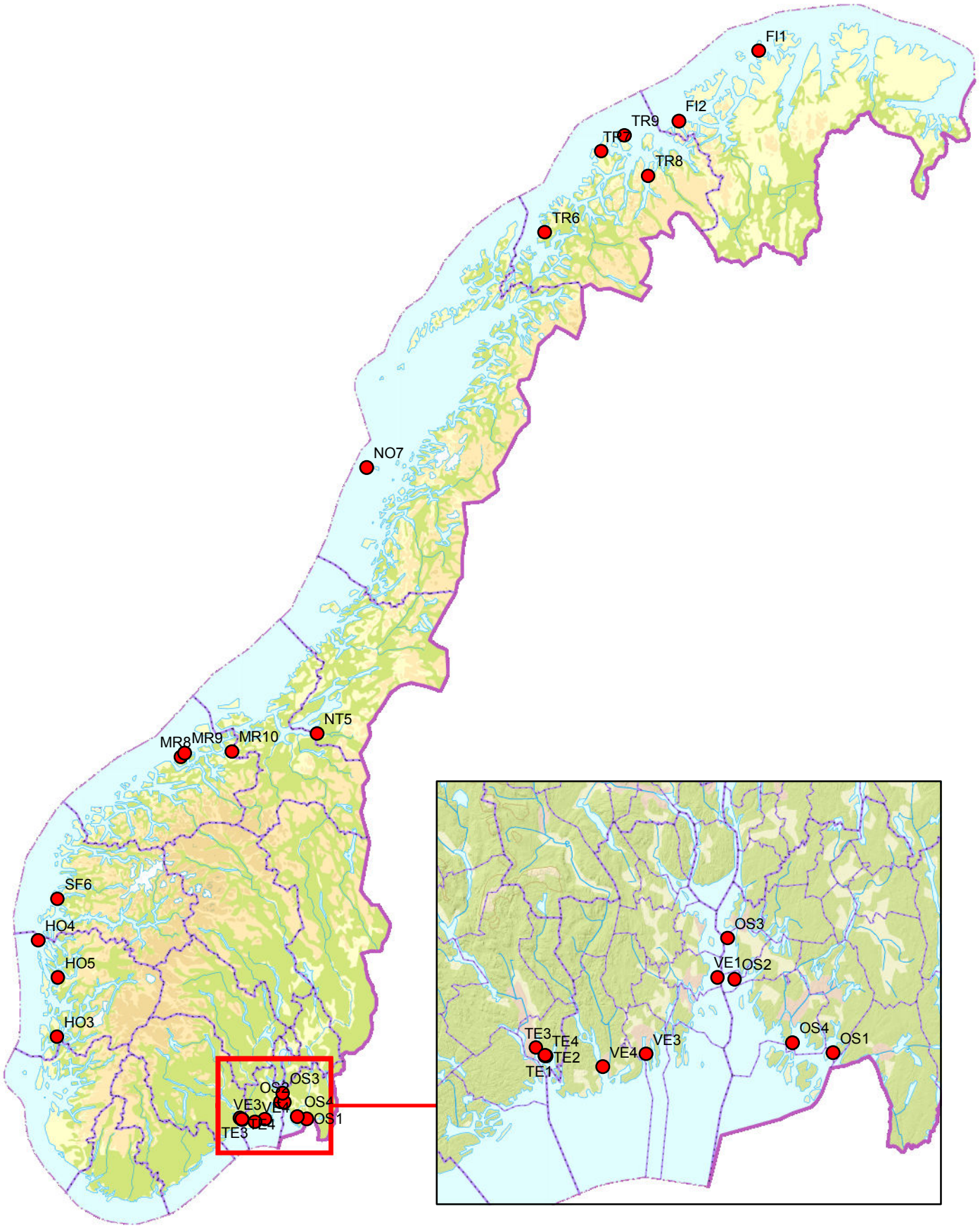


Figure 8

Marine disposal sites in Southwest England and South Wales. Site codes and quantities deposited in tonnes dry weight, in 2009.

