



8.12 London Borough of Richmond

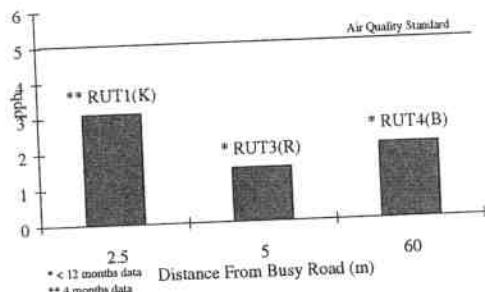


Figure 12A. Annual Mean Benzene Concentrations - 1997

Annual Mean Concentration

There were insufficient data available to make any meaningful comparisons between sites, however the AQS was not exceeded or approached at any site.

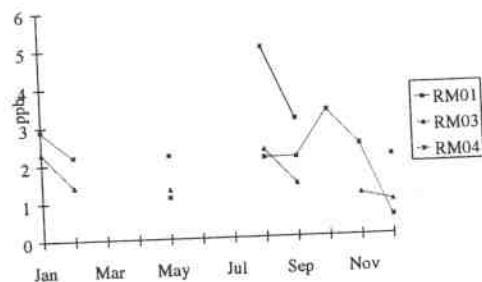


Figure 12B. Temporal Variation 1997

Temporal Variation

Temporal trends for 1997 cannot be established due to insufficient data.

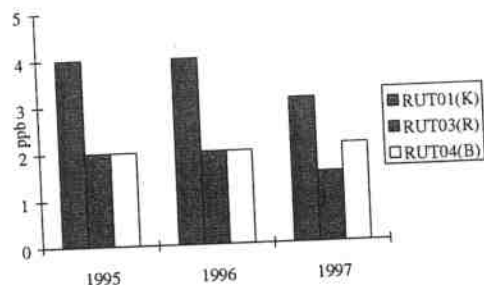


Figure 12C. Trends in Annual Average Benzene Concentrations

Annual Trends

Figure 12C shows annual benzene concentration from 1995 to 1997. There is insufficient data available for 1997, to comment on annual trend.

Table 3: Benzene/Toluene Ratios

Borough	Site Code	Site Classification	Annual Benzene Concentration (ppb)	Annual Toluene Concentration (ppb)	Benzene:Toluene Ratio
Barking	BD1	Roadside	2.5	7.8	1:3
	BD2	Roadside	2.1	6.8	1:3
	BD3	Background	2.1	8.1	1:4
	BD4	Background	2.2	5.5	1:3
Greenwich	GW33	Roadside	4.4	10.4	1:2
	GW34	Roadside	3.1	9.1	1:3
	GW35	kerbside	4.5	9.8	1:2
	GW36	Roadside	2.5	8.1	1:3
	GW37	Background	2.5	10.2	1:4
	GW38	Background	3.6	12.1	1:3
	GW39	Background	1.7	7.1	1:4
	GW41	Roadside	3.9	7.2	1:2
	GW42	Roadside	3.5	9.7	1:3
	GW43	Roadside	3.8	8.6	1:2
	GW44	Roadside	3.8	11.7	1:3
GW45	Roadside	3.0	8.5	1:3	
Kensington	KC01	Kerbside	2.4	5.2	1:2
	KC02	Background	2.2	5.2	1:2
	KC03	Roadside/PS	4.3	9.4	1:2
	KC04	Background	2.3	7.5	1:3
	KC05	Roadside	2.9	5.8	1:2
Richmond	RUT1	Kerbside	3.1	6.2	1:2
	RUT3	Background	1.5	5.5	1:4
	RUT4	Background	2.1	5.3	1:3
Sutton	1	Roadside	2.1	7.0	1:3
	2	Background	1.6	5.1	1:3
	3	Background	1.9	5.6	1:3
	4	Roadside	2.4	6.4	1:3
	5	Background	2.1	6.3	1:3
Tower Hamlets	TH31	Background	1.7	5.6	1:3
	TH37	Roadside	3.5	6.9	1:2
	TH40	Background	1.3	4.1	1:3
	TH43	Kerbside	4.0	6.7	1:2
	TH44	Roadside	2.2	4.5	1:2
	TH45	Background	1.9	4.5	1:2
Corporation of London	CL1	Roadside	2.9	6.1	1:2
	CL2	Roadside	3.7	10.9	1:3
	CL3	Background	2.0	8.0	1:4
	CL4	Roadside	2.4	7.5	1:3
	CL5	Background	2.1	9.1	1:4

