



United Nations
Environment
Programme



UNEP(OCA)/MED WG.25/Inf.8
13 March 1991

Original: ENGLISH

MEDITERRANEAN ACTION PLAN

Joint Meeting of the Scientific and Technical
Committee and the Socio-Economic Committee

Athens, 6-10 May 1991

PROGRESS REPORT

ON THE IMPLEMENTATION OF THE DUMPING PROTOCOL

1. INTRODUCTION

The Joint Meeting of the Scientific and Technical Committee and the Socio-Economic Committee (Athens, 28 May-1 June 1990) requested the Secretariat to report to the next Committee Meeting on information received from Contracting Parties, including that transmitted in previous years, in order to identify possible gaps.

In this document an overview will be given on all information received on:

- national reports on permits issued;
- national reports on actual dumping;
- competent national authorities for issuing of permits.

2. NATIONAL REPORTS ON PERMITS ISSUED

Since 1978, following information on permits issued were received from Contracting Parties to the Protocol:

<u>EEC</u>	Does not issue such permits since this is the responsibility of member states.
<u>Greece</u>	Reported that permit was not issued in the period May 1985-May 1990.
<u>Israel</u>	Reported that no permit was issued in 1986. Permit was issued in 1985 for the period 1985-1987 and in 1988 for the period 1988-1991.
<u>Italy</u>	Reported on permits issued in 1981, 1982 and 1983.
<u>Libya</u>	Reported that no permit was issued in 1990.
<u>Malta</u>	Reported that no permit was issued in 1987.
<u>Monaco</u>	Reported that no permit was issued in 1982-1984.
<u>Spain</u>	Reported that no permit was issued in 1990.
<u>Tunisia</u>	Reported that no permit was issued in 1990.
<u>Yugoslavia</u>	Reported that no permit was issued in 1982.

3. NATIONAL REPORTS ON ACTUAL DUMPING

Since 1978, following information on actual dumping was received from the Contracting Parties to the Protocol:

France Reports on dumping of dredged materials in 1981, 1983, 1986, 1987 and 1988 were received and summary of information is presented in Table I and figure 1 (with legend).

Greece Reports were received that no actual dumping was carried out in the period from 1986 to May 1990.

Israel Reports on dumping (in 1985, 1987, 1988, 1989 and 1990) of sludge from production of phosphoric acid and of coal waste (fly and bottom ash) for 1989 and 1990 were received and summary of information is presented in Table II and figure 2 (with legend).

Italy Reports on dumping of dredged materials in 1980, 1981, 1982, 1983, 1985, 1986 and 1987 were received and summary of information is presented in Table III and figure 3 (with legend). Details of the composition of dredged materials are given in Table IV (1986) and Table V (1987).

Reports on dumping of industrial waste in 1982, 1983, 1986 and 1987 were received and summary of information is presented in Table VI.

Libya No actual dumping was carried out in 1990.

4. COMPETENT NATIONAL AUTHORITIES FOR ISSUING OF DUMPING PERMITS

Since 1978, following information was received on competent national authorities for issuing of dumping permits:

<u>France</u>	Secrétaire d'Etat auprès du Premier Ministre Chargé de l'environnement 14 boulevard du Général Leclerc 92524 Neuilly-sur-Seine
<u>Israel</u>	Ocean Dumping Permits Issue Committee Ministry of the Environment P.O. Box 6234 Jerusalem 91061
<u>Italy</u>	Ministry of Environment Department of Pollution Prevention and Environmental Reclamation 11 Piazza Venezia Rome
<u>Spain</u>	Dirección General de la Marina Mercante Ministerio de Transportes, Turismo y Comunicaciones c/Ruiz de Alarcón 1 28014 Madrid
<u>Tunisia</u>	Direction générale de la Marine Marchande Ministère du Transport Avenue de la République Tunis

5. CONCLUSIONS

Most of the Contracting Parties to the Dumping Protocol do not comply with the obligation to report to the secretariat about:

- issuance of dumping permits
- non-issuance of permits
- reports on actual dumping (including "nil" reports)
- competent national authorities for issuing of dumping permits.

Table I

DUMPING OF DREDGED MATERIAL* IN FRANCE

ORIGINAL OF MATERIAL	1981		1983			1986				1987			
	SETE	NICE	SETE	PORT-LA NOUVELLE	PORT DE MARSEILLE	SETE	PORT-LA NOUVELLE	PORT DE MARSEILLE	PORT DE HYERES LES PALMIERS	SETE	PORT-LA NOUVELLE	PORT DE MARSEILLE	SAINT LOUIS S/RHONE
ACTUALLY DUMPED (m ³)	238,000	160,000	62,500	250,000	240,000	143,050	227,440	16,000	18,850	162,400	200,000	15,000	4,000
AUTHORIZED (m ³)	-	-	-	-	-	-	-	-	20,000	-	-	-	-
SOLID INSOLUBLE MATERIAL (t)	230,000	160,000	-	-	96,000	221,720	226,350	18,000	22,500	75,000	100,000	6,800	455
ORGANIC PARTIC. MATERIAL (t)	8,000	-	-	-	30,240	-	18,220	5,184	4,815	-	-	-	-
MERCURY (kg)	-	-	-	-	-	-	-	3	3	-	-	163	-
CADMIUM (kg)	-	-	-	-	-	-	-	9	9	-	-	72	-
ARSENIC (kg)	-	-	-	-	-	-	-	92	92	-	-	-	-
CHROMIUM (kg)	-	-	-	-	-	-	-	1,524	77	-	-	1,431	15
COPPER (kg)	-	-	-	-	-	-	-	10,540	843	-	-	11,638	12
LEAD (kg)	-	-	-	-	-	-	-	2,986	723	-	-	3,641	12
NICKEL (kg)	-	-	-	-	-	-	-	192	195	-	-	211	14
ZINC (kg)	-	-	-	-	-	-	-	6,816	2,047	-	-	7,347	55
PCB (kg)	-	-	-	-	480	-	-	27	4	-	-	65	-
TOTAL HYDROCARBONS (kg)	-	-	-	-	-	-	-	-	-	-	-	29,886	99

* Port dredges

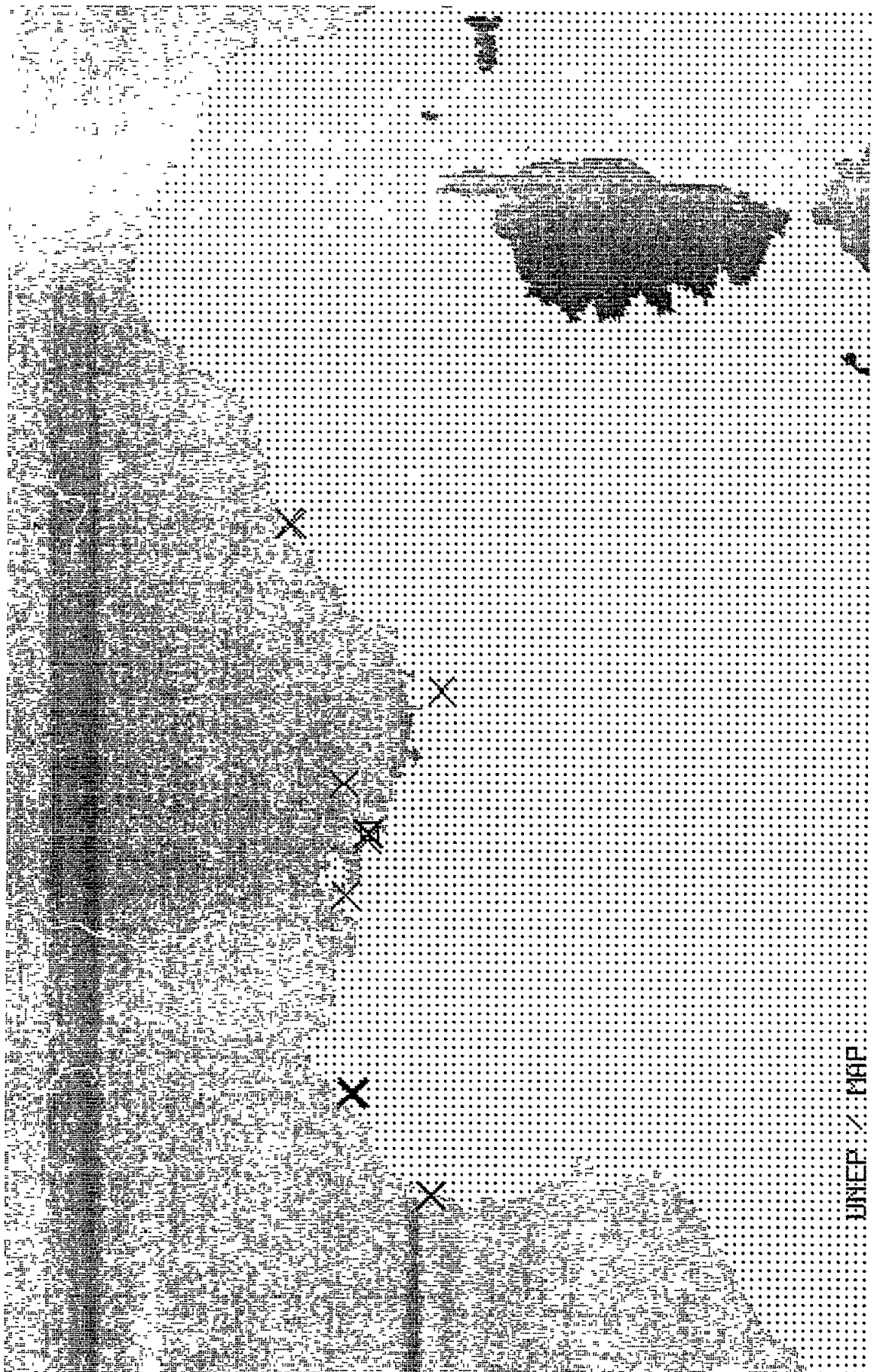
Table I (cont' d)

DUMPING OF DREDGED MATERIAL* IN FRANCE

ORIGINAL OF MATERIAL	1988					
	NICE	ETANG DE SIGEAN	BASSIN DE THAU	ETANG DE BERRE	PORT DE MARSEI LLE	SAINT LOUIS S/RHONE
ACTUALLY DUMPED (m ³)	5, 588	307, 000	110, 000	1, 100	17, 000	3, 000
AUTHORIZED (m ³)	5, 588	307, 000	110, 000	1, 100	17, 000	18, 900
SOLID INSOLUBLE MATERIAL (t)	3, 350	61	140, 000	980	9, 800	9, 800
ORGANIC PARTIC. MATERIAL (t)	-	-	-	-	1, 161	-
MERCURY (kg)	1	-	-	1	35	12
CADMIUM (kg)	-	-	-	1	28	10
CADMIUM (kg)	12	-	-	-	211	-
ARSENIC (kg)	40	-	-	35	571	402
CHROMIUM (kg)	19	-	-	64	2626	271
COPPER (kg)	67	-	-	144	9261	271
LEAD (kg)	22	-	-	26	212	294
NICKEL (kg)	94	-	-	212	9761	1, 014
ZINC (kg)	-	-	-	-	2000	1
PCB (kg)	-	-	-	-	23, 520	-
TOTAL HYDROCARBONS (kg)						

* Port dredges

Figure 1
MEDITERRANEAN DUMPING SITES: FRANCE



LEGEND TO THE FIGURE 1

MEDITERRANEAN DUMPING SITES

FRANCE

Note. During coordinate calculations, SECONDS with values greater than 59 have been considered as decimals to the MINUTES.

