

Table 1a. Supplementary information

| Sample                                   | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       | 14       | 15       |
|------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Start date                               | 19/09/95 | 26/09/95 | 26/09/95 | 03/10/95 | 03/10/95 | 10/10/95 | 10/10/95 | 17/10/95 | 17/10/95 | 27/10/95 | 27/10/95 | 03/11/95 | 03/11/95 | 06/11/95 | 06/11/95 |
| Finish date                              | 26/09/95 | 03/10/95 | 03/10/95 | 10/10/95 | 10/10/95 | 17/10/95 | 17/10/95 | 24/10/95 | 24/10/95 | 03/11/95 | 03/11/95 | 06/11/95 | 06/11/95 | 13/13/95 | 13/13/95 |
| 2,3,7,8-TCDF                             | 0.9      | 1.2      | 0.9      | 1.7      | 1.5      | 4.8      | 4.0      | 2.3      | 1.7      | 3.5      | 3.1      | 13.5     | 15.6     | 5.0      | 4.3      |
| 1,2,3,7,8-PeCDF                          | 1.3      | 1.9      | 1.5      | 2.4      | 2.3      | 7.3      | 5.4      | 3.7      | 2.9      | 5.7      | 5.0      | 27.6     | 33.8     | 10.1     | 9.2      |
| 2,3,4,7,8-PeCDF                          | 1.1      | 1.5      | 1.4      | 2.1      | 2.1      | 6.8      | 5.4      | 3.0      | 2.4      | 5.4      | 5.2      | 25.2     | 27.4     | 8.1      | 7.2      |
| 1,2,3,4,7,8-HxCDF                        | 1.4      | 2.4      | 2.2      | 3.2      | 3.5      | 10.4     | 8.3      | 4.8      | 4.1      | 9.4      | 8.3      | 40.3     | 45.9     | 13.9     | 11.9     |
| 1,2,3,6,7,8-HxCDF                        | 1.1      | 2.2      | 2.0      | 2.7      | 2.7      | 9.0      | 7.5      | 4.1      | 3.3      | 8.1      | 7.5      | 30.4     | 34.9     | 11.4     | 9.8      |
| 1,2,3,7,8,9-HxCDF                        | 0.8      | 1.5      | 1.0      | 1.6      | 1.8      | 5.1      | 3.9      | 1.7      | 1.9      | 5.2      | 4.7      | 14.9     | 18.7     | 6.0      | 5.0      |
| 2,3,4,6,7,8-HxCDF                        | 2.3      | 3.8      | 3.3      | 3.9      | 4.4      | 13.6     | 11.7     | 5.7      | 4.6      | 12.9     | 11.7     | 33.0     | 38.5     | 13.5     | 12.1     |
| 1,2,3,4,6,7,8-HpCDF                      | 15.0     | 37.0     | 27.4     | 39.7     | 37.1     | 162.3    | 143.1    | 54.8     | 41.8     | 127.1    | 151.1    | 384.4    | 488.2    | 164.5    | 138.6    |
| 1,2,3,4,7,8,9-HpCDF                      | 1.9      | 4.6      | 4.2      | 6.2      | 6.1      | 23.4     | 19.1     | 7.2      | 5.6      | 15.9     | 18.2     | 59.0     | 76.0     | 23.2     | 20.4     |
| OCDF                                     | 15.2     | 52.8     | 45.9     | 62.5     | 67.0     | 203.0    | 157.0    | 63.0     | 45.6     | 132.2    | 146.7    | 630.8    | 658.1    | 179.6    | 162.2    |
| 2,3,7,8-TCDD                             | 0.3      | 0.3      | 0.3      | 0.5      | 0.5      | 0.7      | 0.6      | 0.4      | 0.4      | 0.7      | 0.6      | 2.0      | 2.0      | 0.7      | 0.6      |
| 1,2,3,7,8-PeCDD                          | 0.6      | 0.6      | 0.5      | 1.2      | 1.1      | 3.4      | 2.5      | 1.2      | 0.9      | 2.7      | 2.5      | 10.1     | 11.8     | 2.8      | 2.4      |
| 1,2,3,4,7,8-HxCDD                        | 0.8      | 0.9      | 0.7      | 1.8      | 1.9      | 5.8      | 4.7      | 1.7      | 1.4      | 4.4      | 3.9      | 12.7     | 15.2     | 3.9      | 3.4      |
| 1,2,3,6,7,8-HxCDD                        | 2.2      | 2.1      | 1.7      | 3.7      | 3.7      | 10.6     | 9.0      | 3.5      | 3.0      | 8.4      | 7.6      | 28.8     | 34.3     | 9.2      | 7.5      |
| 1,2,3,7,8,9-HxCDD                        | 1.8      | 1.6      | 1.4      | 3.2      | 3.2      | 9.4      | 7.6      | 3.2      | 2.4      | 7.5      | 6.7      | 26.2     | 31.5     | 7.6      | 6.6      |