Note: Above ratio are calculated using available data which may not be representative of a full year.

London Borough of Richmond

Site Code	Location	Distance from Busy Road (m)	Classification
RUT01	York Street, Twickenham	2.5	kerbside
RUT03	Alexandra Hall, Mortlake	5	roadside
RUT04	Waldegrave Road, Teddington	50-70	background

London Borough of Sutton

Site Code	Location	Distance from Busy Road (m)	Classification
Site 1	Croydon Road, Wallington	8	roadside
Site 2	Devonshire Primary School	42	background
Site 3	Sutton Cemetery	100	background
Site 4	Robin Hood Junior School	4	roadside
Site 5	The Lodge, Honeywood Walk	75	background

BENZENE CONCENTRATIONS 1997

LONDON BOROUGH OF RICHMOND

Month	Site Code		
	RUT01	RUT03	RUT04
January	-	2.3	2.9
February	-	1.4	2.2
March	-	-	-
April	-	-	-
May	2.2	1.3	1.1
June	-	-	-
July	-	-	-
August	5.0	2.3	2.1
September	3.1	1.4	2.1
October	-	-	3.3
November	-	1.1	2.4
December	2.1	0.9	0.5
Annual Mean	3.1	1.5	2.1

LONDON BOROUGH OF SUTTON

Month	Site Code				
	Site 1	Site 2	Site 3	Site 4	Site 5
January	3.5	-	3.6	4.3	3.1
February	1.4	0.6	1.1	2.0	1.6
March	2.1	2.1	1.8	2.2	1.7
April	2.7	1.1	0.4	1.4	1.9
May	2.1	1.7	1.6	2.1	2.6
June	1.7	1.3	1.8	2.7	1.4
July	1.5	0.9	1.0	2.3	1.3
August	1.9	1.4	2.1	2.1	1.5
September	1.2	1.6	1.0	2.0	1.2
October	-	3.8	5.0	3.4	4.6
November	4.3	2.8	2.6	3.1	3.3
December	1.1	0.6	0.8	0.9	0.9
Annual Mean	2.1	1.6	1.9	2.4	2.1

TOLUENE CONCENTRATIONS 1997

ROYAL BOROUGH OF KENSINGTON AND CHELSEA

Month	Site Code				
	KC01	KC02	KC03	KC04	KC05
January	1.7	4.9	13.0	6.5	-
February	3.7	4.8	7.0	4.5	4.5
March	3.0	4.5	-	8.5	-
April	-	-	-	-	-
May	-	5.1	-	4.3	5.7
June	3.0	4.5	3.0	8.5	3.0
July	-	-	-	-	-
August	6.3	6.9	6.6	8.0	6.3
September	-	-	-	-	-
October	-	-	-	-	-
November	11.8	7.0	18.2	16.9	8.8
December	7.0	3.5	8.5	2.7	6.4
Annual Mean	5.2	5.2	9.4	7.5	5.8

LONDON BOROUGH OF RICHMOND

Month	Site Code		
	RUT01	RUT03	RUT04
January	-	6.0	7.7
February	-	5.3	10.9
March	-	-	-
April	-	-	-
May	5.0	2.8	0.7
June	-	-	-
July	-	-	-
August	-	5.4	-
September	6.8	9.0	-
October	-	-	-
November	6.9	3.7	4.2
December	-	6.6	3.2
Annual Mean	6.2	5.5	5.3