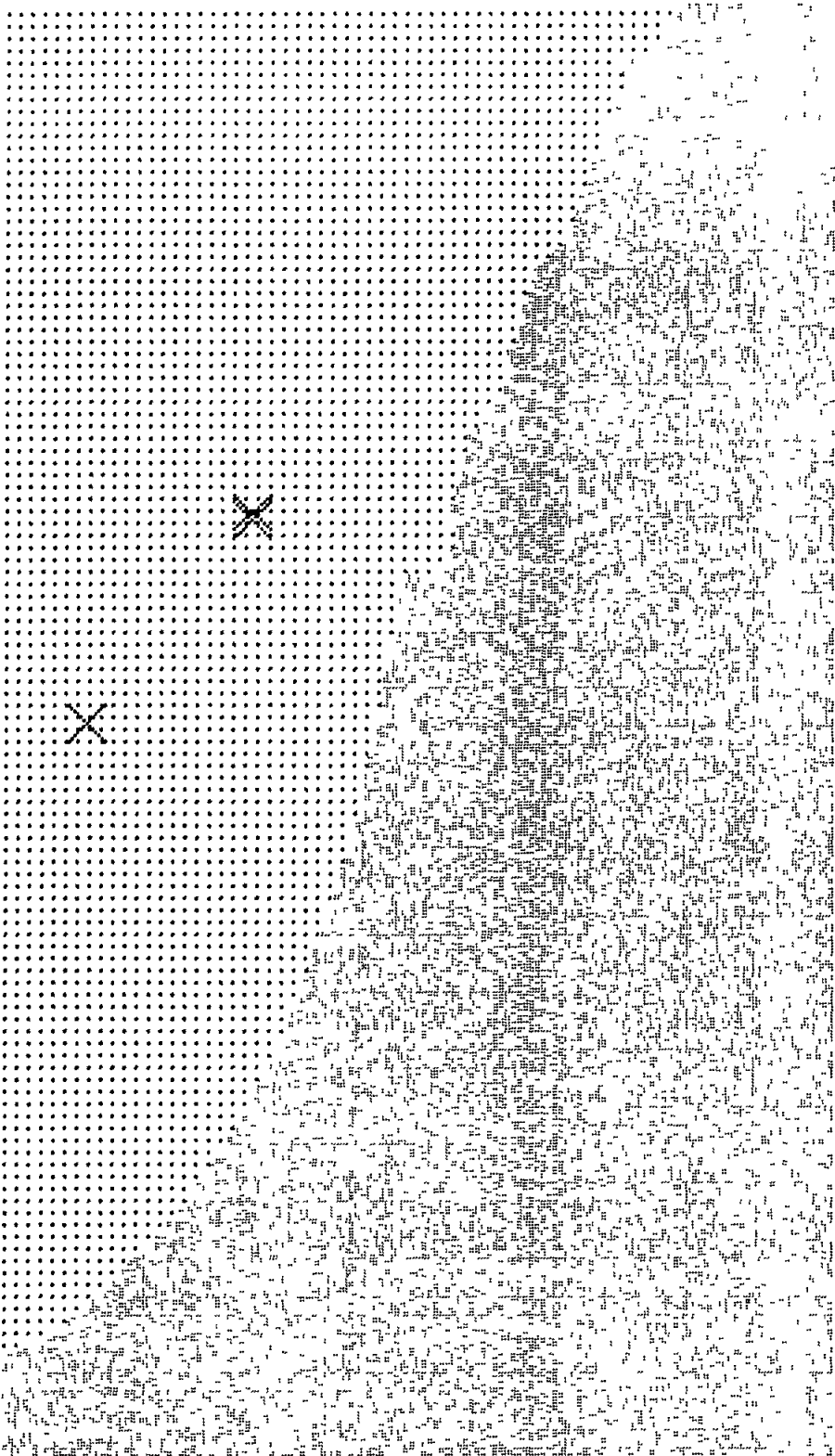
NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR	LATITUDE		LONGITUDE		SOURCE OF COORDINATES	COMMENTS	LATITUDE	LONGITUDE			
			dd	mm	ss	dd					mm	ss	dd
1	ETANG DE SIGEAN	1988	43	0	30	3	5	18	E	Country	Coord. min. given in dec. by country (converted by DP).	43.008333	3.088333
2	PORT LA NOUVELLE D/	1986	43	0	45	3	5	20	E	Country		43.012500	3.088889
3	PORT LA NOUVELLE A/	1986	43	0	57	3	5	20	E	Country		43.015833	3.088889
4	PORT LA NOUVELLE	1987	43	0	50	3	5	30	E	Country	Coord. min. given in dec. by country (converted by DP).	43.013889	3.091667
5	PORT LA NOUVELLE	1983	43	0	30	3	5	30	E	Country		43.008333	3.091667
6	PORT LA NOUVELLE B/	1986	43	0	57	3	5	48	E	Country		43.015833	3.096667
7	PORT LA NOUVELLE C/	1986	43	0	45	3	5	48	E	Country		43.012500	3.096667
8	SETE A/	1986	43	22	48	3	43	15	E	Country		43.380000	3.720833
9	SETE D/	1986	43	22	6	3	43	25	E	Country		43.368333	3.723611
10	BASSIN DE THAU	1988	43	22	21	3	43	30	E	Country	Coord. min. given in dec. by country (converted by DP).	43.372500	3.725000
11	SETE	1981	43	22	30	3	43	30	E	Country		43.375000	3.725000
12	SETE	1983	43	22	30	3	43	30	E	Country		43.375000	3.725000
13	SETE	1987	43	22	35	3	43	50	E	Country		43.376389	3.730556
14	SETE B/	1986	43	23	0	3	44	20	E	Country	Coord. min. given in dec. by country (converted by DP).	43.383333	3.738889
15	SETE C/	1986	43	22	24	3	44	30	E	Country		43.373333	3.741667
16	MARSEILLE(Bass. Ouest St.-L.du Rhône)	1988	43	24	42	4	57	48	E	Country	Coord. min. given in dec. by country (converted by DP).	43.411667	4.963333
17	MARSEILLE (Bassins Est)	1988	43	18	36	5	18	42	E	Country		43.310000	5.311667
18	PORT DE MARSEILLE	1986	43	18	7	5	21	5	E	Country	Coord. min. given in dec. by country (converted by DP).	43.301944	5.351389
19	SAINT LOUIS s/RHONE	1987	43	18	45	5	21	30	E	Country	Coord. min. given in dec. by country (converted by DP).	43.312500	5.358333
20	PORT DE MARSEILLE	1987	43	18	45	5	21	30	E	Country	Coord. min. given in dec. by country (converted by DP).	43.312500	5.358333
21	ZONE DE MARSEILLE	1985	43	18	0	5	22	0	E	Atlas	Coordinates not provided by country. Marseilles used.	43.300000	5.366667
22	ETANG DE BERRE (Port du Sagmas)	1988	43	25	24	5	40	0	E	Country	Coord. min. given in dec. by country (converted by DP).	43.423333	5.666667
23	PORT DE HYERES LES PALMIERS	1986	42	58	4	6	14	27	E	Country	Coord. min. given in dec. by country (converted by DP).	42.967778	6.240833
24	PORT DE NICE	1988	43	40	0	7	17	0	E	Country	Coord. min. given in dec. by country (converted by DP).	43.666667	7.283333
25	NICE	1981	43	41	0	7	17	21	E	Country	Coord. min. given in dec. by country (converted by DP).	43.683333	7.289167

Table II

**DUMPING OF SLUDGE FROM PRODUCTION OF PHOSPHORIC ACID
AND COAL WASTES * (FLY AND BOTTOM ASH) IN ISRAEL**

	1985	1987	1988	1989 (Area	1989 (Area	1990 (Area	1990 (Area
ACTUALLY DUMPED (t)	4, 630	36, 000	36, 000	32, 000	206, 000	32, 000	612, 000
AUTHORIZED (t)	72, 000	66, 000	66, 000	66, 000	500, 000	86, 000	1 000, 000
SOLID INSOLUBLE	236	1, 835	1, 835	1, 530	199, 820	1, 500	593, 640
MERCURY (kg)	0	2	2	2	70	2	210
CADMIUM (kg)	23	182	182	144	360	145	1080
ARSENIC (kg)	46	358	358	360	4, 800	360	14, 400
CHROMIUM (kg)	77	599	599	600	23, 000	600	69, 000
COPPER (kg)	58	450	450	495	14, 500	500	43, 500
LEAD (kg)	4	32	32	81	9, 000	80	27, 000
NICKEL (kg)	46	359	359	660	19, 800	660	59, 400
ZINC (kg)	576	4, 478	4, 478	4, 500	13, 500	4, 500	40, 500
BERYLLIUM (kg)					1, 000		3, 000
VANADIUM (kg)					32, 000		96, 000
SELENIUM (kg)					270		810

Figure 2
MEDITERRANEAN DUMPING SITES: ISRAEL



LEGEND TO THE FIGURE 2

MEDITERRANEAN DUMPING SITES

ISRAEL

Note. During coordinate calculations, SECONDS with values greater than 59 have been considered as decimals to the MINUTES.

NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR	LATITUDE		LONGITUDE		SOURCE OF COORDINATES	COMMENTS	LATITUDE LONGITUDE (decimal degrees)		
			dd	mm	ss	dd				mm	ss
1	SITE N/A	1988	32	57	0	34	36	0	E	Country	32.950000 34.600000
2	SITE N/A	1987	32	57	0	34	36	0	E	Country	32.950000 34.600000
3	SITE N/A	1985	32	57	0	34	36	0	E	Country	32.950000 34.600000
4	SITE N/A (AREA A)	1989	32	56	0	34	36	0	E	Country	32.933333 34.600000
5	SITE N/A (AREA B)	1989	32	31	0	34	12	0	E	Country	32.516667 34.200000

Table III

DUMPING OF DREDGED MATERIAL* IN ITALY (1980-1987)

ORIGIN	ACTUALLY DUMPED (m ³)	LICENCED (m ³)
1980		
CIVITAVECCHIA	30,000	90,000
POZZUOLI	10	30,000
TORRE ANNUNZIATA	9,500	14,000
CIVITAVECCHIA	25,000	80,000
CASAVICCIOLO	30,000	30,000
	94,510	244,000
1981		
ANCONA	24,000	50,000
BARI	69,000	70,000
MOLA DI BARI	67,000	67,000
BARLETTA	50,000	50,000
GENOVA	35,000	90,000
ARBATAX	312,000	312,000
CROTONE	262,000	262,000
LAMPEDUSA	75,000	100,000
PESARO	86,214	87,000
CAGLIARI	184,700	200,000
CAGLIARI	136,000	120,000
	1 300,914	1 408,000
1982		
POLCEVERA	57,150	326,000
ITALSIDER	250	3,000
FANO	-	15,000
PESCARA	170,700	-
ORTONA	150,000	-
PORTO TORRES	11,000	11,000
ANCONA	18,000	41,000
CROTONE	600,000	600,000
TORRE AUGUSTA	3,000	30,000
LICATA	100,000	300,000
CHIPRAVANNA	25,000	25,000
POLCEVERA	100,000	150,000
TORRE VALDALIGA	10,000	90,000
	1 245,100	1 591,000

* Port or canal dredges

ORIGIN	ACTUALLY DUMPED (m ³)	LICENCED (m ³)
1983		
ISCHIA	33,500	33,500
PROCIDA	28,150	28,150
ANZIO	60,000	65,000
ANCONA	1,200	26,000
ANCONA	750,000	676,470
PESCARA	143,180	-
S. BENEDETTO DEL TRONTO	20,000	150,000
ARBATAX	200	139,000
CROTONE	103,200	618,500
CAMPALTO	1,150,000	1,550,000
MUGGIANO	1,200	1,200
SGORBINI	22,400	22,400
SCAURI	1,500	1,300
PIGONATI	15,000	780,000
COSTA MORENA	45,000	60,000
BARLETTA	60,000	60,000
MAZARA DEL VALLO	133,000	133,000
VENEZIA	450,000	350,000
POLCEVERA	143,000	324,000
MANFREDONIA	60,000	60,000
	<hr/>	<hr/>
	3 220,530	5 078,520

ORIGIN	ACTUALLY DUMPED (m ³)	LICENCED (m ³)
1985		
BARI	6,750	20,000
BARLETTA	50,000	50,000
S. BENEDETTO DEL TRONTO	150,000	150,000
CROTONE	300,000	619,000
CASTELLAMARE	9,000	10,000
MARINA DI CARRARA	420,000	-
BAGNOLI	2,100	10,000
LICATA	85,000	100,000
FORMIA	47,000	65,000
LA SPEZIA	399,000	1,326,000
SIRACUSA	150,000	270,000
BRENTA	10,000	10,000
CEDAS	5,000	5,000
LAGO VARANO	7,000	7,000
LAGO VARANO	25,000	30,000
PALERMO	92,000	160,000
PALERMO	8,000	8,000
ARBATAX	15,000	139,000
CAGLIARI	361,000	400,000
GRADO	3,500	6,000
TAGLIAMENTO	14,000	14,000
BRINDISI	1,200	2,400
COSTA MORENA	6,000	6,000
SALERNO	218,000	700,000
MARINA DI CAMEROTA	38,700	-
FIUMICINO	50,000	50,000
TERRACINA	100,000	100,000
ANZIO	60,000	65,000
SENIGALLIA	6,000	-
SENIGALLIA	23,000	14,000
NUMANA	3,000	3,000
POLCEVERA	4,500	326,000
RAPALLO	30,000	30,000
GENOVA	5,800	12,000
POLCEVERA	23,000	150,000
GENOVA	68,910	320,000
VENEZIA	21,000	480,000
COMPLATO	1,170,000	1,550,000
PORTO MARGHERA	13,750	100,000
VENEZIA	43,000	60,000
MESTRE	30,000	100,000
POMEZIA	4,500	29,000
MARGHERA	154,000	400,000
S. SPIRITO	95,000	150,000
PORTO MARGHERA	15,000	40,000
	<hr/> 4 343,710	<hr/> 8 086,400

ORIGIN	ACTUALLY DUMPED (m ³)	LICENCED (m ³)
1986		
VIGNOLA	17,420	50,000
PORTO MARGHERA	2,250	30,000
PORTO MARGHERA	44,500	60,000
LIDO	248,000	400,000
VENEZIA	341,250	480,000
PORTO MARGHERA	41,000	100,000
VENEZIA	12,500	60,000
MARGHERA	750	80,000
ROMAGNA	49,560	50,000
FANO	12,000	12,000
CESENATICO	37,000	100,000
BELLARIA	3,000	17,000
CATTOLICA	15,000	55,000
FANO	55,000	55,000
S. GIULIANO	3,000	10,500
CAGLIARI	305,000	-
ARBATAX	50,000	139,000
PORTOVESME	38,853	38,853
LIVORNO	8,000	8,000
S. STEFANO	60,000	60,000
STASSO	18,700	16,000
S. MARIA LA SCALA	5,000	5,000
TERMINI IMERESE	316,000	316,000
PORTICELLO	25,000	25,000
SENIGALLIA	27,624	20,000
SENIGALLIA	24,500	30,000
ORTONA	20,000	20,000
TERMOLI	7,000	7,000
VIAREGGIO	10	10
M. DI CARRARA	70	70
MONTALTO DI CASTRO	251,920	350,000
CAPRI	15,000	16,000
CROTONE	19,000	20,000
M. DI PISCIOTTA	2,000	9,000
S. BENEDETTO DEL TRONTO	100	100
AUGUSTA	160,000	130,000
R. CALABRIA	3,500	3,500
TRICASE	6,000	6,000
TERRACINA	58,000	58,000
PESARO	1,500	1,500
SCIALLE	32,000	32,000
VENEZIA	830,000	830,000
CESENATICO	50,000	50,000
PESCARA	150,000	150,000
	<hr/> 3 367,007	<hr/> 3 900,533

ORIGIN	ACTUALLY DUMPED (m ³)	LICENCED (m ³)
1987		
MARGHERA	-	40,000
CERVIA	-	8,000
LA SPEZIA	-	900,000
TERRACINA	-	58,000
ORTONA	-	2,000,000
BRINDISI	-	120,000
GIULIANOVA	-	180,000
CIVITANOVA	-	20,000
SORRENTO	-	10,000
VIAREGGIO	-	50,000
PORTO NOGARO	-	83,000
LA SPEZIA	-	85,000
MARGHERA	-	350,000
CHIOGGIA	-	440,000
VENEZIA	-	460,000
MALAMOCCO	-	8,000
MARGHERA	-	120,000
CIVITAVECCHIA	105,000	150,000
NUMANA	-	10,000
TERMINI IMERESE	-	1,100,000
RICCIONE	-	15,000
S. ANTONIO	-	220,000
ANCONA	-	60,000
SCIACCA	-	28,000
MARGHERA	792,774	682,000
	<hr/>	<hr/>
	897,774	7 197,000

SUMMARY

1980	94,510	244,000
1981	1,300,914	1,408,000
1982	1,245,100	1,591,000
1983	3,220,530	5,078,520
1985	4,343,710	8,086,400
1986	3,367,007	3,900,533
1987	897,774	7,197,000
	<hr/>	<hr/>
	14,469,545	27,505,453

Table IV

DETAILS ON DUMPING OF DREDGED MATERIALS* IN ITALY IN 1986

	VENEZIA	CESENATICO	PESCARA
ACTUALLY DUMPED (t)	830,000	50,000	150,000
AUTHORIZED (t)	830,000	50,000	150,000
MERCURY (kg)	0.38	-	0.69
CADMIUM (kg)	0.61	1.7	2
ARSENIC (kg)	8.02	-	6
CHROMIUM (kg)	14.1	17.6	610
COPPER (kg)	23.5	7.2	43
LEAD (kg)	26	15.6	76
NICKEL (kg)	29.2	22.2	42
ZINC (kg)	150	16.4	114
OTHERS (kg)	-	F 1.8	HH 1.09

* Information on quantities of materials actually dumped and authorized is included in Table on Dumping of dredged materials in Italy (1980-1987)