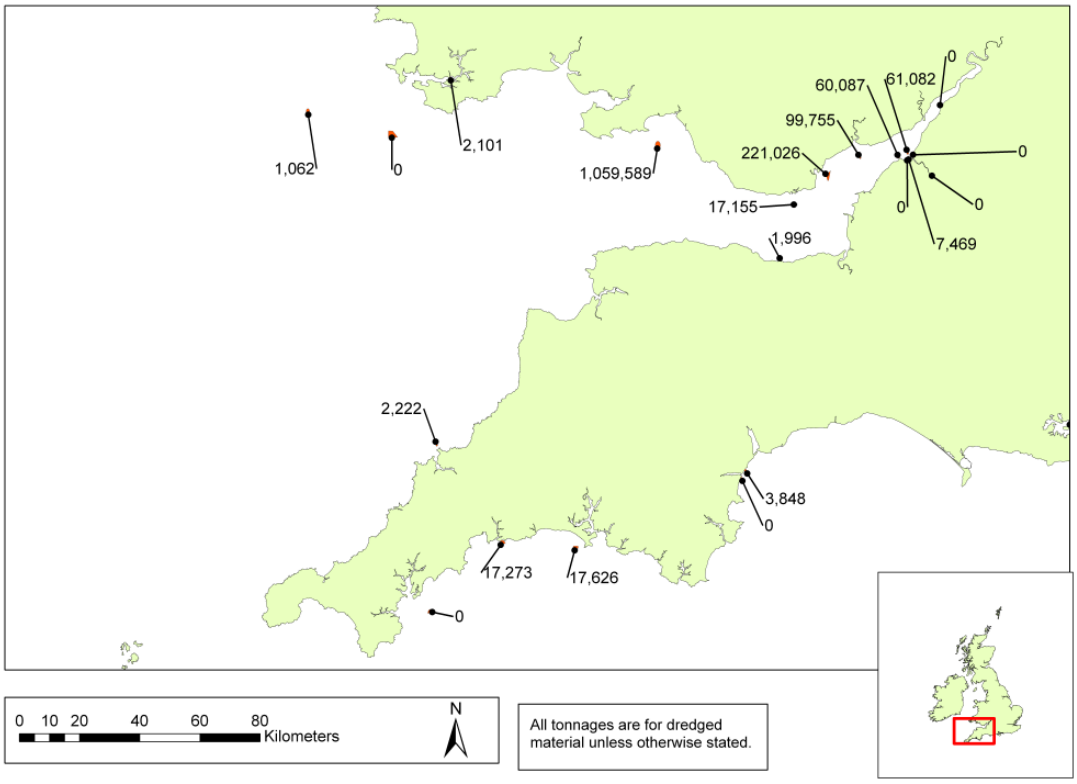


Figure 9

Marine disposal sites in East England
Site codes and quantities deposited in tonnes dry weight, in 2009.

