

## Protecting Urban Water Quality: New Surface Water Regulations of 2012

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The California Department of Pesticide Regulation adopted new surface water regulations on June 19, 2012. The regulations restrict outdoor urban applications of pyrethroid insecticides made by professional applicators. Pyrethroids are highly active insecticides that control crawling, chewing, and flying insects as cockroaches, ants, beetles, caterpillars, termites, mosquitos, and wasps; in addition they are highly active on arachnids as spiders, ticks, and mites. Pyrethroids are highly hydrophobic and sorb to soils and sediment; half-lives of pyrethroids range from weeks to more than a year. Pyrethroids are being regulated in urban (non-agricultural) areas because of the following characteristics:

- 1) high use in urban areas;
- 2) prone to runoff in urban areas due to the engineering design of urban areas, especially during rainstorms;
- 3) more frequently detected in urban areas than in agricultural areas;
- 4) highly toxic to aquatic invertebrates and fish;
- 5) cause aquatic invertebrate toxicity when detected in surface waters.

The new surface water regulations will reduce the amount of pyrethroids applied by limiting applications to spot applications, crack and crevice applications, pin stream applications, and by limiting applications to impervious surfaces. Because more pyrethroids runoff during rainstorm events, applications are prohibited during rainfall (except under eaves), in standing water, to stormdrains and curbside gutters, and unprotected termiticide applications. More specific information can be found at the CDPR website (<http://cdpr.ca.gov/docs/legbills/calcode/040501.htm>). Although the new surface water regulations will reduce pyrethroid use, they will also prolong the life of these insecticides.

### References

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