SECRETARY OF STATE FOR THE ENVIRONMENT

2 MARSHAM STREET
LONDON SW1P 3EB
01-276 3000

My ref:

Your ref :

Dominic Morris Esq
PS/Prime Minister
10 Downing Street
LONDON
SW1A 2AA

18 July 1989

Dear Dominic

You asked, in the light of the recent article in the Daily Telegraph, whether we could send you a copy of the OECD report. As you will see, it is a substantial work, running to over 300 pages.

The report, quite rightly, sounds many notes of caution about direct comparisons of the figures among aountries, and places emphasis upon study of the footnotes as well as the main text. Definitions and classifications are not completely harmonised throughout the OECD countries and it is difficult to assess the accuracy of some national figures. Nevertheless the article did, I think give a fair summary. There is no worst offender, nor does any country emerge completely unscathed. The article did not, and could not have been expected to cover all the information within the report. You may also like to see the attached annexes which summarise some of the major points from the report.

There are perhaps two points at which the article does not give a rounded view. The first of those is on research where in fact the UK spends £161m a year on environmental research (£90.9m alone going to the Natural Environment Research Council). Secondly, the diagram for water quality takes rather a partial view. As the attached tables show the overall river quality has improved since 1975. Nitrates are one of only two substances to show an increase in the three English rivers cited in the report.

Yours

CES Bush

KATE BUSH
Private Secretary

TABLE 1: SELECTED ENVIRONMENTAL INDICATORS a)

		CANADA	USA	FRANCE	GERMANY	ITALY	UK	JAPAN	NORTH AMERICA	OECD EUROPE	OECD TOTAL	WORLD
AIR												
Emissions of:												
- SOX												
Total emissions	(1000 tonnes)	3,670	21,200	1,517	2,223	2,075	3,867	1,079	..	..	..	..
per capita	(kg/cap)	144.8	87.7	28.6	36.4	36.7	68.2	8.9	93.2	39.7	54.1	20.1
per unit of GDP	(kg/1000 US$)	11.7	6.6	2.2	2.5	4.1	6.4	0.8	7.1	4.0	4.9	6.9
- NOX												
total emissions	(1000 tonnes)	1,940	19,300	1,652	2,969	1,570	2,303	1,416	..	..	..	..
per capita	(kg/cap)	76.5	79.9	30.7	48.6	27.8	39.1	11.7	79.6	31.3	44.7	13.8
per unit of GDP	(kg/1000 US$)	6.2	6.1	2.3	3.4	3.1	3.7	1.1	6.1	3.2	4.0	4.7
- Particulates												
total emissions	(1000 tonnes)	2,150	6,800	373	562	413	230	133	..	..	..	..
per capita	(kg/cap)	84.8	28.1	6.5	9.2	7.3	4.8	1.1	33.5	10.9	17.0	11.6
per unit of GDP	(kg/1000 US$)	6.9	2.1	0.5	0.6	0.8	0.4	0.1	2.6	1.1	1.5	4.0
- CO												
total emissions	(1000 tonnes)	10,100	60,900	6,198	8,926	5,571	5,264	..	..	..	..	..
per capita	(kg/cap)	398.4	252.1	116.1	146.2	98.5	89.4	49.4	266.0	105.1	152.5	36.0
per unit of GDP	(kg/1000 US$)	32.3	19.1	8.8	10.1	10.9	8.4	4.6	20.3	10.7	13.8	12.3
SOLID WASTE												
Waste Generated												
- Municipal Waste												
total generated	(1000 tonnes)	16,000	178,000	15,000	19,387	15,000	17,737b)	41,530	194,000	120,000	370,000	..
per capita	(kg/cap)	636	744	272	318	265	353b)	344	734	265	441	..
- Industrial Waste												
total generated	(1000 tonnes)	61,000	628,000	50,000	55,932	35,000	50,000b)	312,000	..	..	1,300,000	..
per unit of GDP	(kg/GDP)	201	203	70	65	71	85b)	243	203	67	146	..
NOISE (from Traffic)												
- Population Exposed to Leq>65dB(A)	(million inh.)	..	17	9	6	..	6	37	19	61	119	..