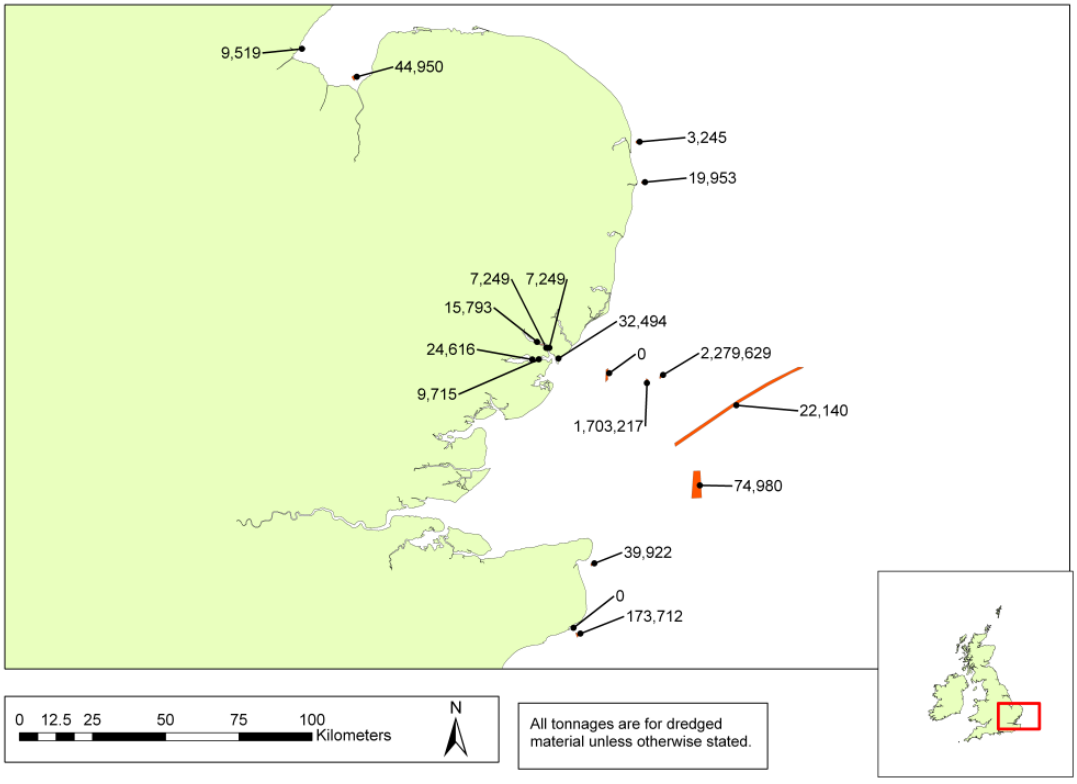


Figure 10

Marine disposal sites in North East England
Site codes and quantities deposited in tonnes dry weight, in 2009.

