SAFETY CONTACT INFORMATION
Sonja B. Thomas, Extension Specialist - Pesticide Safety Education Program

Table 1. Emergency Telephone Numbers

<table>
<thead>
<tr>
<th>Contact</th>
<th>Telephone number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Poison Control Centers (Human or Animal)</strong></td>
<td></td>
</tr>
<tr>
<td>National Poison Control Hotline (Spanish speakers available)</td>
<td>(800) 222-1222</td>
</tr>
<tr>
<td>Physician (See local phone directory; add number to list at right.)</td>
<td></td>
</tr>
<tr>
<td>Ambulance (See local phone directory; add number to list at right.)</td>
<td></td>
</tr>
<tr>
<td><strong>Fires, Spills, Leaks, Etc.</strong></td>
<td></td>
</tr>
<tr>
<td>Chemtrec (technical assistance 24 hrs. a day for fires, spills, and medical emergency)</td>
<td>(800) 424-9300</td>
</tr>
<tr>
<td>Alabama Department of Environmental Management</td>
<td>(334) 271-7700</td>
</tr>
<tr>
<td>Alabama Emergency Management Agency</td>
<td>(205) 280-2200</td>
</tr>
<tr>
<td>Sheriff (See local phone directory; add number to list at right.)</td>
<td></td>
</tr>
<tr>
<td>City Police (See local phone directory; add number to list at right.)</td>
<td></td>
</tr>
<tr>
<td>Alabama Highway Patrol Post</td>
<td>*HP (*47) for mobile phones</td>
</tr>
<tr>
<td>Fire Department (See local phone directory; add number to list at right.)</td>
<td></td>
</tr>
<tr>
<td><strong>Endangerment of Game or Fish</strong></td>
<td></td>
</tr>
<tr>
<td>Alabama Department of Conservation and Natural Resources (Nongame endangered species)</td>
<td>(334) 242-3469</td>
</tr>
<tr>
<td>U.S. Fish and Wildlife Service</td>
<td>(800) 344-WILD (9453)</td>
</tr>
</tbody>
</table>

Table 2. Telephone Numbers for Pesticide Information

<table>
<thead>
<tr>
<th>Contact</th>
<th>Telephone number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nonemergency</strong></td>
<td></td>
</tr>
<tr>
<td>Alabama Cooperative Extension System</td>
<td>(334) 844-8832 (Sonja Thomas)</td>
</tr>
<tr>
<td>Regional Poison Control Center, Children’s Hospital, Birmingham, AL, Non-emergencies and educational information</td>
<td>1 (800) 222-1200 Animal Medical Center Poison Control (Birmingham) 1 (800) 292-6678</td>
</tr>
<tr>
<td>Alabama Poison Center, Shelton State Community College, Tuscaloosa, AL, Non-emergencies and educational information</td>
<td>1 (800) 222-1222 Animal Medical Center Poison Control (Tuscaloosa) 1 (800) 462-0800</td>
</tr>
<tr>
<td>National Pesticide Information Center (NPIC), Oregon State University, General information on toxicology, environmental hazard, etc. (M–F, 8:00 a.m.–Noon Pacific Time)</td>
<td>(800) 858-7378</td>
</tr>
<tr>
<td>Pesticide Manufacturer</td>
<td>See pesticide label.</td>
</tr>
</tbody>
</table>

continued
Table 2. Telephone Numbers for Pesticide Information (cont.)

