Preventing pesticide contamination

For more information contact:

Thurston County Health Department
Environmental Health Division, (360) 867-2674
www.co.thurston.wa.us/health/ehadm
TDD Line for Hearing Impaired, (360) 867-2603

WSU Thurston County Extension, (360) 867-2167
http://pep.wsu.edu/hortsense

Thurston Conservation District, (360) 754-3588
http://www.thurstoncd.com

Pesticides are chemicals used to destroy weeds, insects, fungi and rodents. Because pesticides are toxic, they are hazardous to human health. If enough pesticides contaminate a water supply, they can cause illness or death. They reach drinking water by seeping down (leaching) through the soil and into the ground water below.

Pesticides are not the only way to control weeds, insects and plant diseases. Keeping plants healthy is the key to reducing pest problems. Healthy trees, shrubs, lawns, gardens and pastures resist attack.

To develop a safe and effective control method for a specific pest, you need to understand its life cycle. This principle is part of a pest control strategy called integrated pest management (IPM). To learn more about integrated pest management, please see the information section at the end of this fact sheet.

Use
If you choose to use pesticides on your property, follow these key rules to help limit any health or environmental hazards:

- **Carefully follow the label directions on the pesticide container.** Get advice from the retailer or manufacturer from whom you purchased the product. Each label reflects many years and millions of dollars of research on proper use. Take advantage of this information for effective pest control. Remember that applying more of a pesticide than the label recommends will not make the pesticide more effective, and it will increase the health and environmental hazards. *It is against the law to use a pesticide in a manner inconsistent with its labeling.*
Do not apply, store or mix pesticides within 100 feet of your well. Applying or accidentally spilling a pesticide near a well can quickly contaminate your drinking water, especially if you live on sandy or gravelly soil. The soils around your well casing can provide a direct path to ground water. Cracks in the casing may allow contaminants even quicker access to your water supply. Keeping pesticides far from your well lessens the contamination risk. Never store pesticides or other hazardous materials in your well house.

Other tips to prevent contamination include:

- Correctly identify the pest.
- Select a chemical control specific to the target pest.
- Purchase only as much pesticide concentrate as you can use in one year.
- Mix only as much of the pesticide as you can use during a single application.
- Do not apply the pesticide if rain is predicted.
- Apply the pesticide when it will be most effective.
- Spot treat only the specific plants with the problem.

Selection
Some pesticides are more likely to contaminate ground water than others. Factors affecting the contamination risk include the soils in the area and the chemical’s ability to travel through the soil and remain there without breaking down.

Below is a list of pesticides (and their active ingredient) known to leach in Thurston County soils. In addition to contaminating ground water, any pesticide could harm the environment, wildlife or your family’s health. Read the label to find the least toxic pesticide.

High leaching risk

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Example</th>
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<tbody>
<tr>
<td>Herbicides</td>
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<tr>
<td>2,4 D</td>
<td>Weed ‘n’ Feed</td>
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<tr>
<td>Acifluorfen</td>
<td>Kleenup</td>
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<tr>
<td>Dicamba</td>
<td>Weedmaster</td>
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<tr>
<td>Dichlobenil</td>
<td>Casoron</td>
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<tr>
<td>Diquat</td>
<td>Knockout</td>
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<tr>
<td>Trifluralin</td>
<td>Preen</td>
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<tr>
<td>Triclopyr</td>
<td>Crossbow</td>
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<tr>
<td>Insecticides</td>
<td>Diazinon</td>
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<tr>
<td>Fungicides</td>
<td>Thiram</td>
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<tr>
<td></td>
<td>Bulb Dust</td>
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For more information

A series of Common Sense Gardening guides (with information on integrated pest management) is available from the Thurston County Hazardous Waste Program. For free copies of the gardening guides or a slide presentation on common sense gardening, call (360) 867-2674.

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