| 1,2,3,4,6,7,8-HpCDD                      | 75.2     | 65.8     | 48.7     | 130.3    | 124.9    | 395.2    | 329.8    | 133.0    | 93.6     | 286.2    | 304.8    | 1163.8   | 1442.4   | 322.0    | 274.7    |
| OCDD                                     | 312.4    | 262.0    | 182.9    | 492.2    | 480.5    | 1604.0   | 1308.6   | 523.8    | 342.2    | 993.9    | 1156.0   | 5195.0   | 6385.2   | 1270.5   | 1145.0   |
| Tetra-Furans                             | 119.9    | 166.7    | 148.5    | 264.3    | 233.8    | 790.6    | 664.4    | 364.6    | 297.9    | 509.8    | 562.9    | 1597.8   | 2214.9   | 752.2    | 685.5    |
| Penta-Furans                             | 69.6     | 109.9    | 93.6     | 157.8    | 147.6    | 472.3    | 357.2    | 218.5    | 169.2    | 371.8    | 435.8    | 1682.9   | 2090.7   | 597.2    | 529.2    |
| Hexa-Furans                              | 69.4     | 123.1    | 109.6    | 151.4    | 155.1    | 509.7    | 417.6    | 215.8    | 166.2    | 430.6    | 505.0    | 1540.0   | 1960.9   | 629.7    | 538.2    |
| Hepta-Furans                             | 18.6     | 67.2     | 51.3     | 75.0     | 72.9     | 309.0    | 267.1    | 100.8    | 74.4     | 233.4    | 277.0    | 711.6    | 918.4    | 294.0    | 252.0    |
| Tetra-Dioxins                            | 41.0     | 63.3     | 60.9     | 122.1    | 128.6    | 610.2    | 538.0    | 141.4    | 170.7    | 518.8    | 617.4    | 767.4    | 1293.9   | 789.0    | 500.5    |
| Penta-Dioxins                            | 47.6     | 67.9     | 55.3     | 174.3    | 158.5    | 708.9    | 508.5    | 160.0    | 135.4    | 353.2    | 410.1    | 983.2    | 1195.1   | 343.8    | 335.7    |
| Hexa-Dioxins                             | 109.4    | 136.8    | 113.7    | 346.1    | 348.1    | 1150.5   | 965.2    | 298.5    | 233.1    | 768.7    | 874.9    | 1888.3   | 2454.3   | 704.9    | 589.1    |
| Hepta-Dioxins                            | 133.0    | 128.1    | 97.8     | 256.1    | 251.4    | 906.1    | 775.7    | 257.1    | 184.5    | 584.4    | 651.6    | 2190.6   | 2748.7   | 620.5    | 537.1    |
| $\Sigma_{4,5}$ PCDD/F $/\text{g m}^{-3}$ | 936.1    | 1177.6   | 959.4    | 2101.7   | 2043.6   | 7264.3   | 5959.2   | 2343.3   | 1819.3   | 4896.8   | 5637.4   | 17187.6  | 21920.2  | 6181.3   | 5274.6   |
| OCDD % of $\Sigma$                       | 33.4     | 22.2     | 19.1     | 23.4     | 23.5     | 22.1     | 22.0     | 22.4     | 18.8     | 20.3     | 20.5     | 30.2     | 29.1     | 20.6     | 21.7     |
| PCDD/PCDF ratio                          | 2.2      | 1.3      | 1.1      | 2.0      | 2.0      | 2.2      | 2.2      | 1.4      | 1.4      | 1.9      | 1.9      | 1.8      | 1.8      | 1.5      | 1.4      |
| $\Sigma$ of TEQ $/[\text{g m}^{-3}]$     | 3.6      | 4.5      | 3.6      | 6.7      | 6.7      | 20.6     | 16.8     | 7.9      | 6.2      | 16.4     | 16.1     | 62.8     | 73.9     | 20.2     | 17.6     |
| 2,3,4,7,8-PeCDF                          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| [% of TEQ]                               | 14.7     | 17.1     | 18.6     | 15.9     | 15.8     | 16.4     | 16.0     | 19.1     | 19.2     | 16.5     | 16.1     | 20.0     | 18.5     | 19.9     | 20.3     |

Table 1b. Supplementary information

| Sample                           | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       | 14        | 15       |
|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
| Start date                       | 19/09/95 | 26/09/95 | 26/09/95 | 03/10/95 | 03/10/95 | 10/10/95 | 10/10/95 | 17/10/95 | 17/10/95 | 27/10/95 | 27/10/95 | 03/11/95 | 03/11/95 | 06/11/95  | 06/11/95 |
| Finish date                      | 26/09/95 | 03/10/95 | 03/10/95 | 10/10/95 | 10/10/95 | 17/10/95 | 17/10/95 | 24/10/95 | 24/10/95 | 03/11/95 | 03/11/95 | 06/11/95 | 06/11/95 | 13/13/95  | 13/13/95 |
| Mean Temp. °C                    | 12.6     | 11.0     |          | 14.2     |          | 14.3     |          | 11.3     |          | 9.1      |          | 5.5      |          | 8.2       |          |
