

Clean drinking water from surface water

Theme: Risk assessment procedures for pesticide registration

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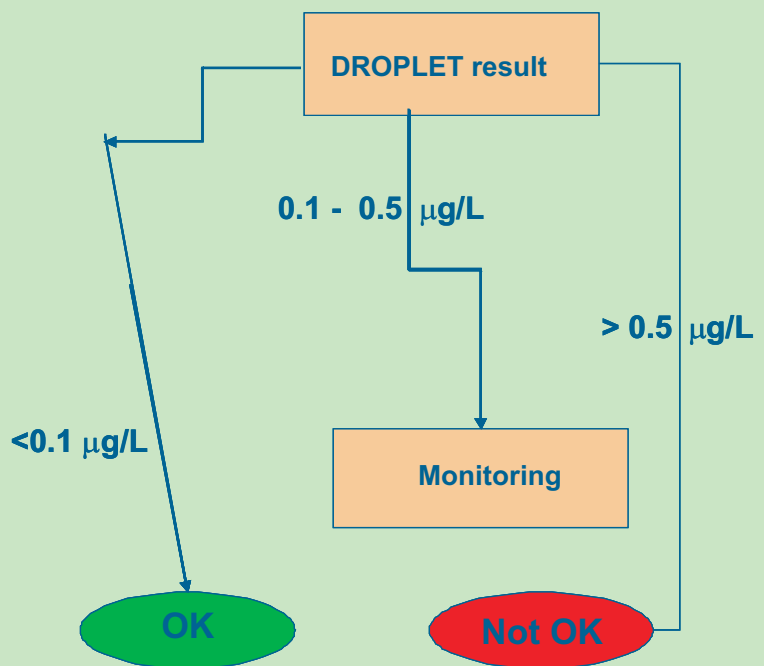
Problem

Since years the drinking water standard of 0.1 µg/L is regularly exceeded at surface water abstraction points. The Board for the Authorisation of Plant Protection Products and Biocides (Ctgb) experienced difficulties in evaluating the drinking water standard during their registration procedure, because it lacked a methodology to estimate possible concentrations of plant protection products at drinking water abstraction points.

Approach

First we developed a simple model to estimate the concentration at each of the nine Dutch abstraction points. Next we created a user friendly software tool, called DROPLET, which enables the Ctgb to calculate the expected concentrations in an easy way on the basis of:

- Application pattern of all crops on which the plant protection product is used, i.e. application method, use rate and frequency
- Physicochemical properties of the plant protection product



Tiered assessment scheme to evaluate risks for drinking water from surface water.



Results

Representatives of the three involved ministries agreed to implement the assessment scheme shown above into the Dutch registration procedure.

The approximate impact was estimated at:

- For 5% of the registered compounds the registration may not be continued
- For 10-15% post-registration monitoring may be required to demonstrate whether or not the compound will be found at one of the surface water abstraction points

Future use in risk assessment

The Board for the Authorisation of Plant Protection Products and Biocides (Ctgb) will use the user friendly software tool DROPLET in their registration procedure. With the aid of DROPLET they can evaluate the risks of Good Agricultural Practice of plant protection products for drinking water production from surface water.

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