Source: OECD Environmental Data, Compendium 1989

NOTES:

.. not available
a) Most recent yearly data
b) England and Wales only

TABLE 1 (cont) : SELECTED ENVIRONMENTAL INDICATORS a)

		CANADA	USA	FRANCE	GERMANY	ITALY	UK	JAPAN	NORTH AMERICA	OECD EUROPE	OECD TOTAL	WORLD
WATER												
- Waste Water Treatment Plants	(% population served)	62.2	74.0	49,7	86.5	30.0	84,0b)	39.0	77.0	55.0	60.0	..
- Total Water Withdrawal	(mill m3)	41,470	467,000	39,995	41,216	56,200	11,511b)	84,831	508,500	278,200	893,000	..
per capital	(m3/cap)	1,635	1,952	725	675	1,010	231b)	726	1,920	700	1,120	..
- Fish Catches (Inland + Marine)	(%)	1.6	5.4	0.9	0.2	0.6	0.9	13.1	7.0	12.4	33.1	100
LAND												
- Total Area	(%)	7.0	7.0	0.4	0.2	0.2	0.2	0.3	14.1	3.2	23.6	100
- Major Protected Areas	(%)	5.4	15.3	0.4	0.1	0.1	0.4	0.5	20.7	20.4	50.7	100
- Pesticides on Agricultural Land total	(tonnes)	39,259	334,000	85,922	31,417	..	40,300c)	83,056	..	..	..	..
per Km2	(Kg/km2)	51	77	274	262	..	356c)	1,550	73	161	61	..
FOREST												
- Area	(% land area)	49	32	27	30	23	10	67	41	33	33	31
- Wood Production	(%)	3.8	11.9	1.0	0.7	0.3	0.1	0.7	15.7	6.2	23.2	100
- Forest Trade												
- Exports	(%)	21.1	10.9	3.3	6.2	1.6	1.5	1.7	32.1	44.2	79.1	100
- Imports	(%)	1.8	17.3	5.7	10.0	5.2	9.7	10.2	19.1	47.6	78.4	100

Source: OECD Environmental Data, Compendium 1989

NOTES:

.. not available
a) Most recent yearly data
b) England and Wales only
c) Great Britain only

TABLE 2 : ECONOMIC TRENDS a)

		CANADA	USA	FRANCE	GERMANY	ITALY	UK	JAPAN	NORTH AMERICA	OECD EUROPE	OECD TOTAL
POPULATION											
- Growth	(%)	20.3	19.0	9.6	0.9	7.4	2.3	17.7	19.1	10.6	14.7
- Population Density	(/km2)	2.6	26.0	101.7	246.2	188.1	232.5	327.9	13.9	93.1	25.5
GROSS DOMESTIC PRODUCT (1980 exchange rates)											
- Growth	(%)	93.1	60.9	55.3	44.3	57.0	42.2	103.7	63.3	51.3	62.4
- Per capita	(1000 US$/cap)	12.7	13.5	13.4	14.7	9.3	11.0	11.2	13.5	10.1	11.4
ENERGY REQUIREMENTS											
Total Energy Requirements	MTOE	240	1,866	206	272	149	209	372	2,106	1,314	3,887
Total Growth	(%)	58.0	17.2	36.7	14.8	28.4	-0.1	38.9	20.8	27.9	25.4
- Change in Solid Fuels	MTOE	15.7	184.0	-17.4	-14.4	5.0	-20.3	5.2	199.7	-0.1	215.9
- Change in Oil	MTOE	3.6	75.3	-5.2	-13.4	5.9	-25.7	23.7	78.8	-25.6	81.5
- Change in Gas	MTOE	17.9	-91.0	17.2	34.3	21.9	39.2	33.7	-73.1	148.4	124.0
- Change in Nuclear Energy	MTOE	17.1	102.6	58.0	27.9	1.3	6.5	40.9	119.7	135.0	295.5
ROAD TRANSPORT											
Road Vehicle Stocks:											
- Total Stocks	(1000)	14,903	179,625	26,052	29,284	24,769	21,490	49,908	194,528	145,731	401,306
- Growth	(%)	84.4	65.7	81.0	95.0	122.7	58.4	183.9	67.0	101.0	88.9
- Per capita	(veh./cap)	0.58	0.74	0.47	0.48	0.44	0.38	0.41	0.72	0.36	0.49
Road Traffic Volumes:											
- Total Volume	(billion veh. km)	211	3,001	379	396	274	311b)	489	3,212	1,911	5,776
- Growth	(%)	67.3	67.9	82.2	69.1	87.3	73.7b)	161.5	67.9	80.8	75.6
- Per capita	(1000 veh km/cap)	8.22	12.30	6.81	6.47	4.84	5.62b)	4.00	11.92	4.69	7.06