| Min and Max Temp. °C             | 6.6-17.9 | 3.4-15.3 |          | 8.2-22   |          | 9.8-18.4 |          | 0.6-17.6 |          | 1.5-14.3 |          | -0.4-9.5 |          | -0.3-13.1 |          |
| Run of wind km day <sup>-1</sup> | 336.3    | 388.6    |          | 401.1    |          | 334.1    |          | 456.1    |          | 157.9    |          | 252.3    |          | 289.9     |          |
| Min and Max km day <sup>-1</sup> | 167-534  | 222-504  |          | 227-537  |          | 156-533  |          | 182-721  |          | 97-216   |          | 165-297  |          | 30-744    |          |
| Mean daily rainfall mm           | 4.7      | 5.7      |          | 2.1      |          | 1.3      |          | 1.4      |          | 0.03     |          | 0.4      |          | 1.3       |          |
| Total rainfall mm                | 32.7     | 40.0     |          | 15.0     |          | 9.0      |          | 9.5      |          | 0.2      |          | 1.1      |          | 9.4       |          |
| Mean sunshine hrs                | 0.4      | 1.3      |          | 4.7      |          | 1.6      |          | 2.3      |          | 4.3      |          | 4.7      |          | 0.5       |          |
| Min and Max sunshine             | 0.01-1.0 | 0-7.2    |          | 0-9.6    |          | 0-5.9    |          | 0-8.1    |          | 01-8.7   |          | 1.6-6.5  |          | 0-3.3     |          |
| Wind direction degree            |          |          |          |          |          |          |          |          |          |          |          |          |          |           |          |
| Day 1                            | 20       | 170      |          | 170      |          | 200      |          | 170      |          | 260      |          | 40       |          | 70        |          |
| Day 2                            | 350      | 280      |          | 190      |          | 130      |          | 280      |          | 180      |          | 120      |          | 190       |          |
| Day 3                            | 70       | 80       |          | 180      |          | 170      |          | 250      |          | 150      |          | 160      |          | 240       |          |
| Day 4                            | 270      | 270      |          | 170      |          | 170      |          | 20       |          | 150      |          | 70       |          | 300       |          |
| Day 5                            | 270      | 120      |          | 160      |          | 130      |          | 140      |          | 200      |          | 30       |          | 30        |          |
| Day 6                            | 310      | 230      |          | 170      |          | 170      |          | 170      |          | 320      |          | 110      |          | 110       |          |
| Day 7                            | 240      | 180      |          | 170      |          | 160      |          | 170      |          | 50       |          | 120      |          | 120       |          |
| Day 8                            | 280      | 170      |          | 200      |          | 170      |          | 160      |          | 40       |          | 80       |          | 80        |          |
| Sample air vol. m <sup>-3</sup>  | 794      | 910      | 811      | 914      | 811      | 927      | 836      | 879      | 775      | 906      | 818      | 823      | 790      | 872       | 795      |

Table 2a. Supplementary information

| Sample              | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Start date          | 30/05/96 | 06/06/96 | 20/06/96 | 27/06/96 | 04/07/96 | 11/07/96 | 18/07/96 | 25/07/96 | 01/08/96 |
| Finish date         | 06/06/96 | 13/06/96 | 27/06/96 | 04/07/96 | 11/07/96 | 18/07/96 | 25/07/96 | 01/08/96 | 08/08/96 |