Table V

DUMPING OF DREDGED MATERIALS* IN ITALY IN 1987

	LA SPEZIA	MARGHERA	CHIOGGIA	VENEZIA	MALAMOC CO	MARGHERA	CIVITAVECCH IA	NUMANA	IMERESE	RICCION E	S. ANTONI O	ANCONA	SCIACCA	MARGHERA
ACTUALLY DUMPED (m ³)	-	-	-	-	-	-	105,000	-	-	-	-	-	-	792,774
AUTHORIZED (m ³)	85,000	350,000	440,000	460,000	8,000	120,000	150,000	10,000	1,100,000	15,000	220,000	60,000	28,000	682,000
MERCURY (mg/kg)	-	0.4	0.5	1.2	2	1.5	0.5	-	-	-	0.5	-	0	0.1
CADMIUM (mg/kg)	-	3.5	4.3	6.6	5	6.3	0.5	0	-	0.3	1	1	0	1.5
ARSENIC (mg/kg)	-	15.4	1.8	1.8	27	19.4	-	-	-	-	6.9	-	-	1.2
CHROMIUM (mg/kg)	-	14	47.2	19	33	20	21	0	-	1.5	1	0.1	0.1	1
COPPER (mg/kg)	2	25	34.3	57	86	66.5	26	4	-	-	5	3	-	2.8
LEAD (mg/kg)	-	51	40.7	82	160	51.5	32.6	1	0	8.4	1	5.4	0.1	3
NICKEL (mg/kg)	10.8	33	44.5	39	-	33.5	27.3	-	-	10.	-	-	-	2
ZINC (mg/kg)	-	184	135.3	375	879	503	110	20	0	1.5	-	40	-	7.9
OTHER (mg/kg)	Fe 7.2	-	-	-	-	-	P 64.2 Ph 12	NH3 3	S04 188	-	Se 9.1	-	-	Be 0.1 V 7
MINERAL OILS	-	-	82	11	47	36	23	-	28	-	-	-	-	-

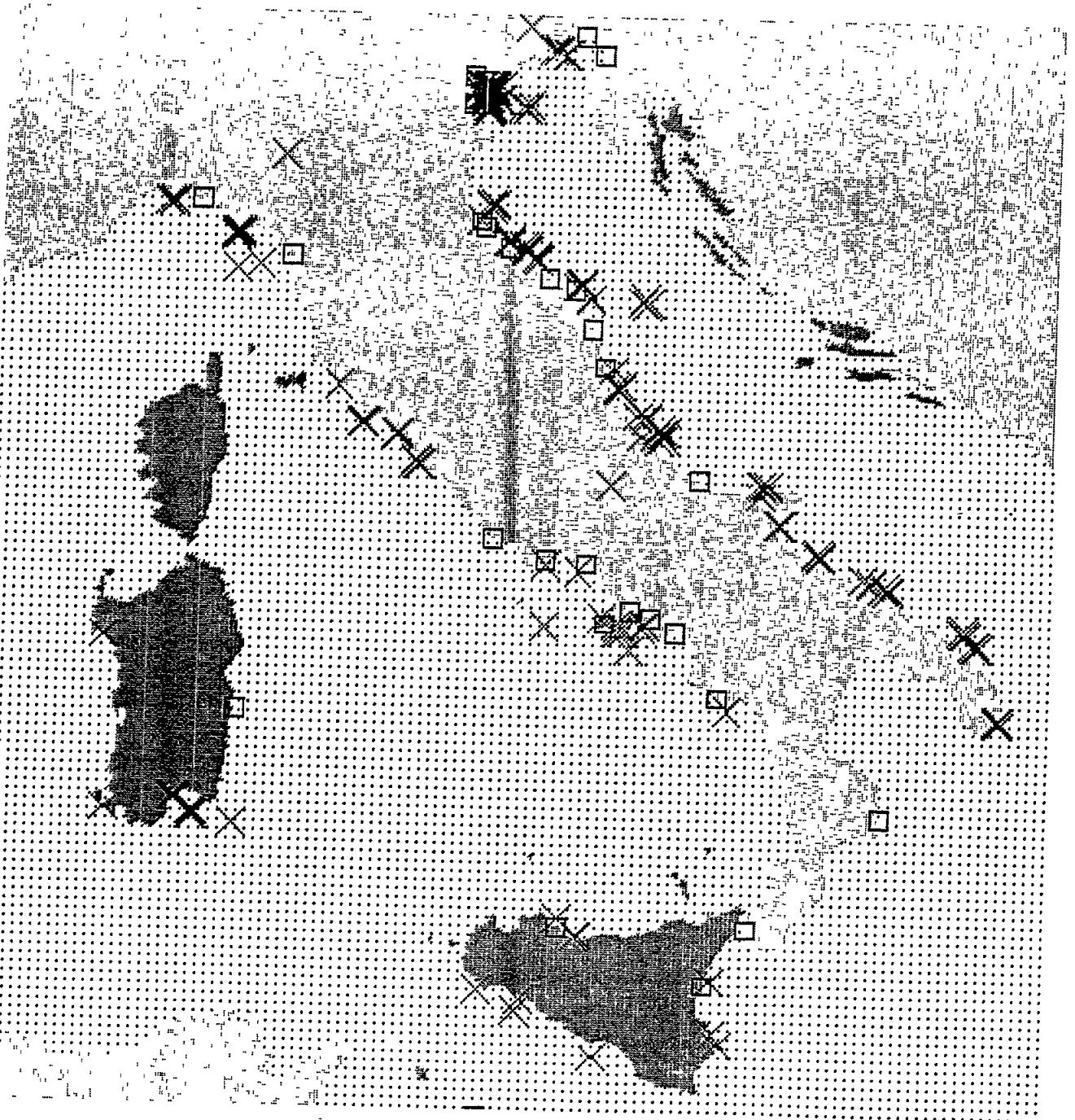
* Information on quantities of materials actually dumped and authorized is included in Table on dumping of dredged materials in Italy (1980-1987).

Table VI

DUMPING OF INDUSTRIAL WASTE IN ITALY (1982-1987)

COMPANY	CITY	YEAR	AMOUNT AUTHORIZED	AMOUNT DUMPED	MANUFACTURING	POLLUTANTS
DAUNA	MANFREDONIA	1982	-	112,000	CAPROLATTAM	60% Caprolattam
DAUNA	MANFREDONIA	1983	-	129,850	CAPROLATTAM	15% Others (Organic acids)
DAUNA	MANFREDONIA	1987	110,000	45,101	CAPROLATTAM	
SIBIT	SCARLINO	1982		482,787	TITANIUM DIOXIDE	in mg/kg Fe 17,000 Ni 1.8 Al 900 Pb 10
SIBIT	SCARLINO	1983		589,241	TITANIUM DIOXIDE	Ti 2,000 Zn 12 Mn 2,000 Cu 2.5
SIBIT	SCARLINO	1986	1,896,000	197,391	TITANIUM DIOXIDE	Cr 110 Cd 0.15 V 250
BERMONT	MARGHERA	1982		981,000	PHOSPHORIC ACID	in percentage CaSO ₄ 93
AUSIDET		1983	1,536,000	1,047,165	HYDROFLUORIC ACID	CaF ₂ 6

Figure 3
MEDITERRANEAN DUMPING SITES: ITALY



LEGEND TO THE FIGURE 3

MEDITERRANEAN DUMPING SITES

ITALY

Note. During coordinate calculations, SECONDS with values greater than 59 have been considered as decimals to the MINUTES.

NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR	LATITUDE		LONGITUDE		SOURCE OF COORDINATES	COMMENTS	LATITUDE (decimal degrees)	LONGITUDE (decimal degrees)
			dd	mm	ss	dd				
1	SITE (N/A) A/	1981	45	53	30	12	53	30	E	Country
2	TAGLIAMENTO	1985	45	49	0	13	32	0	E	Atlas
3	MONFALCONE B/	1987	45	41	54	13	13	24	E	Country
4	MONFALCONE A/	1987	45	41	51	13	11	36	E	Country
5	MONFALCONE C/	1987	45	41	12	13	13	24	E	Country
6	MONFALCONE D/	1987	45	41	9	13	11	36	E	Country
7	GRADO A/	1985	45	40	0	13	19	48	E	Country
8	GRADO B/	1985	45	39	36	13	20	54	E	Country
9	GRADO D/	1985	45	39	30	13	19	24	E	Country
10	GRADO C/	1985	45	39	6	13	20	33	E	Country
11	CEPAS (Marina near Trieste)	1985	45	39	0	13	47	0	E	Atlas
12	S. GIULIANO	1986	45	28	0	12	17	0	E	Atlas
13	LIDO (4 miles from coast)	1983	45	23	33	12	22	9	E	Atlas
14	PORTO DI LIDO B/	1983	45	23	12	22	9	E	Country	
15	PORTO DI LIDO C/	1983	45	23	21	12	21	42	E	Country
16	VIGNOLA B/	1986	45	22	50	12	29	0	E	Country
17	PORTO VENEZIA A/	1986	45	22	50	12	25	50	E	Country
18	VIGNOLA C/	1986	45	22	50	12	30	0	E	Country
19	VENEZIA I A/	1987	45	22	70	12	28	0	E	Country
20	S. SPIRITO I A/	1985	45	22	70	12	28	0	E	Country
21	POMEZIA I B/	1985	45	22	70	12	26	50	E	Country
22	VENEZIA I A/	1986	45	22	70	12	28	0	E	Country
23	VENEZIA I A/	1986	45	22	70	12	28	0	E	Country
24	POMEZIA I A/	1985	45	22	70	12	35	0	E	Country
25	VENEZIA I A/	1985	45	22	70	12	28	0	E	Country
26	PORTO MARGHERA II D/	1986	45	22	23	12	26	10	E	Country
27	MARGHERA I D/	1985	45	22	23	12	26	10	E	Country
28	PORTO DI LIDO A/	1983	45	22	12	21	22	E	Country	
29	PORTO DI LIDO D/	1983	45	22	12	21	42	E	Country	
30	S. SPIRITO I B/	1985	45	22	0	12	29	70	E	Country
31	VENEZIA I B/	1986	45	22	0	12	29	70	E	Country
32	VENEZIA I B/	1986	45	22	0	12	29	70	E	Country
33	VENEZIA I B/	1985	45	22	0	12	29	70	E	Country
34	VENEZIA I B/	1987	45	22	0	12	29	70	E	Country
35	MARGHERA I C/	1985	45	21	85	12	27	2	E	Country
36	PORTO MARGHERA II C/	1986	45	21	85	12	27	9	E	Country
37	VENEZIA II B/	1987	45	21	50	12	30	0	E	Country
38	MARGHERA I C/	1987	45	21	50	12	30	0	E	Country

Coord not provided by country. River, Monfalcone used.

Coordinates not provided by country. Trieste used.

Coordinates not provided by country. S. Giuliano used.

Coordinates/year not provided by country. Lido used.

Seconds reported incorrectly by country.

Seconds reported incorrectly by country.

Seconds reported incorrectly by country.

Seconds reported incorrectly by country.

Seconds reported incorrectly by country.

Seconds reported incorrectly by country.

Seconds reported incorrectly by country.

Seconds reported incorrectly by country.

NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR	LATITUDE		LONGITUDE		SOURCE OF COORDINATES	COMMENTS	LATITUDE (decimal degrees)	LONGITUDE (decimal degrees)	
			dd	mm	ss	dd					mm
39	PORTO MARGHERA D/	1987	45	21	50	12	28	0	E	Country	45.363889 12.466667
40	VIGNOLA A/	1986	45	21	50	12	29	0	E	Country	45.363889 12.483333
41	PORTO MARGHERA A/	1987	45	21	50	12	27	0	E	Country	45.363889 12.450000
42	MARGHERA I D/	1987	45	21	50	12	30	0	E	Country	45.363889 12.500000
43	VENEZIA II C/	1987	45	21	50	12	29	0	E	Country	45.363889 12.483333
44	VIGNOLA D/	1986	45	21	50	12	30	0	E	Country	45.363889 12.500000
45	PORTO VENEZIA B/	1986	45	21	50	12	29	0	E	Country	45.363889 12.483333
46	VENEZIA B/	1985	45	21	50	12	26	10	E	Country	45.363333 12.436111
47	POMEZIA I C/	1985	45	21	50	12	26	50	E	Country	45.363333 12.436111
48	POMEZIA I D/	1985	45	21	70	12	21	50	E	Country	45.361667 12.467222
49	PORTO MARGHERA I B/	1985	45	21	0	12	29	0	E	Country	45.350000 12.483333
50	PORTO MARGHERA B/	1987	45	21	0	12	28	0	E	Country	45.350000 12.466667
51	VENEZIA II A/	1987	45	21	0	12	29	0	E	Country	45.350000 12.483333
52	VENEZIA II D/	1987	45	21	0	12	29	0	E	Country	45.350000 12.483333
53	PORTO MARGHERA III B/	1986	45	21	0	12	29	0	E	Country	45.350000 12.483333
54	PORTO MARGHERA I B/	1986	45	21	0	12	28	0	E	Country	45.350000 12.466667
55	PORTO MARGHERA C/	1987	45	21	0	12	27	0	E	Country	45.350000 12.450000
56	PORTO MARGHERA I A/	1986	45	20	50	12	27	0	E	Country	45.347222 12.450000
57	VENEZIA A/	1985	45	20	50	12	25	50	E	Country	45.347222 12.430556
58	S. SPIRITO I D/	1985	45	20	80	12	26	40	E	Country	45.346667 12.444444
59	VENEZIA I D/	1986	45	20	80	12	26	40	E	Country	45.346667 12.444444
60	MESTRE I A/	1985	45	20	80	12	24	90	E	Country	45.346667 12.415000
61	VENEZIA I D/	1986	45	20	80	12	26	40	E	Country	45.346667 12.415000
62	PORTO MARGHERA II A/	1986	45	20	80	12	26	40	E	Country	45.346667 12.415000
63	VENEZIA I D/	1987	45	20	80	12	26	40	E	Country	45.346667 12.416667
64	VENEZIA I D/	1985	45	20	80	12	26	40	E	Country	45.346667 12.444444
65	MARGHERA I A/	1985	45	20	80	12	26	40	E	Country	45.346667 12.444444
66	CAMPALTO I B/	1983	45	20	70	12	26	50	E	Country	45.346667 12.416667
67	CAMPALTO I A/	1983	45	20	70	12	26	50	E	Country	45.346667 12.416667
68	MESTRE I B/	1985	45	20	70	12	26	50	E	Country	45.346667 12.416667
69	MARGHERA I B/	1985	45	20	70	12	26	50	E	Country	45.346667 12.416667
70	PORTO MARGHERA II B/	1986	45	20	40	12	26	0	E	Country	45.345000 12.447222
71	MESTRE I D/	1985	45	20	40	12	26	0	E	Country	45.345000 12.447222
72	VENEZIA I C/	1985	45	20	10	12	26	60	E	Country	45.345000 12.415000
73	S. SPIRITO I C/	1985	45	20	10	12	28	10	E	Country	45.344444 12.433333
74	VENEZIA I C/	1985	45	20	10	12	28	10	E	Country	45.344444 12.433333
75	VENEZIA I C/	1985	45	20	10	12	28	10	E	Country	45.344444 12.433333
76	CAMPALTO I D/	1983	45	20	10	12	26	60	E	Country	45.336111 12.469444
77	VENEZIA I C/	1986	45	20	10	12	28	10	E	Country	45.336111 12.469444
78	MARGHERA I A/	1987	45	20	0	12	28	0	E	Country	45.336111 12.469444
79	MARGHERA I B/	1987	45	20	0	12	28	0	E	Country	45.335333 12.466667
80	MESTRE I C/	1985	45	20	0	12	28	15	E	Country	45.333333 12.500000
81	PORTO MARGHERA I A/	1985	45	20	0	12	28	0	E	Country	45.333333 12.470833
82	PORTO MARGHERA III A/	1986	45	20	0	12	28	0	E	Country	45.333333 12.466667
83	CAMPALTO I C/	1983	45	20	0	12	28	15	E	Country	45.333333 12.466667
84	PORTO MARGHERA II A/	1985	45	18	80	12	22	12	E	Country	45.313333 12.370000

NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR	LATITUDE		LONGITUDE		SOURCE OF COORDINATES	COMMENTS	LATITUDE (decimal degrees)	LONGITUDE (decimal degrees)			
			dd	mm	ss	dd					mm	ss	E/W
85	PORTO MARGHERA II B/	1985	45	18	72	12	22	53	E	Country	Seconds reported incorrectly by country.	45.312000	12.381389
86	PORTO MARGHERA II D/	1985	45	18	30	12	21	90	E	Country	Seconds reported incorrectly by country.	45.308333	12.365000
87	MESTRE B/	1985	45	18	30	12	26	0	E	Country		45.308333	12.433333
88	PORTO MARGHERA II C/	1985	45	18	22	12	22	33	E	Country		45.306111	12.375833
89	MESTRE A/	1985	45	17	21	12	25	0	E	Country	Seconds reported incorrectly by country.	45.295000	12.416667
90	POMEZIA II D/	1985	45	17	10	12	23	52	E	Country		45.289167	12.397778
91	MARGHERA II D/	1985	45	17	12	12	23	52	E	Country		45.286667	12.397778
92	CAMPALTO II B/	1986	45	17	10	12	23	50	E	Country		45.286111	12.397222
93	VENEZIA II A/	1985	45	17	10	12	25	0	E	Country		45.286111	12.416667
94	VENEZIA II A/	1985	45	17	10	12	25	0	E	Country		45.286111	12.416667
95	MESTRE II B/	1985	45	17	10	12	25	0	E	Country		45.286111	12.397222
96	S. SPIRITO II A/	1985	45	17	0	12	25	0	E	Country		45.283333	12.416667
97	MARGHERA II C/	1985	45	16	85	12	24	61	E	Country	Seconds reported incorrectly by country.	45.280833	12.410167
98	POMEZIA II C/	1985	45	16	85	12	24	61	E	Country	Seconds reported incorrectly by country.	45.280833	12.410167
99	CAMPALTO II C/	1983	45	16	70	12	25	30	E	Country	Seconds reported incorrectly by country.	45.278333	12.425000
100	MESTRE II C/	1985	45	16	70	12	25	30	E	Country	Seconds reported incorrectly by country.	45.278333	12.425000
101	S. SPIRITO II B/	1985	45	16	70	12	26	80	E	Country	Seconds reported incorrectly by country.	45.278333	12.446667
102	VENEZIA II B/	1985	45	16	70	12	26	80	E	Country	Seconds reported incorrectly by country.	45.278333	12.446667
103	VENEZIA II B/	1986	45	16	70	12	26	80	E	Country	Seconds reported incorrectly by country.	45.278333	12.446667
104	POMEZIA II A/	1985	45	15	60	12	35	0	E	Country	Seconds reported incorrectly by country.	45.260000	12.583333
105	MARGHERA II A/	1985	45	15	60	12	27	6	E	Country	Seconds reported incorrectly by country.	45.260000	12.379333
106	MARGHERA II B/	1985	45	15	32	12	23	84	E	Country	Seconds reported incorrectly by country.	45.258889	12.397333
107	POMEZIA II B/	1985	45	15	32	12	33	84	E	Country	Seconds reported incorrectly by country.	45.258889	12.397333
108	CAMPALTO II A/	1983	45	15	10	12	22	50	E	Country	Seconds reported incorrectly by country.	45.250000	12.564000
109	MESTRE II A/	1985	45	15	10	12	22	50	E	Country	Seconds reported incorrectly by country.	45.252778	12.380556
110	VENEZIA II D/	1986	45	15	0	12	24	15	E	Country	Seconds reported incorrectly by country.	45.252778	12.380556
111	VENEZIA II D/	1985	45	15	0	12	24	15	E	Country	Seconds reported incorrectly by country.	45.250000	12.404167
112	S. SPIRITO II D/	1985	45	15	0	12	24	15	E	Country	Seconds reported incorrectly by country.	45.250000	12.404167
113	MESTRE II D/	1985	45	14	70	12	23	90	E	Country	Seconds reported incorrectly by country.	45.250000	12.404167
114	CAMPALTO II D/	1983	45	14	70	12	23	90	E	Country	Seconds reported incorrectly by country.	45.245000	12.398333
115	S. SPIRITO II C/	1985	45	14	60	12	25	95	E	Country	Seconds reported incorrectly by country.	45.243333	12.432500
116	VENEZIA II C/	1985	45	14	60	12	25	95	E	Country	Seconds reported incorrectly by country.	45.243333	12.432500
117	VENEZIA II C/	1986	45	14	60	12	25	95	E	Country	Seconds reported incorrectly by country.	45.243333	12.432500
118	SITE (N/A) B/	1981	45	13	15	12	55	20	E	Country	Seconds reported incorrectly by country.	45.220833	12.922222
119	BRENTA	1985	45	13	0	12	17	0	E	Atlas	Coord not provided by country. River, Chioggia used.	45.216667	12.283333
120	SITE (N/A) D/	1981	45	12	10	12	51	30	E	Country	Seconds reported incorrectly by country.	45.202778	12.658333
121	CHIOGGIA B/	1987	45	12	0	12	27	30	E	Country	Seconds reported incorrectly by country.	45.200000	12.458333
122	MARGHERA II A/	1987	45	12	0	12	27	0	E	Country	Seconds reported incorrectly by country.	45.200000	12.450000
123	CHIOGGIA A/	1987	45	12	0	12	26	0	E	Country	Seconds reported incorrectly by country.	45.200000	12.433333
124	MARGHERA II B/	1987	45	12	0	12	28	30	E	Country	Seconds reported incorrectly by country.	45.200000	12.475000
125	SITE (N/A) C/	1981	45	11	15	12	53	15	E	Country	Seconds reported incorrectly by country.	45.187500	12.887500
126	MARGHERA II C/	1987	45	11	0	12	28	30	E	Country	Seconds reported incorrectly by country.	45.183333	12.475000
127	MARGHERA II D/	1987	45	11	0	12	27	30	E	Country	Seconds reported incorrectly by country.	45.183333	12.450000
128	CHIOGGIA D/	1987	45	10	0	12	27	0	E	Country	Seconds reported incorrectly by country.	45.166667	12.458333
129	CHIOGGIA C/	1987	45	10	0	12	26	0	E	Country	Seconds reported incorrectly by country.	45.166667	12.433333

NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR	LATITUDE		LONGITUDE		SOURCE OF COORDINATES	COMMENTS	LATITUDE (decimal degrees)	LONGITUDE (decimal degrees)		
			dd	mm	ss	dd					mm	ss
130	VIAREGGIO	1987	44	45	0	10	9	30	E	Country	44.750000	10.158333
131	CERVIA B/	1987	44	21	30	12	31	0	E	Country	44.358333	12.516667
132	CERVIA C/	1987	44	21	30	12	34	0	E	Country	44.358333	12.566667
133	RAPALLO	1985	44	21	0	9	13	0	E	Atlas	44.350000	9.216667
134	CERVIA D/	1987	44	21	0	12	34	0	E	Country	44.350000	12.566667
135	POLCEVERA D/	1985	44	20	0	8	51	7	E	Country	44.333333	8.851944
136	POLCEVERA C/	1985	44	20	0	8	55	0	E	Country	44.333333	8.916667
137	CERVIA A/	1987	44	20	0	12	31	0	E	Country	44.333333	12.516667
138	CHIARAVANNA C/	1982	44	20	0	8	51	7	E	Country	44.333333	8.851944
139	POLCEVERA D/	1983	44	20	0	8	51	7	E	Country	44.333333	8.851944
140	POLCEVERA D/	1982	44	20	0	8	51	7	E	Country	44.333333	8.851944
141	GENOVA D/	1981	44	20	0	8	55	7	E	Country	44.333333	8.916667
142	GENOVA C/	1981	44	20	0	8	55	0	E	Country	44.333333	8.916667
143	POLCEVERA C/	1983	44	20	0	8	55	0	E	Country	44.333333	8.916667
144	GENOVA D/	1985	44	20	0	8	55	7	E	Country	44.333333	8.916667
145	CHIARAVANNA D/	1982	44	20	0	8	55	0	E	Country	44.333333	8.916667
146	POLCEVERA C/	1982	44	20	0	8	55	0	E	Country	44.333333	8.916667
147	GENOVA C/	1985	44	20	0	8	55	0	E	Country	44.333333	8.916667
148	GENOVA B/	1985	44	19	18	8	51	0	E	Country	44.321667	8.850000
149	CHIARAVANNA A/	1982	44	19	18	8	51	7	E	Country	44.321667	8.851944
150	POLCEVERA B/	1983	44	19	18	8	55	0	E	Country	44.321667	8.916667
151	GENOVA A/	1981	44	19	18	8	51	7	E	Country	44.321667	8.851944
152	POLCEVERA A/	1985	44	19	18	8	51	7	E	Country	44.321667	8.851944
153	GENOVA A/	1985	44	19	18	8	51	7	E	Country	44.321667	8.851944
154	POLCEVERA A/	1983	44	19	18	8	51	7	E	Country	44.321667	8.851944
155	POLCEVERA B/	1982	44	19	18	8	55	0	E	Country	44.321667	8.916667
156	POLCEVERA B/	1985	44	19	18	8	55	0	E	Country	44.321667	8.916667
157	GENOVA B/	1981	44	19	18	8	55	0	E	Country	44.321667	8.916667
158	CHIARAVANNA B/	1982	44	19	18	8	55	0	E	Country	44.321667	8.916667
159	POLCEVERA A/	1982	44	19	18	8	51	7	E	Country	44.321667	8.851944
160	CESENATICO	1986	44	13	0	12	24	0	E	Atlas	44.216667	12.400000
161	CESENATICO	1986	44	12	0	12	24	0	E	Atlas	44.200000	12.400000
162	BELLARIA	1986	44	9	0	12	27	0	E	Atlas	44.150000	12.450000
163	HUGGIANO B/	1983	44	5	0	9	39	30	E	Country	44.083333	9.658333
164	SCORBANI B/	1983	44	5	0	9	39	30	E	Country	44.083333	9.658333
165	LA SPEZIA I O/	1987	44	4	30	9	39	30	E	Country	44.075000	9.658333
166	LA SPEZIA I B/	1987	44	4	30	9	39	30	E	Country	44.075000	9.616667
167	LA SPEZIA B/	1987	44	4	30	9	39	30	E	Country	44.075000	9.658333
168	LA SPEZIA B/	1985	44	3	30	9	39	30	E	Country	44.058333	9.658333
169	LA SPEZIA A/	1987	44	3	30	9	37	0	E	Country	44.058333	9.616667
170	LA SPEZIA A/	1985	44	3	30	9	37	0	E	Country	44.058333	9.616667
171	LA SPEZIA I A/	1987	44	3	30	9	37	0	E	Country	44.058333	9.616667
172	LA SPEZIA I C/	1987	44	3	30	9	39	30	E	Country	44.058333	9.658333
173	RICCIONE B/	1987	44	2	54	12	44	0	E	Country	44.048333	12.733333
174	RICCIONE A/	1987	44	2	15	12	42	54	E	Country	44.037500	12.715000

Coordinates not provided by country. Rapallo used.

Coordinates not provided by country. Cesenatico used.
Coordinates not provided by country. Bellaria used.

NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR	LATITUDE		LONGITUDE		SOURCE OF COORDINATES †	COMMENTS	LATITUDE (decimal degrees)	LONGITUDE (decimal degrees)	
			dd	mm	ss	dd					mm
175	RICCIONE C/	1987	44	2	12	12	44	54	E	Country	44.036667 12.748333
176	SGORBINI A/	1983	44	2	0	9	37	0	E	Country	44.033333 9.616667
177	MUGGIANO A/	1983	44	2	0	9	37	0	E	Country	44.033333 9.616667
178	RICCIONE D/	1987	44	1	30	12	43	48	E	Country	44.025000 12.730000
179	PORT OF PESARO	1981	43	59	24	12	53	24	E	Country	43.990000 12.890000
180	PESARO B/	1986	43	58	24	12	56	0	E	Country	43.973333 12.933333
181	CATTOLICA	1986	43	58	0	12	44	0	E	Atlas	43.966667 12.733333
182	PESARO C/	1986	43	57	48	12	56	12	E	Country	43.958889 12.916667
183	PESARO A/	1986	43	57	32	12	55	0	E	Country	43.950833 12.950833
184	PESARO D/	1986	43	57	3	12	57	3	E	Country	43.898333 13.052778
185	FANO B/	1986	43	53	54	13	3	10	E	Country	43.896667 13.036667
186	FANO A/	1986	43	53	48	13	2	10	E	Country	43.886167 13.056111
187	FANO	1982	43	53	9	13	3	6	E	Country	43.885833 13.051667
188	FANO C/	1986	43	53	3	13	3	22	E	Country	43.883333 13.038333
189	FANO D/	1986	43	53	0	13	2	18	E	Country	43.876667 13.083333
190	FANO	1986	43	52	36	13	5	0	E	Country	43.866667 10.250000
191	VIAREGGIO	1986	43	52	0	10	15	0	E	Atlas	43.800000 9.901667
192	MARINA DI CARRARA A/	1986	43	48	0	9	54	6	E	Country	43.750000 9.650000
193	MARINA DI CARRARA B/	1986	43	48	0	9	59	0	E	Country	43.716667 13.216667
194	SENIGALLIA	1985	43	43	0	13	13	0	E	Atlas	43.716667 13.216667
195	SENIGALLIA	1986	43	43	0	13	13	0	E	Atlas	43.716667 13.216667
196	ANCONA C/	1987	43	40	53	13	36	12	E	Country	43.681389 13.603333
197	ANCONA B/	1987	43	40	3	13	34	3	E	Country	43.667500 13.567500
198	ANCONA D/	1987	43	39	35	13	35	20	E	Country	43.659722 13.588889
199	ANCONA A/	1987	43	38	53	13	33	10	E	Country	43.648056 13.552778
200	ANCONA	1983	43	37	0	13	31	0	E	Atlas	43.616667 13.516667
201	ANCONA (3 miles SE CONTIERI NAVALI)	43	37	0	13	31	0	E	Atlas	43.616667 13.516667	
202	ANCONA (3 miles SE CONTIERI NAVALI)	43	37	0	13	31	0	E	Atlas	43.616667 13.516667	
203	ANCONA	1983	43	37	0	13	31	0	E	Atlas	43.616667 13.516667
204	PESCARA B/	1983	43	37	0	13	31	0	E	Atlas	43.616667 13.516667
205	NUMANA	1986	43	33	15	14	19	33	E	Country	43.554167 14.325833
206	HUMANA	1985	43	33	0	13	42	0	E	Country	43.550000 13.700000
207	PESCARA C/	1987	43	32	0	13	42	0	E	Country	43.533333 13.700000
208	PESCARA A/	1986	43	31	15	14	22	12	E	Country	43.520833 14.370000
209	PESCARA D/	1986	43	31	6	14	18	6	E	Country	43.518333 14.301667
210	CIVITANOVA MARCHE	1986	43	30	11	14	20	36	E	Country	43.503056 14.343333
211	ST. BENEDETTO DEL TRONTO	1987	43	17	0	13	44	0	E	Atlas	43.283333 13.733333
212	ST. BENEDETTO DEL TRONTO	1983	42	57	0	13	53	0	E	Atlas	42.950000 13.883333
213	GIULIANOVA B/	1986	42	56	0	13	59	5	E	Country	42.933333 13.984722
214	GIULIANOVA A/	1987	42	47	40	14	3	0	E	Country	42.794444 14.050000
215	LIVORNO	1987	42	47	10	14	1	20	E	Country	42.786111 14.022222
216	GIULIANOVA C/	1987	42	46	0	14	4	0	E	Country	42.766667 14.066667
217	GIULIANOVA D/	1986	42	45	30	10	50	30	E	Country	42.758333 10.841667
218	PESCARA D/	1987	42	45	30	14	2	25	E	Country	42.758333 14.040278
219	PESCARA D/	1982	42	32	25	14	16	5	E	Country	42.540278 14.268056
219	PESCARA D/	1983	42	32	25	14	16	5	E	Country	42.540278 14.268056

Coordinates not provided by country. Cattolica used.