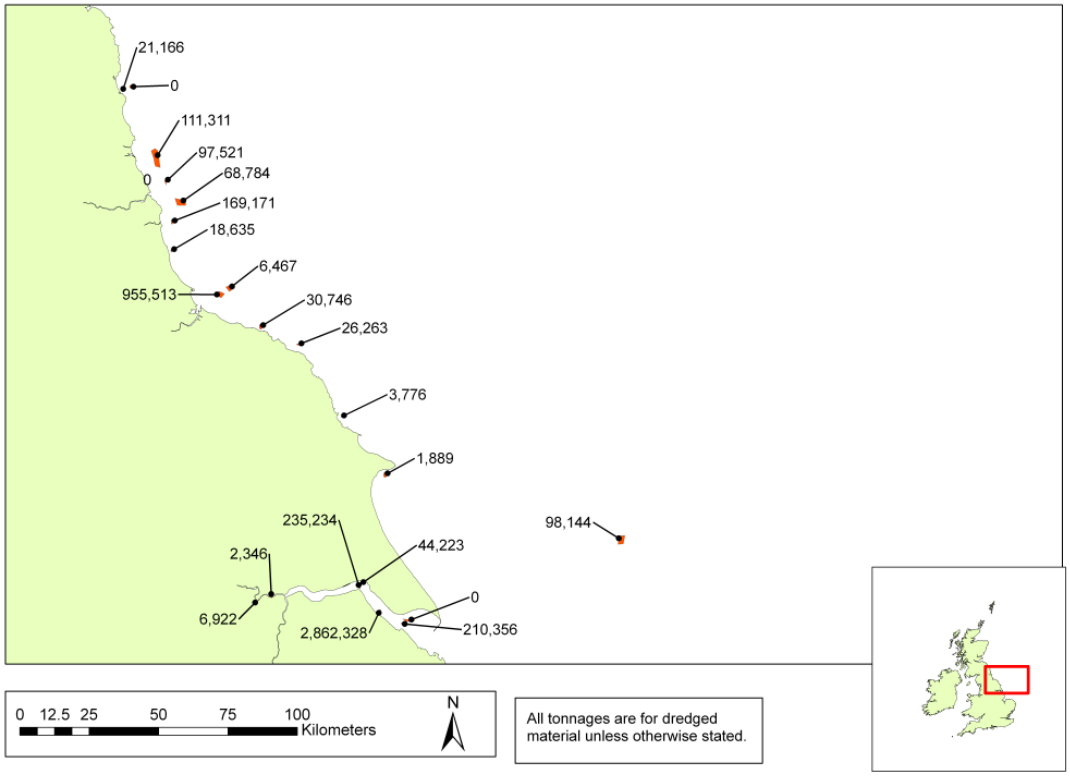


Figure 11

Marine disposal sites in South England
Site codes and quantities deposited in tonnes dry weight, in 2009.

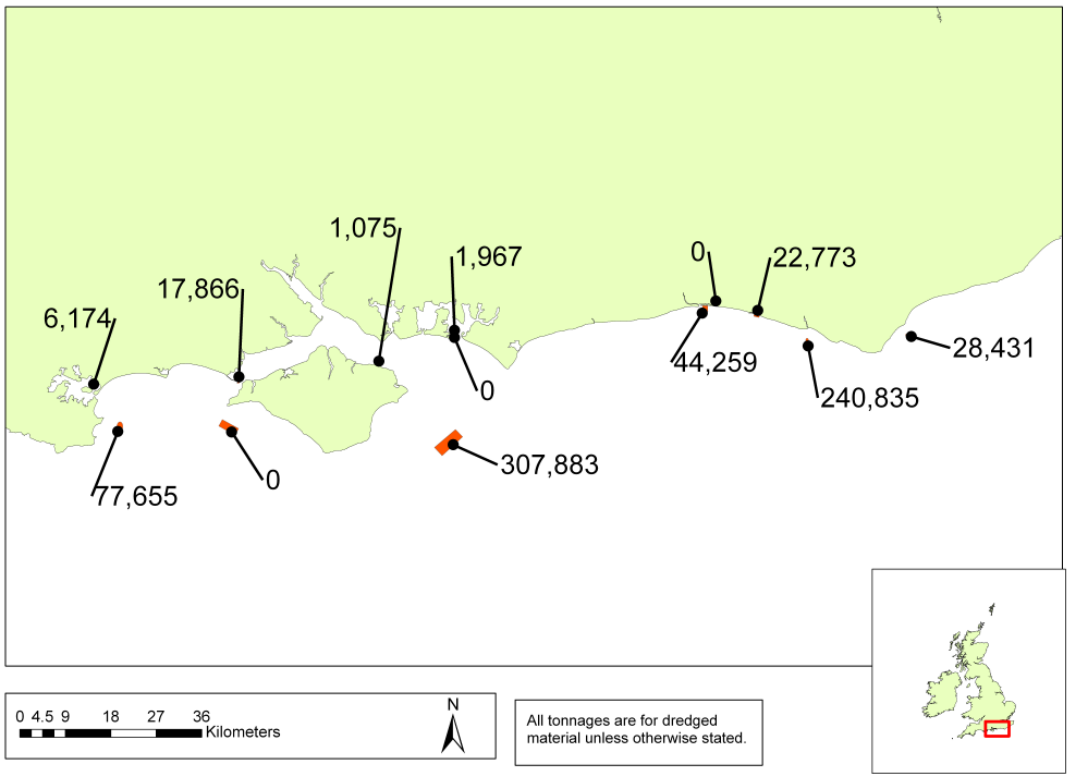


Figure 12

Marine disposal sites in Northwest England and North Wales. Site codes and quantities deposited in tonnes dry weight, in 2009.