| 2,3,7,8-TCDF        | 4.7      | 4.5      | 3.6      | 3.8      | 3.9      | 3.4      | 4.5      | 2.9      | 4.7      |
| 1,2,3,7,8-PeCDF     | 11.4     | 12.4     | 8.3      | 7.9      | 5.4      | 6.2      | 9.8      | 5.4      | 7.4      |
| 2,3,4,7,8-PeCDF     | 5.3      | 6.3      | 3.8      | 4.0      | 3.5      | 4.0      | 5.3      | 3.4      | 4.9      |
| 1,2,3,4,7,8-HxCDF   | 5.8      | 6.8      | 4.3      | 4.4      | 3.4      | 4.7      | 7.5      | 4.1      | 7.4      |
| 1,2,3,6,7,8-HxCDF   | 5.3      | 6.4      | 4.5      | 4.1      | 2.6      | 4.3      | 6.2      | 3.4      | 6.2      |
| 1,2,3,7,8,9-HxCDF   | 15.0     | 14.4     | 11.1     | 12.3     | 11.3     | 4.5      | 1.0      | 7.4      | 9.1      |
| 2,3,4,6,7,8-HxCDF   | 8.7      | 7.0      | 5.3      | 6.5      | 4.2      | 4.2      | 7.3      | 4.8      | 6.7      |
| 1,2,3,4,6,7,8-HpCDF | 17.3     | 18.6     | 12.2     | 11.5     | 8.0      | 14.3     | 25.0     | 10.7     | 25.4     |
| 1,2,3,4,7,8,9-HpCDF | 6.3      | 9.0      | 3.3      | 4.7      | 1.6      | 2.9      | 4.1      | 8.1      | 4.8      |
| OCDF                | 33.7     | 35.9     | 18.4     | 24.1     | 12.4     | 18.1     | 28.1     | 20.7     | 34.7     |
| 2,3,7,8-TCDD        | 3.4      | 2.6      | 2.5      | 2.2      | 1.8      | 1.1      | 2.4      | 1.3      | 1.0      |
| 1,2,3,7,8-PeCDD     | 5.8      | 6.2      | 3.6      | 3.8      | 1.7      | 1.8      | 2.2      | 1.4      | 1.5      |
| 1,2,3,4,7,8-HxCDD   | 2.8      | 2.7      | 1.8      | 2.0      | 0.9      | 1.8      | 1.2      | 0.5      | 1.2      |
| 1,2,3,6,7,8-HxCDD   | 5.6      | 6.6      | 3.9      | 5.9      | 2.0      | 3.8      | 4.4      | 2.2      | 2.7      |
| 1,2,3,7,8,9-HxCDD   | 14.6     | 12.2     | 8.3      | 9.1      | 4.3      | 4.8      | 4.0      | 3.0      | 2.8      |
| 1,2,3,4,6,7,8-HpCDD | 43.7     | 32.2     | 20.4     | 20.5     | 15.3     | 44.9     | 27.2     | 15.9     | 23.3     |
| OCDD                | 130.1    | 93.5     | 66.3     | 60.7     | 61.0     | 202.6    | 80.3     | 49.6     | 69.3     |
| Di-Furans           | 29138.0  | 38898.6  | 88470.5  | 101497.0 | 111939.9 | 94026.2  | 55820.7  | 98783.1  | 20806.3  |
| Tri-Furans          | 224.8    | 376.3    | 242.6    | 238.0    | 270.9    | 346.8    | 584.7    | 262.9    | 496.8    |
| Tetra-Furans        | 100.4    | 159.9    | 98.6     | 89.3     | 102.7    | 121.8    | 199.4    | 112.9    | 158.5    |
| Penta-Furans        | 53.3     | 80.6     | 57.9     | 45.5     | 46.4     | 63.7     | 93.3     | 56.6     | 85.7     |
| Hexa-Furans         | 56.6     | 63.4     | 43.0     | 40.5     | 33.4     | 46.4     | 80.1     | 42.3     | 66.1     |
| Hepta-Furans        | 23.7     | 33.2     | 17.6     | 16.6     | 11.0     | 20.6     | 46.0     | 21.6     | 48.9     |
| Di-Dioxins          | 436.3    | 380.4    | 446.8    | 556.0    | 1022.1   | 643.5    | 329.4    | 554.3    | 303.3    |
| Tri-Dioxins         | 36.6     | 74.2     | 40.4     | 46.3     | 31.2     | 27.8     | 46.5     | 29.7     | 30.2     |
| Tetra-Dioxins       | 52.4     | 126.3    | 50.4     | 43.6     | 42.9     | 32.9     | 60.4     | 31.3     | 28.0     |
| Penta-Dioxins       | 35.6     | 52.0     | 41.3     | 44.8     | 24.9     | 21.1     | 26.0     | 15.2     | 13.4     |
| Hexa-Dioxins        | 64.1     | 77.9     | 56.1     | 51.2     | 25.5     | 41.4     | 52.5     | 26.7     | 34.4     |
| Hepta-Dioxins       | 79.3     | 64.1     | 44.4     | 41.0     | 30.4     | 87.1     | 60.3     | 32.0     | 48.9     |

Table 2b. Supplementary information

| Sample                             | 1        | 2         | 3        | 4         | 5         | 6         | 7         | 8         | 9         |
|------------------------------------|----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Start date                         | 30/05/96 | 06/06/96  | 20/06/96 | 27/06/96  | 04/07/96  | 11/07/96  | 18/07/96  | 25/07/96  | 01/08/96  |