Source: OECD Environmental Data, Compendium 1989

NOTES:
a) All growth and change values cover (1970-1987) period of time
b) Great Britain only

TABLE 2 (cont) : ECONOMIC TRENDS a)

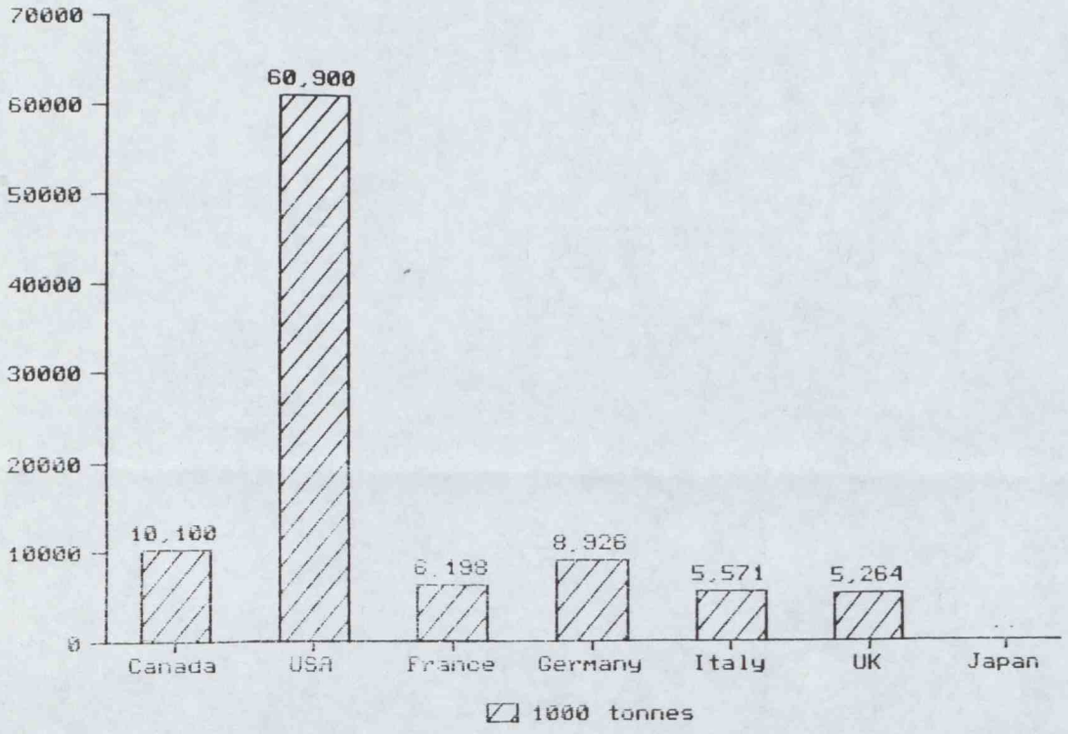
		CANADA	USA	FRANCE	GERMANY	ITALY	UK	JAPAN	NORTH AMERICA	OECD EUROPE	OECD TOTAL
INDUSTRIAL PRODUCTION											
- Growth	(%)	78.2	64.4	37.3	26.2	5.7	26.4	82.4	66.4	37.2	53.0
AGRICULTURE											
Fertilizer Use:											
- Amount	(1000 tonnes)	2,203	17,717	5,812	3,104	2,320	2,531	2,008	19,920	22,393	45,953
- Growth	(%)	174.7	14.0	25.0	-3.9	73.4	37.6	3.1	21.9	30.8	24.8
- Fertilizer on Agricultural Land	(tonnes/km2)	2.8	4.0	18.7	26.6	46.5	14.5	37.7	3.9	13.5	3.9

NOTES:

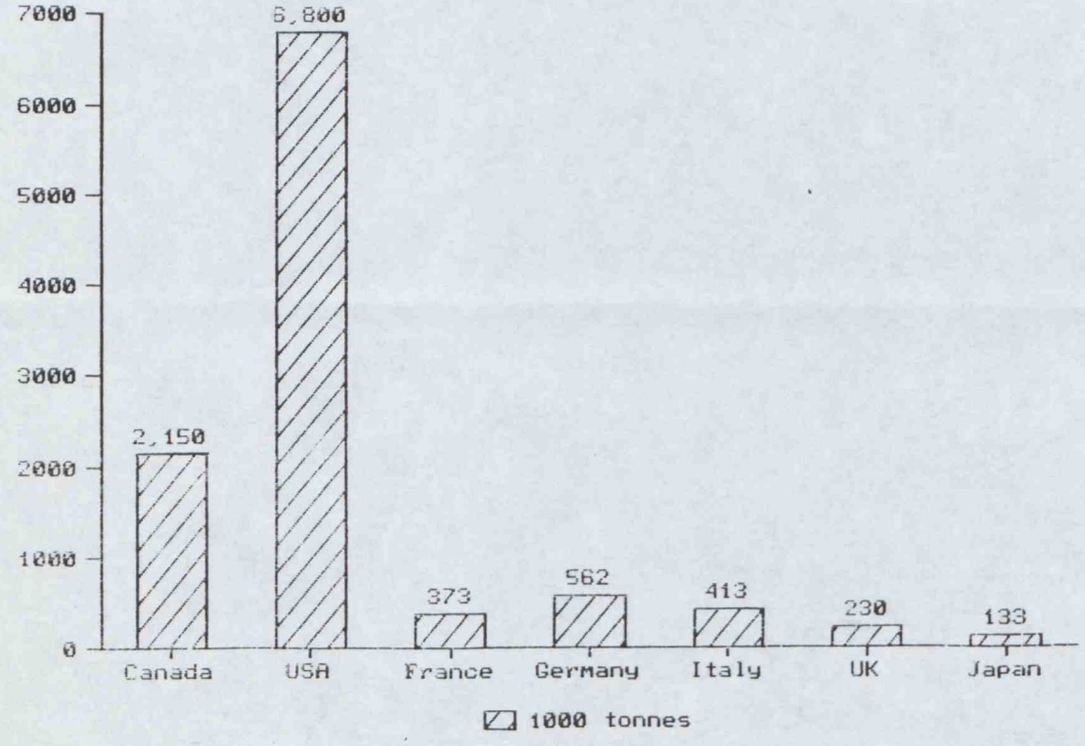
Source: OECD Environmental Data, Compendium 1989

a) All growth and change values cover (1970-1987) period of time
b) Great Britain only