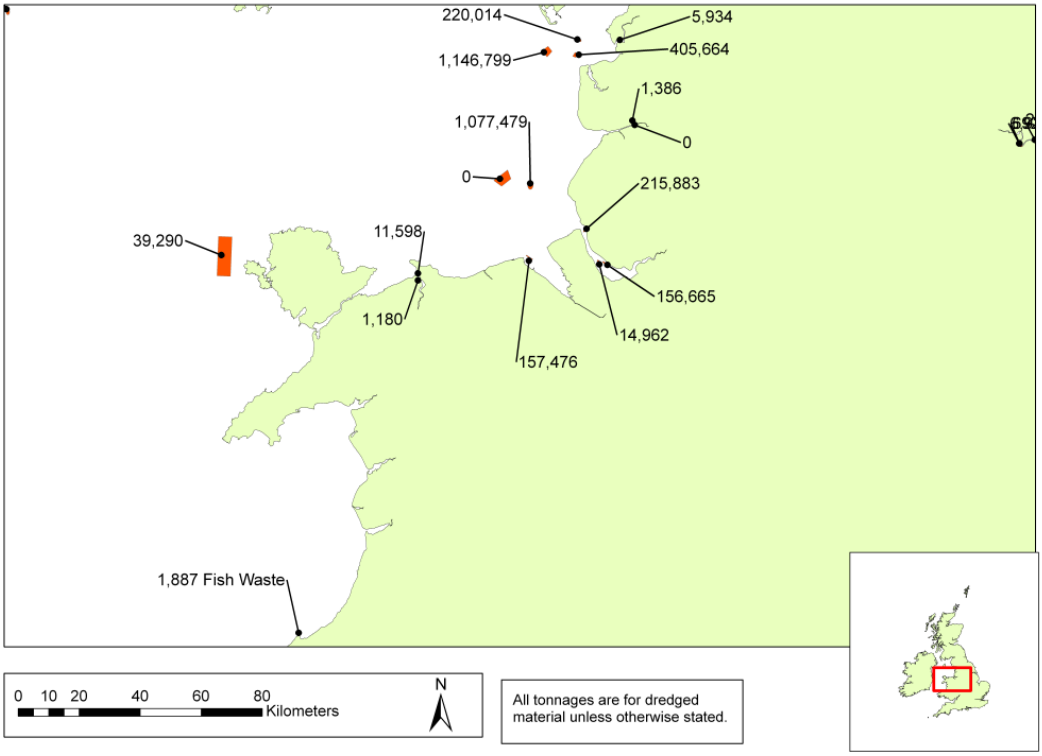


Figure 13

Marine disposal sites in Northern Ireland, Isle of Man and South West Scotland. Site codes and quantities deposited in tonnes dry weight, in 2009.