<table>
<thead>
<tr>
<th>Contact</th>
<th>Telephone number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nonemergency (cont.)</strong></td>
<td></td>
</tr>
<tr>
<td>CropLife America, General information about the pesticide industry</td>
<td>(202) 296-1585</td>
</tr>
<tr>
<td>(M–F, 8:30 a.m.—5:30 p.m. EST)</td>
<td></td>
</tr>
<tr>
<td>Chemtrec Referral Center, Refers caller to the company responsible for</td>
<td>(800) 262 8200</td>
</tr>
<tr>
<td>the pesticide (M–F, 9:00 a.m.—6:00 p.m. EST)</td>
<td></td>
</tr>
<tr>
<td>National Response Center, Refers caller to proper government agency</td>
<td>(800) 424-8802 (Voice/TTY)</td>
</tr>
<tr>
<td>for hazardous materials</td>
<td></td>
</tr>
<tr>
<td><strong>Pesticide Disposal</strong></td>
<td></td>
</tr>
<tr>
<td>Alabama Department of Agriculture &amp; Industries</td>
<td>(334) 240-7242</td>
</tr>
<tr>
<td>Alabama Department of Environmental Management</td>
<td>(334) 271-7700</td>
</tr>
<tr>
<td>EPA Hazardous Waste Hotline (Superfund)</td>
<td>(800) 424-9346</td>
</tr>
<tr>
<td><strong>Hazard Communication–Workplace Assistance</strong></td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>(800) 321-OSHA (6742)</td>
</tr>
<tr>
<td>Regional IV OSHA Office Alliance in Atlanta</td>
<td>(678) 237-0400</td>
</tr>
<tr>
<td><strong>Drinking Water</strong></td>
<td></td>
</tr>
<tr>
<td>EPA Safe Drinking Water Hotline</td>
<td>(800) 426-4791</td>
</tr>
<tr>
<td>Interprets residue data and gives EPA drinking water regulations</td>
<td></td>
</tr>
<tr>
<td>Local Health Department or Sanitarian</td>
<td></td>
</tr>
<tr>
<td>County (See local phone directory; add number to list at right.)</td>
<td></td>
</tr>
<tr>
<td>City (See local phone directory; add number to list at right.)</td>
<td></td>
</tr>
<tr>
<td><strong>Enforcement of Pesticide Laws</strong></td>
<td></td>
</tr>
<tr>
<td>Alabama Department of Agriculture &amp; Industries, Pesticide Management</td>
<td>(334) 240-7242</td>
</tr>
<tr>
<td>Division</td>
<td></td>
</tr>
<tr>
<td>EPA Region IV Pesticides Section</td>
<td>(404) 562-9038</td>
</tr>
<tr>
<td>Applicator certification to use restricted-use pesticides</td>
<td>(334) 240-7243</td>
</tr>
<tr>
<td>Structural pest control certification and testing</td>
<td>(334) 240-7243</td>
</tr>
<tr>
<td>Safety/Training/Information</td>
<td>(334) 844-8832</td>
</tr>
</tbody>
</table>

Table 3. Websites with Pesticide Information

<table>
<thead>
<tr>
<th>Contact</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Alabama Cooperative Extension System Pesticide Information Home Page</td>
<td><a href="http://www.aces.edu/anr/pesticidemgt/">www.aces.edu/anr/pesticidemgt/</a></td>
</tr>
<tr>
<td>The Alabama Cooperative Extension System Pesticide Information Section</td>
<td><a href="http://www.agi.alabama.gov/divisions/pesticide-management">www.agi.alabama.gov/divisions/pesticide-management</a></td>
</tr>
<tr>
<td>Pesticide Action Network North America</td>
<td><a href="http://www.panna.org">www.panna.org</a></td>
</tr>
<tr>
<td>American Crop Protection Association</td>
<td><a href="http://www.croplifeamerica.org">www.croplifeamerica.org</a></td>
</tr>
<tr>
<td>Extension Toxicology Network</td>
<td>extoxnet.orst.edu</td>
</tr>
<tr>
<td>National Pesticide Information Center</td>
<td>npic.orst.edu</td>
</tr>
<tr>
<td>National IPM Network</td>
<td><a href="http://www.ipmcenters.org">www.ipmcenters.org</a></td>
</tr>
<tr>
<td>USDA National Organic Program</td>
<td><a href="http://www.ams.usda.gov/nop">www.ams.usda.gov/nop</a></td>
</tr>
<tr>
<td>Pesticide labels/MSDS from a range of companies.</td>
<td></td>
</tr>
<tr>
<td>Daily updates</td>
<td></td>
</tr>
<tr>
<td>EPA Pesticide Product Information</td>
<td>ppis.ceris.purdue.edu</td>
</tr>
<tr>
<td>EPA List of Restricted-Use Pesticides</td>
<td><a href="https://www.epa.gov/pesticide-worker-safety/">https://www.epa.gov/pesticide-worker-safety/</a></td>
</tr>
<tr>
<td>restricted-use-products-rup-report</td>
<td></td>
</tr>
<tr>
<td>EPA Pesticide Safety Programs/Worker Protection Standard</td>
<td><a href="http://www.epa.gov/pesticide-worker-safety">www.epa.gov/pesticide-worker-safety</a></td>
</tr>
<tr>
<td>EPA Office of Pesticide Programs</td>
<td><a href="http://www.epa.gov/pesticides/">www.epa.gov/pesticides/</a></td>
</tr>
</tbody>
</table>
WORKER PROTECTION STANDARD