| Finish date                        | 06/06/96 | 13/06/96  | 27/06/96 | 04/07/96  | 11/07/96  | 18/07/96  | 25/07/96  | 01/08/96  | 08/08/96  |
| $\Sigma_{4-8}$ PCDD/F $fg\ m^{-3}$ | 629.2    | 786.7     | 494.0    | 457.4     | 390.6     | 655.7     | 726.5     | 408.8     | 585.0     |
| $\Sigma_{2-8}$ PCDD/F $fg\ m^{-3}$ | 30464.9  | 40516.1   | 89694.4  | 102794.8  | 113654.7  | 95699.9   | 57507.8   | 100038.9  | 22221.6   |
| OCDD % of $\Sigma$                 | 20.7     | 11.9      | 13.4     | 13.3      | 15.6      | 30.9      | 11.1      | 12.1      | 11.8      |
| PCDD/PCDF ratio                    | 1.4      | 1.1       | 1.1      | 1.1       | 0.9       | 1.4       | 0.6       | 0.6       | 0.5       |
| $\Sigma$ of TEQ [ $fg\ m^{-3}$ ]   | 16.6     | 16.3      | 11.3     | 11.8      | 8.2       | 8.1       | 11.1      | 7.0       | 9.4       |
| 2,3,4,7,8-PeCDF                    |          |           |          |           |           |           |           |           |           |
| [% of TEQ]                         | 16.1     | 19.3      | 16.8     | 17.0      | 21.3      | 24.3      | 24.1      | 24.0      | 26.3      |
| Mean Temp. °C                      | 12.2     | 13.1      | 12.6     | 12.5      | 12.8      | 14.8      | 17.0      | 15.0      | 15.6      |
| Min and Max Temp. °C               | 9.7-16.3 | 11.8-14.9 | 9.4-14.9 | 11.4-13.3 | 11.1-14.3 | 13.9-17.4 | 13.9-19.3 | 14.0-16.7 | 14.3-18.9 |
| Run of wind $km\ day^{-1}$         | 300      | 266       | 161      | 421       | 282       | 199       | 170       | 239       | 287       |
| Min and Max $km\ day^{-1}$         | 154-576  | 146-456   | 117-233  | 289-538   | 228-415   | 122-264   | 99-334    | 141-463   | 203-463   |
| Mean daily rainfall mm             | 0.9      | 2.9       | 1.2      | 6.1       | 2.7       | 0.2       | 0.3       | 2.0       | 5.2       |
| Total rainfall mm                  | 6.5      | 20.5      | 8.3      | 42.5      | 19.0      | 1.7       | 2.0       | 14.3      | 36.3      |
| Mean sunshine hrs                  | 7.1      | 8.4       | 6.4      | 3.0       | 4.6       | 9.6       | 8.2       | 1.7       | 4.8       |
| Min and Max sunshine               | 0.4-12.6 | 0-15.3    | 0.5-12.8 | 0.1-7.4   | 0-10.7    | 0-15.9    | 1.6-14.2  | 0-6.2     | 0-11.2    |
| Wind direction degrees             |          |           |          |           |           |           |           |           |           |
| Day 1                              | 140      | 160       | 70       | 150       | 220       | 260       | 250       | 260       | 230       |
| Day 2                              | 220      | 0         | 40       | 170       | 280       | 230       | 50        | 240       | 290       |
| Day 3                              | 240      | 300       | 290      | 280       | 280       | 230       | 280       | 270       | 270       |
| Day 4                              | 150      | 180       | 270      | 250       | 310       | 280       | 200       | 200       | 170       |
| Day 5                              | 180      | 180       | 220      | 280       | 290       | 30        | 210       | 230       | 140       |
| Day 6                              | 220      | 170       | 290      | 280       | 290       | 130       | 300       | 200       | 120       |
| Day 7                              | 180      | 280       | 200      | 160       | 250       | 150       | 320       | 260       | 280       |
| Day 8                              | 160      | 280       | 150      | 220       | 260       | 250       | 260       | 230       | 170       |
| Sample air vol. $m^3$              | 761      | 947       | 938      | 1043      | 658       | 1161      | 839       | 928       | 945       |