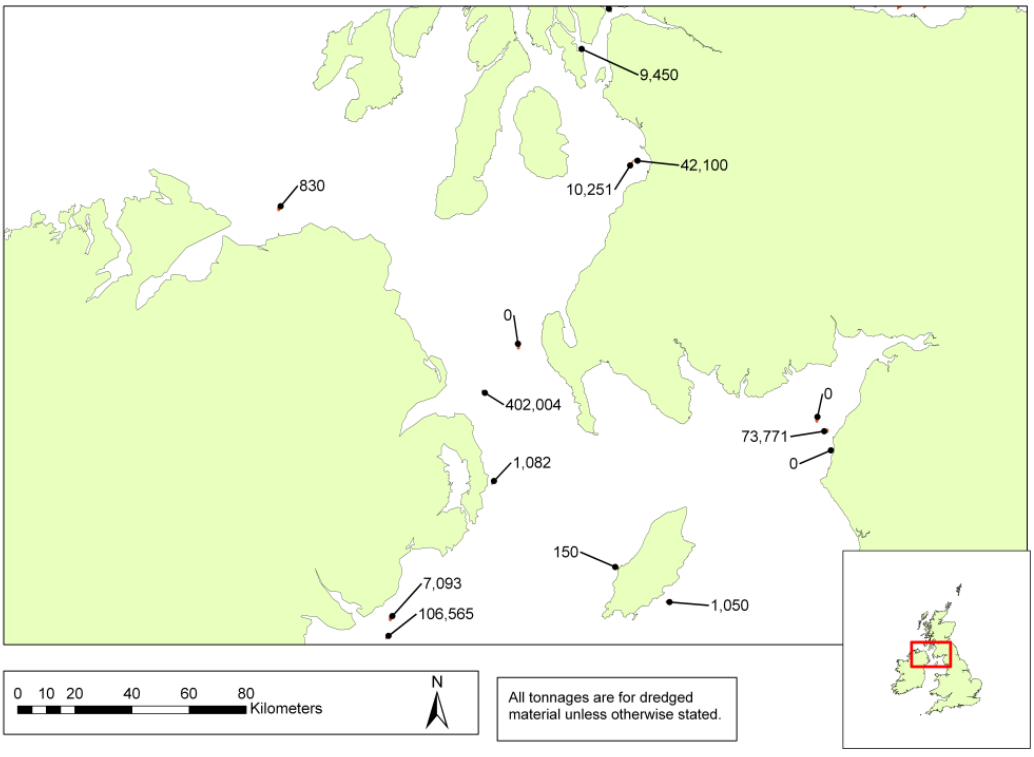
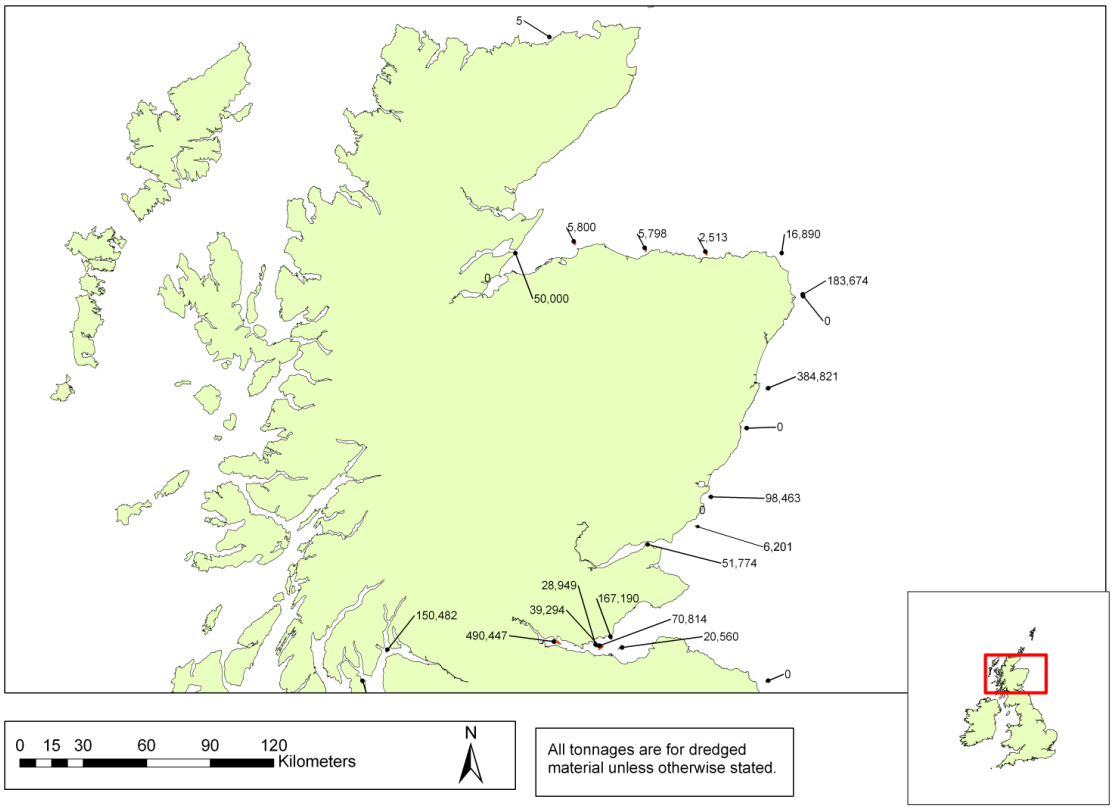


Figure 14

Marine disposal sites in Scotland.
Site codes and quantities deposited in tonnes dry weight, in 2009.



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