ETHYL BENZENE CONCENTRATIONS 1997

ROYAL BOROUGH OF KENSINGTON AND CHELSEA

Month	Site Code				
	KC01	KC02	KC03	KC04	KC05
January	0.3	1.5	3.3	2.8	-
February	1.0	0.6	2.6	0.7	1.3-
March	0.7	0.8	-	2.6	-
April	-	-	-	-	-
May	0.5	-	0.6	1.0	-
June	0.7	0.8	0.7	2.6	0.7
July	-	-	-	-	-
August	0.9	1.0	5.4	1.1	2.4
September	-	-	-	-	-
October	-	-	-	-	-
November	1.0	1.1	1.4	1.9	0.8
December	2.2	1.4	1.7	0.8	1.4
Annual Mean	0.9	1.0	2.2	1.7	1.3

LONDON BOROUGH OF RICHMOND

Month	Site Code		
	RUT01	RUT03	RUT04
January	-	1.3	1.4
February	-	0.5	1.0
March	-	-	-
April	-	-	-
May	0.3	0.2	0.1
June	-	-	-
July	-	-	-
August	3.6	0.7	0.9
September	0.4	0.3	1.4
October	2.5	2.7	3.2
November	0.8	0.3	0.4
December	1.9	0.5	0.4
Annual Mean	1.6	0.8	1.1

M,P-XYLENE CONCENTRATIONS 1997

ROYAL BOROUGH OF KENSINGTON AND CHELSEA

Month	Site Code				
	KC01	KC02	KC03	KC04	KC05
January	0.8	7.8	9.1	12.6	-
February	3.1	1.8	9.0	2.0	4.0
March	1.6	1.4	-	8.2	-
April	-	-	-	-	-
May	-	1.8	-	2.2	2.3
June	1.6	1.4	1.6	8.2	1.6
July	-	-	-	-	-
August	3.6	3.1	3.6	3.1	3.8
September	-	-	-	-	-
October	-	-	-	-	-
November	2.7	3.1	4.8	2.9	2.4
December	8.0	2.5	4.8	2.6	4.4
Annual Mean	3.1	2.9	5.5	5.2	3.1

LONDON BOROUGH OF RICHMOND

Month	Site Code		
	RUT01	RUT03	RUT04
January	-	3.4	4.1
February	-	1.7	3.2
March	-	-	-
April	-	-	-
May	0.4	0.3	0.1
June	-	-	-
July	-	-	-
August	7.2	2.5	3.3
September	1.7	0.9	5.4
October	4.9	6.7	7.8
November	3.2	1.1	1.6
December	-	1.7	1.5
Annual Mean	3.5	2.3	3.4

O-XYLENE CONCENTRATIONS 1997

ROYAL BOROUGH OF KENSINGTON AND CHELSEA

Month	Site Code				
	KC01	KC02	KC03	KC04	KC05
January	1.5	8.4	5.5	11.5	-
February	6.2	0.6	3.7	0.7	1.8
March	1.4	1.2	-	3.4	-
April	-	-	-	-	-
May	-	0.5	-	2.5	2.7
June	1.4	1.2	1.4	3.4	1.4
July	-	-	-	-	-
August	1.9	2.4	1.9	3.0	3.3
September	-	-	-	-	-
October	-	-	-	-	-
November	1.4	1.1	1.6	1.0	0.8
December	2.7	1.0	2.6	1.6	2.8
Annual Mean	2.4	2.1	2.8	3.4	2.1

LONDON BOROUGH OF RICHMOND

Month	Site Code		
	RUT01	RUT03	RUT04
January	-	2.5	2.8
February	-	1.8	2.3
March	-	-	-
April	-	-	-
May	0.7	0.6	0.1
June	-	-	-
July	-	-	-
August	4.3	0.9	3.5
September	0.4	0.6	2.5
October	2.2	2.5	4.5
November	1.6	0.5	0.9
December	2.0	0.5	0.4
Annual Mean	1.9	1.2	2.1