Total Emissions of CO

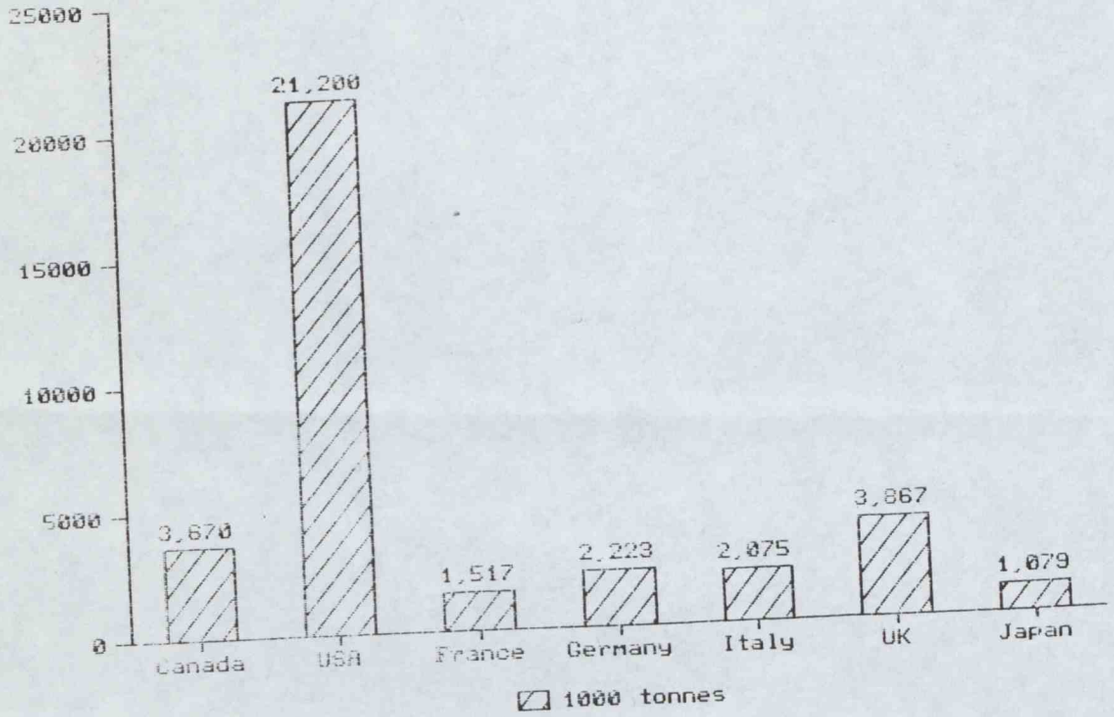


Total Emissions of Particulates

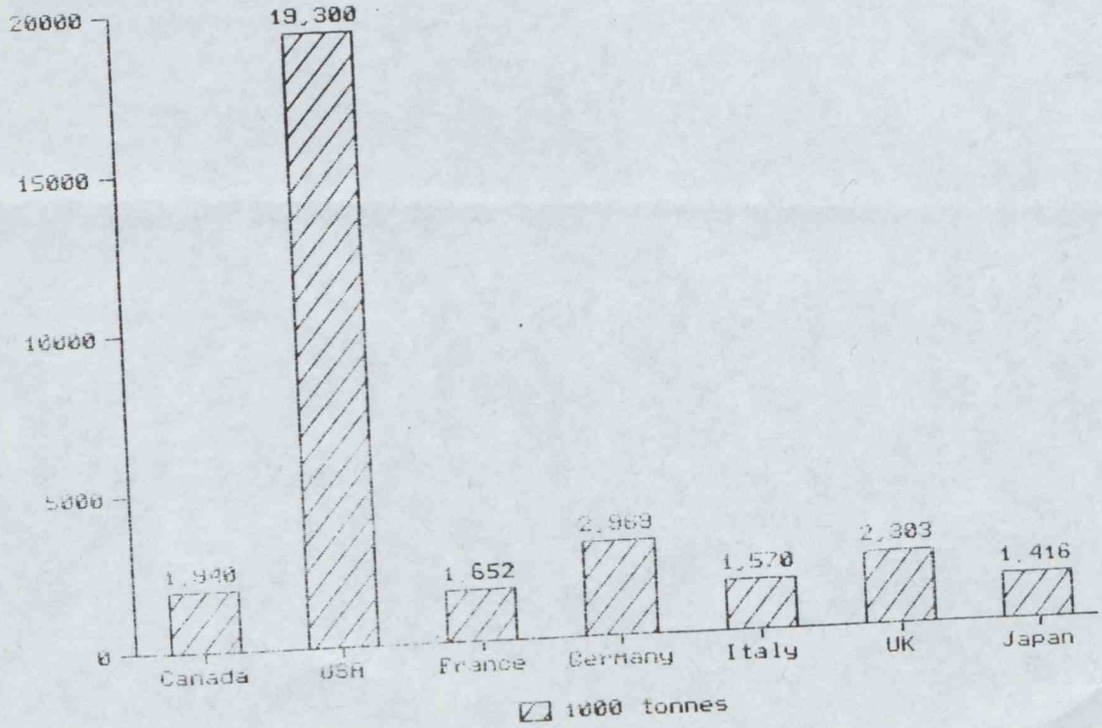


Source: OECD Environmental Data, Compendium 1989

Total Emissions of SOX



Total Emissions of NOX



Source: OECD Environmental Data, Compendium 1989

ANNEX B

AIR EMISSIONS (1000 tonnes) (1980 figures)

	Sulphur Dioxide	Particu-lates	NOx	Carbon Monoxide	Hydro-carbons
UK	4836	290	2264	4999	2241
Belgium	856	267	317	839	339
Denmark	452	47	245	577	197
France	3512	483	1861	6620	1972
FRG	3187	696	2935	11708	2490
Greece	546	40	217	695	130
Ireland	217	94	71	497	62
Italy	3211	386	1585	5487	1566
Lux'rg	24	-	23	-	11
Neth'ds	462	162	553	1450	493
Portugal	266	119	166	533	159
Spain	2543	1521	937	3780	843
Canada	4650	1907	1942	9928	2100
USA	23900	8500	20300	76100	23000

AIR EMISSIONS (Kg per capita) (1980 figures)