Coordinates not provided by country. Viareggio used.

Coordinates not provided by country. Senigallia used.

Coordinates not provided by country. Senigallia used.

Coordinates/year not provided by country. Ancona used.

Coordinates/year not provided by country. Ancona used.

Coordinates/year not provided by country. Ancona used.

Coord. not provided by country. Civitanova Marche used.

Coord. not provided by country. St Benedetto del Tronto used.

NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR	LATITUDE		LONGITUDE		SOURCE OF COORDINATES	COMMENTS	LATITUDE	LONGITUDE	
			dd	mm	ss	dd					mm
220	PESCARA C/	1983	42	32	20	14	21	35	E	Country	42.538889 14.359722
221	PESCARA C/	1982	42	32	20	14	21	35	E	Country	42.538889 14.359722
222	PESCARA B/	1983	42	30	25	14	21	35	E	Country	42.506944 14.359722
223	PESCARA B/	1982	42	30	25	14	21	35	E	Country	42.506944 14.359722
224	S. STEFANO C/	1986	42	26	34	11	7	36	E	Country	42.442778 11.126667
225	S. STEFANO A/	1986	42	26	34	11	7	23	E	Country	42.442778 11.126667
226	S. STEFANO B/	1986	42	26	29	11	7	23	E	Country	42.441389 11.123056
227	S. STEFANO D/	1986	42	26	29	11	7	36	E	Country	42.441389 11.123056
228	ORTONA A/	1987	42	25	55	14	31	50	E	Country	42.431944 14.530556
229	ORTONA D/	1987	42	25	5	14	30	10	E	Country	42.418056 14.502778
230	ORTONA B/	1987	42	23	50	14	35	0	E	Country	42.397222 14.583333
231	ORTONA C/	1987	42	23	0	14	34	0	E	Country	42.383333 14.566667
232	ORTONA B/	1982	42	23	0	14	33	0	E	Country	42.383333 14.550000
233	ORTONA B/	1986	42	23	0	14	33	0	E	Country	42.383333 14.550000
234	ORTONA A/	1982	42	22	0	14	29	0	E	Country	42.366667 14.483333
235	ORTONA A/	1986	42	22	0	14	29	0	E	Country	42.366667 14.483333
236	PESCARA A/	1982	42	21	20	14	18	55	E	Country	42.355556 11.514444
237	MONTALTO DI CASTRO B/	1986	42	21	20	11	30	52	E	Country	42.355556 11.514444
238	PESCARA A/	1983	42	21	20	14	18	55	E	Country	42.355556 11.514444
239	MONTALTO DI CASTRO A/	1986	42	21	8	11	30	40	E	Country	42.352222 11.511111
240	MONTALTO DI CASTRO C/	1986	42	21	3	11	30	0	E	Country	42.350833 11.500000
241	ORTONA C/	1982	42	21	0	14	35	0	E	Country	42.350000 14.583333
242	ORTONA C/	1986	42	21	0	14	35	0	E	Country	42.350000 14.583333
243	MONTALTO DI CASTRO D/	1986	42	20	92	11	30	90	E	Country	42.348667 11.515000
244	ORTONA D/	1986	42	20	0	14	31	0	E	Country	42.333333 14.516667
245	TORRE VALDALIGA B/	1982	42	20	0	14	31	30	E	Country	42.333333 14.525000
246	TORRE VALDALIGA B/	1982	42	8	1	11	44	1	E	Country	42.133611 11.733611
247	TORRE VALDALIGA B/	1980	42	8	1	11	44	9	E	Country	42.133611 11.735833
248	TORRE VALDALIGA A/	1982	42	7	3	11	44	9	E	Country	42.117500 11.735833
249	TORRE VALDALIGA A/	1980	42	7	3	11	44	9	E	Country	42.117500 11.735833
250	CIVITAVECCHIA A/	1987	42	5	39	11	46	15	E	Country	42.094167 11.770833
251	CIVITAVECCHIA B/	1987	42	5	33	11	46	3	E	Country	42.092500 11.767500
252	CIVITAVECCHIA C/	1987	42	5	9	11	46	18	E	Country	42.085833 11.771667
253	CIVITAVECCHIA D/	1987	42	5	8	11	46	36	E	Country	42.085556 11.776667
254	CIVITAVECCHIA B/	1980	42	5	6	11	46	3	E	Country	42.085556 11.768889
255	CIVITAVECCHIA A/	1980	42	5	6	11	46	8	E	Country	42.085000 11.767500
256	CIVITAVECCHIA C/	1980	42	5	4	11	46	6	E	Country	42.084444 11.768889
257	CIVITAVECCHIA D/	1980	42	5	3	11	46	6	E	Country	42.084444 11.768889
258	TERMO I	1986	42	0	15	0	0	0	E	Atlas	42.000000 15.000000
259	LAGO VARANO II A/	1985	41	57	54	15	42	0	E	Country	41.965000 15.700000
260	LAGO VARANO II B/	1985	41	57	52	15	45	40	E	Country	41.964444 15.761111
261	LAGO VARANO I B/	1985	41	57	52	15	45	40	E	Country	41.964444 15.761111
262	LAGO VARANO II D/	1985	41	57	3	15	42	12	E	Country	41.950833 15.703333
263	LAGO VARANO I D/	1985	41	57	3	15	42	12	E	Country	41.950833 15.703333
264	LAGO VARANO I C/	1985	41	57	3	15	46	8	E	Country	41.950833 15.768889

Seconds reported incorrectly by country.

Coordinates not provided by country. Termoli used.

NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR	LATITUDE		LONGITUDE		SOURCE OF COORDINATES	COMMENTS	LATITUDE	LONGITUDE	
			dd	mm	ss	dd					mm
265	LAGO VARANO II C/	1985	41	57	3	15	46	8	E	Country	41.950833 15.768889
266	ST. BENEDETTO DEL TRONTO	1985	41	56	0	13	59	5	E	Country	41.933333 13.984722
267	LAGO VARANO I A/	1985	41	51	54	15	42	0	E	Country	41.865000 15.700000
268	MANFREDONIA B/	1983	41	37	13	15	54	46	E	Country	41.620278 15.912778
269	MANFREDONIA C/	1983	41	37	4	15	54	58	E	Country	41.617778 15.916111
270	MANFREDONIA A/	1983	41	36	58	15	54	24	E	Country	41.616111 15.906667
271	MANFREDONIA D/	1983	41	36	52	15	54	33	E	Country	41.614444 15.909167
272	TERRACINA	1985	41	17	0	13	15	0	E	Atlas	Coordinates not provided by country. Terracina used.
273	ANZIO	1983	41	27	0	12	38	0	E	Atlas	Coordinates not provided by country. Anzio used.
274	ANZIO	1985	41	27	0	12	38	0	E	Atlas	Coordinates not provided by country. Anzio used.
275	BARLETTA C/	1981	41	22	13	16	20	50	E	Country	41.450000 12.633333
276	BARLETTA C/	1985	41	22	13	16	20	53	E	Country	41.450000 12.633333
277	BARLETTA D/	1981	41	21	36	16	20	24	E	Country	41.370278 16.340000
278	BARLETTA D/	1985	41	21	36	16	20	24	E	Country	41.360000 16.340000
279	BARLETTA B/	1985	41	21	0	16	23	55	E	Country	41.360000 16.340000
280	BARLETTA B/	1981	41	21	0	16	23	55	E	Country	41.350000 16.398611
281	BARLETTA A/	1985	41	20	17	16	23	24	E	Country	41.350000 16.398611
282	BARLETTA A/	1981	41	20	17	16	23	24	E	Country	41.338056 16.390000
283	TERRACINA	1986	41	17	0	13	15	0	E	Atlas	Coordinates not provided by country. Terracina used.
284	SCAURI	1987	41	14	10	13	44	0	E	Atlas	Coordinates not provided by country. Scauri used.
285	TERRACINA	1985	41	15	0	13	15	0	E	Atlas	Coordinates not provided by country. Fiumicino used
286	FIUMICINO	1987	41	14	10	13	44	0	E	Atlas	Coordinates not provided by country. Fiumicino used
287	FORMIA	1985	41	11	0	13	38	0	E	Country	41.183333 13.633333
288	BARI B/	1981	41	9	32	16	52	40	E	Country	41.183333 13.633333
289	BARI A/	1981	41	9	10	16	52	28	E	Country	41.158889 16.877778
290	BARI C/	1981	41	7	35	16	58	34	E	Country	41.152778 16.874444
291	BARI D/	1981	41	7	10	16	58	20	E	Country	41.126389 16.976111
292	MOLA DI BARI A/	1985	41	5	48	17	7	41	E	Country	41.119444 16.972222
293	MOLA DI BARI A/	1981	41	5	48	17	7	41	E	Country	41.096667 17.128056
294	MOLA DI BARI A/	1981	41	5	48	17	7	41	E	Country	41.096667 17.128056
295	MOLA DI BARI A/	1985	41	5	12	17	7	6	E	Country	41.086667 17.118333
296	MOLA DI BARI A/	1981	41	4	8	17	10	52	E	Country	41.086667 17.118333
297	MOLA DI BARI A/	1981	41	4	8	17	10	52	E	Country	41.068889 17.181111
298	MOLA DI BARI A/	1981	41	3	33	17	10	25	E	Country	41.059167 17.173611
299	MOLA DI BARI A/	1985	41	3	33	17	10	25	E	Country	41.059167 17.173611
300	ITALSIDIR (Napoli)	1982	40	50	0	14	15	0	E	Atlas	Coordinates not provided by country. Napoli used.
301	ISCHIA	1983	40	47	0	13	55	0	E	Country	Degrees not given by country. Castellammare di Stabia used.
302	TORRE AUGUSTA(Castellammare di Stabia)	1982	40	47	0	13	55	0	E	Country	Degrees not given by country. Castellammare di Stabia used.
303	COSTA MORENA D/	1985	40	44	22	18	2	10	E	Country	40.783333 14.483333
304	PIGONATI B/	1983	40	44	22	18	2	10	E	Country	40.739444 18.036111
305	BRINDISI D/	1985	40	44	22	18	2	10	E	Country	40.739444 18.036111
306	ISOLA D' ISCHIA (2.5 miles from PUNTA CORNACCHIA)	1983	40	44	0	13	57	0	E	Atlas	Coordinates/Year not provided by country. Ischia used.
307	PIGONATI C/	1980	40	43	20	18	0	45	E	Country	40.733333 13.950000
308	TORRE ANNUNZIATA	1980	40	43	10	14	25	10	E	Country	40.722222 18.012500
309	PROCIDA	1983	40	43	0	14	5	0	E	Country	40.719444 14.419444

NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR	LATITUDE		LONGITUDE		SOURCE OF COORDINATES	COMMENTS	LATITUDE	LONGITUDE	
			dd	mm	ss	dd					mm
310	BRINDISI A/	1985	40	42	45	18	0	17	E	Country	40.712500 18.004722
311	COSTA MORENA A/	1985	40	42	45	18	0	17	E	Country	40.712500 18.004722
312	COSTA MORENA	1983	40	42	20	18	1	50	E	Country	40.705556 18.030556
313	BIAGNOLI	1985	40	42	5	14	10	0	E	Country	40.701389 14.166667
314	POZZUOLI B/	1980	40	42	0	14	6	0	E	Country	40.700000 14.100000
315	SORRENTO	1987	40	42	0	13	15	0	E	Country	40.700000 13.250000
316	POZZUOLI C/	1980	40	42	0	14	10	0	E	Country	40.700000 14.166667
317	CASTELLANARE	1985	40	42	0	14	23	0	E	Country	40.700000 14.383333
318	BRINDISI B/	1985	40	41	42	18	3	29	E	Country	40.695000 18.058056
319	COSTA MORENA B/	1985	40	41	42	18	3	29	E	Country	40.695000 18.058056
320	BRINDISI C/	1985	40	41	31	18	4	37	E	Country	40.691944 18.076944
321	PIGONATI A/	1983	40	41	31	18	4	33	E	Country	40.691944 18.075833
322	COSTA MORENA C/	1985	40	41	31	18	4	37	E	Country	40.691944 18.076944
323	SALERNO (3 miles S/W of CAPO D'ORSO AL LARGO)									Atlas	Coordinates/year not provided by country. Salerno used.
324	POZZUOLI D/	1980	40	40	0	14	46	0	E	Country	40.666667 14.166667
325	POZZUOLI A/	1980	40	40	0	14	10	0	E	Country	40.666667 14.100000
326	BRINDISI B/	1987	40	36	54	18	9	36	E	Country	40.615000 18.160000
327	BRINDISI A/	1987	40	36	30	18	8	40	E	Country	40.608333 18.144444
328	BRINDISI C/	1987	40	34	54	18	11	30	E	Country	40.581667 18.191667
329	BRINDISI D/	1987	40	34	30	18	10	42	E	Country	40.575000 18.178333
330	PORTO TORRE B/	1982	40	33	28	8	15	43	E	Country	40.557778 8.261944
331	PORTO TORRE A/	1982	40	33	28	8	15	20	E	Country	40.557778 8.255556
332	PORTO TORRE D/	1982	40	33	11	8	15	20	E	Country	40.553056 8.255556
333	PORTO TORRE C/	1982	40	33	11	8	15	43	E	Country	40.553056 8.261944
334	CAPRI	1986	40	30	30	14	15	0	E	Country	40.508333 14.250000
335	M. DI PISCIOTTA	1986	40	6	0	15	15	0	E	Atlas	Coordinates not provided by country. Pisciotta used.
336	MARINA DI CAMEROTA	1985	39	59	5	15	21	54	E	Country	39.984722 15.365000
337	TRICASE A/	1986	39	57	18	18	26	30	E	Country	39.955000 18.441667
338	TRICASE B/	1986	39	57	0	18	27	42	E	Country	39.950000 18.461667
339	ARBATAX	1985	39	56	0	9	44	0	E	Atlas	Coordinates not provided by country. Arbatax used.
340	TRICASE D/	1986	39	55	30	18	25	30	E	Country	39.925000 18.425000
341	TRICASE C/	1986	39	55	12	18	26	54	E	Country	39.920000 18.448333
342	CAGLIARI B/	1981	39	9	8	9	4	75	E	Country	39.152222 9.079167
343	CAGLIARI C/	1981	39	9	8	9	4	75	E	Country	39.152222 9.079167
344	CAGLIARI B/	1985	39	9	8	9	4	75	E	Country	39.152222 9.091667
345	CAGLIARI C/	1985	39	9	8	9	4	75	E	Country	39.152222 9.091667
346	CAGLIARI A/	1985	39	8	56	9	5	30	E	Country	39.148889 9.079167
347	CAGLIARI D/	1985	39	8	56	9	5	30	E	Country	39.148889 9.079167
348	CAGLIARI D/	1981	39	8	56	9	5	30	E	Country	39.148889 9.091667
349	CAGLIARI A/	1981	39	8	56	9	4	75	E	Country	39.148889 9.079167
350	CROTONE (3 miles east of PORT OF CROTONE)									Atlas	Coordinates/year not provided by country. Crotone used.
351	CROTONE (3 miles east of PORT OF CROTONE)									Atlas	Coordinates/year not provided by country. Crotone used.
352	CROTONE	1983	39	5	0	17	8	0	E	Atlas	Coordinates/year not provided by country. Crotone used.
353	CROTONE (3 miles east of PORT OF CROTONE)									Atlas	Coordinates/year not provided by country. Crotone used.
354	CROTONE (3 miles east of PORT OF CROTONE)									Atlas	Coordinates/year not provided by country. Crotone used.

NO. OF ENTRIES	MEDITERRANEAN DUMPING SITE	YEAR		LATITUDE		LONGITUDE		SOURCE OF COORDINATES	COMMENTS	LATITUDE (decimal degrees)	LON. (decimal degrees)
		dd	mm	ss	dd	mm	ss				
355	PORTOESNE	1986	39	2	50	8	18	40	E	Country	39.047222 8.311111
356	PORT OF CAGLIARI D/	1981	39	2	0	9	18	30	E	Country	39.033333 9.308333
357	PORT OF CAGLIARI D/	1985	39	2	0	9	18	30	E	Country	39.033333 9.308333
358	PORT OF CAGLIARI C/	1981	39	2	0	9	17	0	E	Country	39.033333 9.283333
359	PORT OF CAGLIARI C/	1986	39	2	0	9	17	0	E	Country	39.033333 9.283333
360	PORT OF CAGLIARI D/	1986	39	2	0	9	18	30	E	Country	39.033333 9.308333
361	PORT OF CAGLIARI C/	1985	39	2	0	9	17	0	E	Country	39.033333 9.283333
362	PORT OF CAGLIARI A/	1986	39	0	0	9	17	0	E	Country	39.000000 9.283333
363	PORT OF CAGLIARI A/	1985	39	0	0	9	17	0	E	Country	39.000000 9.283333
364	PORT OF CAGLIARI B/	1985	39	0	0	9	18	30	E	Country	39.000000 9.308333
365	PORT OF CAGLIARI A/	1981	39	0	0	9	17	0	E	Country	39.000000 9.283333
366	PORT OF CAGLIARI B/	1986	39	0	0	9	18	30	E	Country	39.000000 9.308333
367	PORT OF CAGLIARI B/	1981	39	0	0	9	18	30	E	Country	39.000000 9.308333
368	ARBATAX	1983	38	56	4	9	45	7	E	Country	38.934444 9.751944
369	ARBATAX	1981	38	56	4	9	45	7	E	Country	38.934444 9.751944
370	ARBATAX	1986	38	56	4	9	45	7	E	Country	38.934444 9.751944
371	PALERMO	1985	38	10	0	13	29	0	E	Country	38.166667 13.483333
372	R. CALABRIA	1986	38	6	0	15	39	0	E	Atlas	38.100000 15.650000
373	PORTICELLO (Santa Flavia)	1986	38	5	0	13	30	0	E	Atlas	38.083333 13.500000
374	TERNINI IMERSE	1986	38	1	18	13	43	6	E	Country	38.021667 13.718333
375	TERNINI IMERSE	1987	38	0	48	13	42	0	E	Country	38.013333 13.700000
376	STASSO	1986	37	38	30	15	15	30	E	Country	37.641667 15.258333
377	S. MARIA LA SCALA (3.5 mi. from coast)(Acireale)	1983	37	36	0	15	10	0	E	Atlas	37.600000 15.166667
378	MAZARA DEL VALLO	1983	37	32	0	12	35	0	E	Country	37.533333 12.583333
379	SCIACCA	1986	37	27	0	13	5	0	E	Country	37.450000 13.083333
380	EMPEDOCLE	1987	37	21	0	13	1	0	E	Country	37.350000 13.016667
381	AUGUSTA	1986	37	10	12	15	17	18	E	Country	37.170000 15.288333
382	SIRACUSA	1987	37	5	0	15	21	0	E	Country	37.083333 15.350000
383	SIRACUSA	1985	37	5	0	15	21	0	E	Country	37.083333 15.350000
384	LICATA	1982	36	58	0	13	56	30	E	Country	36.966667 13.941667
385	LICATA	1985	36	58	0	13	56	30	E	Country	36.966667 13.941667
386	LAMPEDUSA	1981	35	31	0	12	37	0	E	Atlas	35.516667 12.616667

Coord.s not provided by country. Reggio Calabria used.
Coordinates not provided by country. Santa Flavia used.

Coordinates/year not provided by country. Acireale used.

Latitude coordinates not provided. Lampedusa used.