

COMPLIANCE OF PUBLIC DRINKING WATER VIS-À-VIS PESTICIDES

WATER 15

Directive 98/83/EC on the quality of water intended for human consumption and the Water Code (Code de l'eau) impose drinking water standards for water supplied by the public distribution system. The water distributed must therefore meet the requirements of wholesomeness and cleanliness, in order to guarantee public health. Pesticides are one of the chemical parameters to be controlled.

A high overall compliance rate of public drinking water

In 2014, 50 public water distributors were active in the Walloon territory and managed 686 water distribution areas (WDAs)¹, for a total of 1,483,492 individual connections. Each distributor is required to draw up and implement an annual water monitoring program.

In 2014, the overall compliance rate² (Tcor) of analyses was 98.9%. Pesticides accounted for 0.1% of non-compliances, far behind excessive acidity (30.2%), the presence of bacteria indicating faecal pollution (29.5%) and excess metals (23.0%).

In Wallonia, mandatory monitoring of 20 pesticides

Directive 98/83/EC sets standards for pesticides: the maximum concentration not to be exceeded is 0.1 µg/l for each individual pesticide³ and 0.5 µg/l for the total of all individual pesticides. However, only those pesticides that are likely to be present in a given WDA need to be monitored. In Wallonia, the Environment Minister has imposed⁴ a minimum list of 20 pesticides⁵ to be monitored, selected on the basis of the substances most commonly detected in raw groundwater⁶.

In 2014, 2,159 compliance checks were carried out, almost double the regulatory requirements. Only one sample was found to be non-compliant, which is equivalent to a Tcor of 99.97% for pesticides⁷. The average pesticide levels in 2014 per WDA⁸ also show that in 92.6% of these, no pesticides

were detected in significant quantities (≤ 50 ng/l). Although pesticides are a serious problem in groundwater⁹, they are nonetheless relatively well controlled in public drinking water¹⁰.

Since 2005, the Tcor for pesticides has been relatively stable and above 99.6%. In 92.5% of cases, the non-compliances relate to exceedances of the standard for 1 or more individual pesticide(s) without exceeding the total pesticide standard. The pesticides that most frequently exceed the 0.1 µg/l standard are desethylatrazine (71.7% of exceedances), atrazine (5.1%) and 2,6-dichlorobenzamide (BAM) (5.1%)¹¹. Atrazine, a herbicide applied in maize crops and banned since 2005¹², and its main metabolite, desethylatrazine, have not been detected since 2007 and 2011, respectively.

[1] Geographical area in which water intended for human consumption comes from one or more sources and within which quality is considered to be uniform. | [2] Number of analyses in compliance/number of compliance checks carried out during a year | [3] Certain organochlorine pesticides are subject to stricter standards (≤ 0.03 µg/l). | [4] Ministerial Circular DE/2004/1 | [5] Active substances and/or metabolites | [6] Except for organochlorine pesticides, for which monitoring is mandatory, given their high toxicity | [7] The Tcor takes account of the compliance vis-à-vis the standard for individual pesticides for the 20 pesticides in the Circular DE/2004/1 and the standard for total pesticides. | [8] → Map 37 | [9] → WATER 14 | [10] → WATER 17 | [11] The standard applied for BAM is 0.2 µg/l. | [12] Use authorised until 2006

Fig. WATER 15-1 Compliance of public drinking water vis-à-vis pesticides in Wallonia