UK	86	5	40	89	40
Belgium	87	27	32	85	34
Denmark	88	9	48	113	38
France	65	9	35	123	37
FRG	52	11	48	190	40
Greece	57	4	23	72	13
Ireland	64	28	21	146	18
Italy	58	7	28	99	28
Lux'bg	66	-	63	-	30
Neth'ds	33	11	39	102	35
Portugal	29	13	18	57	17
Spain	68	41	25	101	23
Canada	193	79	81	413	87
USA	105	37	89	334	101

PERCENTAGE OF THE POPULATION SERVED BY (a)

	Waste Water Treatment Plants	Municipal Waste Services
UK	84	100
Belgium	23	100
Denmark	98	-
France	50	98
FRG	86.5	100
Greece	0.5	69
Ireland	11	77
Italy	30	-
Lux'b'g	83	100
Neth'ds	90	100
Portugal	12.5	75
Spain	29	85

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a) most recent yearly data.

	Phosphorous (mgP)			Ammonium (mgN)			Lead (ug)		
75	80	85	75	80	85	75	80	85			
Thames	1.1.	1.2	1.3	0.3	0.3	0.3	-	10	9
Severn	0.7	0.5	0.7	0.2	0.1	0.2	29	40	4
Mersey	1.0	0.8	1.4	5.8	4.5	4.6	50	15	11

Cadmium(ug)			Chromium(ug)						Copper(ug)		
			75	80	85	75	80	85	75	80	85
Thames	-	1.0	0.8	-	11	10	-	10	11		
Severn	5.2	10.0	0.2	9	30	11	18	21	12		
Mersey	20.0	0.8	0.2	20	20	12	20	19	9		

MAJOR PROTECTED AREAS
(Scientific reserves, national parks, natural monuments, nature reserves and protected landscapes) - as defined by the IUCN)

	Number of Sites	% territory
UK	57	6.3
Belgium	4	0.4
Denmark	25	32.1
France	37	2.3
FRG	45	2.1
Greece	14	0.5
Ireland	3	0.3
Italy	34	1.7
Lux'b'g	4	44.2
Neth'ds	50	4.4
Portugal	12	4.1
Spain	56	3.4

ANNEX C

The OECD report does not contain the following information, which may also be useful to repeat here.

CARBON DIOXIDE (emissions per capita - (1986) tonnes)

U.K.	2.94
FRG	3.06
Italy	1.65
U.S.A.	5.0
Czechoslovakia	4.2
Bulgaria	3.6
U.S.S.R.	3.59
Norway	2.1

RESEARCH

The UK spends £161m per annum (not £46m as quoted in the Daily Telegraph article) on environmental research. Only FRG £159m (1987 figure) spends a similar amount. Selected other EC countries spend:

	£
Netherlands	28m
Italy	25m
France	23m
Belgium	9m

WATER

90% of the river length in England and Wales is classified as being of good or fair quality. This compares with an average of 75% in the EC.

EC COMPLIANCE

The article stated that the UK was the only country never to have been successfully prosecuted by the EC for environmental misdemeanours. In fact, we believe that Ireland, Luxembourg, Portugal and Spain have not been prosecuted.

WASTE RECOVERY (% recovery rate)

	Paper & Cardboard	Glass
UK	27	13
Belgium	15	39
Denmark	31	32
France	33	26
FRG	41	37
Greece	-	-
Ireland	15	8
Italy	-	38
Lux'b'g	-	-
Neth'ds	50	62
Portugal	38	14
Spain	44	22

ENERGY

	Total Energy Requirements Per Capita in 1987 (1975 = 100)	Consumption of Energy by unit of GDP in 1987 (1975=100)	% of Electricity generated by nuclear power (1987)
UK	102	81	16
Belgium	107	86	62
Denmark	110	84	-
France	116	94	66
FRG	114	86	29
Greece	141	116	-
Ireland	124	95	-
Italy	111	83	-
Luxb'g	78	58	-
Neth'ds	102	88	5
Portugal	144	107	-
Spain	115	99	30
Canada	112	85	15
USA	98	77	17

WATER QUALITY (annual mean concentrations mg/litre unless otherwise stated)

	dissolved oxygen			biological oxygen demand			nitrates(mgN/litre)		
	1975	80	85	75	80	85	75	80	85
Thames	10.8	9.9	10	3.4	2.7	2.4	6.5	6.9	7.5
Severn	10.1	10.4	10.8	2.8	2.6	1.7	5.5	5.8	6.3
Mersey	5.1	6.1	6.2	7.2	5.1	5.0	1.8	2.3	3.1