

How should I store pesticides, herbicides and fertilizers?

- Keep all pesticides, herbicides and fertilizers in their original containers.
- Store all pesticides, herbicides and fertilizers in a dry, cool, well ventilated area out of the sun. Prevent exposure to children and animals.
- **DO NOT** allow the pesticides, herbicides or fertilizers to freeze or get too hot.
- Store pesticides and herbicides separately from fertilizers, seed, and food.
- Check storage facility and containers for any leaks or spills.
- Date the containers. Use the oldest ones first.



How should I dispose of the containers?

- Make sure that you have used all the contents of the container.
- The Alabama Department of Environmental Management recommends using a triple-rinse procedure: Fill the container 1/4 full with water or oil (whichever is the appropriate diluent). Swirl for 30 seconds and pour the rinse solution into a sprayer. Repeat two times. Spray the rinse water over a target plant or area.
- **DO NOT** spray rinse solution on driveways, roads, and other areas where it can enter storm drains.
- Wrap the container in newspaper.
- If this process is used properly, then it is safe to dispose the container in your regular garbage.
- If you prefer to recycle the container, contact the Alabama Department of Agriculture and Industries for Information on the Pesticide Container Recycling Program.
- For unwanted, unused pesticides, herbicides, or fertilizers, dispose at the City/County Household Hazardous Waste Day. Contact Keep Mobile Beautiful (208-6029) for information.

Resources: Alabama Cooperative System and Alabama Department of Environmental Management

Pesticides, Herbicides And Fertilizers

Usage, Storage, & Disposal



Storm Water Management
Educational Series

What are pesticides, herbicides, and fertilizers?

- A **pesticide** is a substance that kills bugs and animals.
- An **herbicide** is a substance that kills weeds and plants.
- A **fertilizer** is a substance that is used to enrich soils with nutrients.

How does home use contribute to the problem?

- Pesticides and fertilizers in residential areas have the highest loading factor.
- Approximately **10%** of fertilizers used in residential areas end up in storm water.
- Home use accounts for roughly **20%** of pesticides.
- Improper landscaping and maintenance can significantly contribute to non-point source pollution.
- In coastal areas, the high ground water table adds to the problem.
- **50-80%** of all households use some form of fertilizer for lawn and garden care.
- Homeowners unknowingly rinse containers on their driveways, streets, inlets, etc. allowing polluted water to runoff into storm drains.

Safer Alternatives for Bug & Weed Warfare

The Alabama Cooperative System encourages an integrated pest-management approach consisting of the following tactics:

- Remove infected plant debris to decrease overwintering and pest resurgence.
- Identify the pest before reacting.
- Plant pest-resistant or well-adapted plant varieties, such as native plants.
- Rely on and conserve “good bugs,” such as lady beetles, lacewings, syrphid flies, parasitic mini-wasps, and spiders. They help decrease the need for insecticides that could end up in waterways.
- Attract “good bugs” with plants from the aster, mint, mustard, and parsley plant families.
- Use compost or mulch for fertilizer instead of manufactured fertilizers. They allow grass to grow slower and tougher, requiring much less care.
- Recycle grass clippings. They save money, reduce waste and are equivalent to almost three applications of fertilizer a year, without unhealthy chemicals or their effects.



Using Pesticides, Herbicides, and Fertilizers More Safely

- If pesticides/herbicides are needed, use the least toxic products first. Read product labels carefully and follow instructions on proper use, storage, and disposal.
- When using pesticides/herbicides, avoid frequent use/over-application, spills, use when weather conditions favor rain, or use uphill from or adjacent to drains, ditches, inlets, storm drain system or bodies of water.
- If you choose to use a chemical fertilizer, try finding a slow-release one with low phosphorus content.
- Have your soil tested every 2-3 years to determine the right amount and type of fertilizer that you need. Test kits are available from the Alabama Cooperative Extension System (www.aces.edu).
- Instead of using one large application, use several small applications. This way, the plants get their nutrients, but excess fertilizer is not applied.
- Spot apply herbicides to weeds to prevent excess build up and runoff.
- If possible, use a licensed lawn care professional or get trained yourself.

Why should we care?

- Pesticides, herbicides and fertilizers contain materials that are toxic to people, plants and fish. When it rains, the materials can runoff into storm drains, ditches and waterways.
- Fertilizers contain large amounts of phosphorous and nitrogen, which are key nutrients for aquatic plants. They may come in contact with storm water and runoff into lakes and streams. If this occurs, aquatic plants will be saturated with nutrients causing them to overgrow and smother other aquatic life. Over application in coastal areas can contaminate storm water and ground water.