



**Strengthening the Scientific Foundation of Water Quality Programs**

Project Number: **LIFE08 ENV /CY / 000460**

Deliverable Number: **D4.3**

Deliverable Name: **Emission Time Series**

| <b>Dissemination Level</b> |  |          |
|----------------------------|--|----------|
| <b>PU</b>                  | Public   | <b>X</b> |
| <b>PP</b>                  | Restricted to other program participants (including the Commission Services)     |          |
| <b>CO</b>                  | Confidential, only for members of the Consortium (including Commission Services) |          |

In deliverable “2.3 and 4.2 Emission rates and data/register “, it was described how the various point sources emission data were acquired. In order to import these data to the HSPF model, the data had to be on a daily basis instead of yearly.

This meant that the project team had to calculate the time series for each value. Time series is a sequence of data points, measured typically at successive times spaced at uniform time intervals. The point sources and the PRTR installations may produce emissions 365 days per year or only on working days.

With the installations in the project there were both types of installations. The Electricity Authority power plants and the airport work 365 per year and private companies work only on weekdays. The calculation of the working weekdays for 2010 produced a total of 240 days for the current year. This occurs with the deduction of bank holidays, weekends and two weeks holiday during August.

As a result a table was created showing the time series. The file can be located on CD → Task 2 → Point Sources.

A sample of these data is shown below.

|                   |    | Hg and Compounds (g)                      | Phosphates (g)                            | BODmg/l  | Total N mg/l |
|-------------------|----|---|---|----------|--------------|
|                   |    | Electricity Authority of Cyprus Dhekhelia | Electricity Authority of Cyprus Dhekhelia | Ambrosia | Ambrosia     |
| Yearly Quantities |    | 1200                                      | 5170000                                   | 100      | 500          |
| Working Days      |    | 365                                       | 365                                       | 240      | 240          |
| January           | 1  | 3.287671                                  | 14164.38                                  |          |              |
|                   | 2  | 3.287671                                  | 14164.38                                  |          |              |
|                   | 3  | 3.287671                                  | 14164.38                                  |          |              |
|                   | 4  | 3.287671                                  | 14164.38                                  | 0.416667 | 2.083333     |
|                   | 5  | 3.287671                                  | 14164.38                                  | 0.416667 | 2.083333     |
|                   | 6  | 3.287671                                  | 14164.38                                  |          |              |
|                   | 7  | 3.287671                                  | 14164.38                                  | 0.416667 | 2.083333     |
|                   | 8  | 3.287671                                  | 14164.38                                  | 0.416667 | 2.083333     |
|                   | 9  | 3.287671                                  | 14164.38                                  |          |              |
|                   | 10 | 3.287671                                  | 14164.38                                  |          |              |
|                   | 11 | 3.287671                                  | 14164.38                                  | 0.416667 | 2.083333     |
|                   | 12 | 3.287671                                  | 14164.38                                  | 0.416667 | 2.083333     |
|                   | 13 | 3.287671                                  | 14164.38                                  | 0.416667 | 2.083333     |
|                   | 14 | 3.287671                                  | 14164.38                                  | 0.416667 | 2.083333     |
|                   | 15 | 3.287671                                  | 14164.38                                  | 0.416667 | 2.083333     |