



BUILDING AND CODES DEPARTMENT

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Home Lawn and Gardening Chemicals

According to the US Environmental Protection Agency, homeowners use 10 times more chemicals per acre, in the form of pesticides, herbicides and fertilizers, than farmers use on crops. American households use approx. 136 million pounds of pesticides every year. Pesticides are one of the main groups of pollutants that are presently polluting lakes, rivers and streams. These chemicals can be washed off the lawn or garden during rain events and the excess water carries these chemicals to the gutters and storm drains and deposits them in the nearest water body through the stormwater drainage system. Over application and misuse of pesticides, herbicides and fertilizers will result in heavily polluted stormwater runoff with even a small amount of rainfall.

Insects, weeds and other pests are things that we make every effort to eliminate from our lives. Pesticides and herbicides are typically used in order to eliminate problems, and they are readily available at the local garden centers in our community. From the perspective of protecting area water quality, proper pesticide and herbicide selection and use is of utmost importance.

Fertilizers are used to strengthen our lawns and plants. Because a lot of money is invested in our yards and gardens, keeping them healthy is very important. Once again, fertilizers are easily available at our local garden centers and should be selected wisely and used according to the package instructions to prevent stormwater runoff pollution.

Some precautions to prevent pollution:

- Always check the weather forecast before applying any chemicals. Never apply pesticides when rain is eminent.
- Avoid application to sidewalks, driveways or other hard surfaces.
- Leave a 50 foot buffer between waterways, drainages and storm drains and the areas where you are applying chemicals.
- Always read and follow label directions exactly. Look for special precautions and restrictions.

- Do not apply outdoors on a windy day. Take precautions to keep the residue from drifting.
- Always purchase pesticides in the smallest amount needed. NEVER apply more than is recommended on the label. More is never better when dealing with pesticides.
- Always dispose of unused pesticides, herbicides and fertilizers and empty containers as hazardous waste. Call Bi-County Solid Waste Management at (931)- 648-5751 for more information.

Integrated Pest Management

One way that we can protect our environment from the overuse of harmful chemicals is to practice Integrated Pest Management (IPM). IPM methods provide less-toxic or non-toxic home landscape and garden care. IPM focuses on identifying the conditions causing pest problems, changing the conditions to discourage recurrences, and selecting controls that minimize health and environmental risks. Call your UT Extension office at (931) 648-5725 or look on the web at <https://extension.tennessee.edu/montgomery> or more information about IPM for specific pests. Tell your landscape and nursery professionals that you are interested in less toxic, IPM methods.

- **Plant Selection:** Select Plants that are adapted to middle Tennessee, including natives and disease resistant varieties.
- **Plant Health:** Provide the proper amount of food, drainage, light, and water to reduce pest related problems.
- **Garden and Home Hygiene:** Remove pests' hiding places (leaf piles, animal wastes, rotting fruit, standing water) and sources of food.
- **Create barriers and try traps:** Try netting or plastic covers for plants. Sticky barriers prevent insect movement. Traps are helpful in roach management. Plug entry holes for ants.
- **Beneficial Insects:** Beneficial insects eat pests. Encourage beneficials with flowering plants (food source) and plant variety (adequate cover). Some beneficials can be purchased from retailers and mail order firms.
- **Physical Removal:** Pull weeds and remove pests by hand. Try a hard spray of water to knock insects from leaves.
- **Less Toxic Insecticides:** When insecticides are needed, there are many products that pose few health and environmental hazards. These include insecticidal soaps, insecticidal oils, microbially-based products like *Bacillus thuringiensis*, insect-eating nematodes, and botanical insecticides such as pyrethrins and neem, that are derived from plants. It is essential that you chose the right product for your pest