The U.S. EPA Worker Protection Standard (WPS) protects employees on farms, forests, nurseries, and greenhouses from occupational exposure to agricultural pesticides. The regulation covers two types of employees, handlers and workers. In 2015, the EPA revised the Worker Protection Standards, adding new restrictions and requirements for workers and handlers.

1. Training is required yearly for handlers and workers. (There is no grandfather clause.)
2. Applicators must be 18 years or older.
3. Family farms are exempt from this rule.
4. Private and commercial applicators can administer worker and handler training.
5. Visit EPA.gov/pesticides/safety for the detailed changes and training material for workers and handlers.

Compliance assistance has been in effect through 2017. After 2017, ADAI will determine if compliance assistance will continue.

- **Pesticide handlers**—those who mix, load, or apply agricultural pesticides; clean or repair pesticide application equipment; or assist with the application of pesticides in any way.

- **Agricultural workers**—those who perform tasks related to the cultivation and harvesting of plants on farms or in greenhouses, nurseries, or forests. Workers include anyone employed for any type of compensation (including self-employed) doing tasks (such as carrying nursery stock, repotting plants, or watering) related to the production of agricultural plants on an agricultural establishment. Workers do not include such employees as office employees, truck drivers, mechanics, and any other worker not engaged in worker or handler activities.

In addition there are some WPS requirements that apply to all persons and some that apply to anyone who handles pesticide application equipment or cleans or launderers pesticide-contaminated personal protective equipment.

The WPS requires agricultural employers to provide four basic protections for their employees.

1. Employees must receive pesticide safety training annually.
2. Information concerning pesticides applied in the work area must be posted in a central location.
3. Employees must be excluded from treated areas or provided proper training and safety equipment if they may be exposed to pesticides.
4. Employers must supply decontamination sites (soap, water, etc.) for workers. Emergency assistance must be available for any employee injured by pesticides.

Refer to the EPA Worker Protection Standard for Agricultural Pesticides—How to Comply for details. (This publication is available at the following website: www.epa.gov/pesticides/safety).

Additional information is available from the Alabama Department of Agriculture & Industries (334-240-7243) or Auburn University Cooperative Extension System (334-844-8832).

SAFE USE, HANDLING, AND STORAGE OF PESTICIDES

Most pesticides are synthesized chemicals which have proven effective, useful, and safe if used according to label instructions. Many pesticides, however, are poisonous and may be a hazard to humans, animals, plants, and the environment if they are not handled and used properly. Certain procedures are required when dealing with pesticides. They are:

- Identify the pest.
- Determine the correct pesticide.
- Dispose the pesticide properly.
- Store the pesticide safely according to the label.
- Dispose of the empty containers safely.

The following suggestions for using, handling, and storing pesticides will minimize the likelihood of injury to man, animals, plants, and the environment.

**General Precautions**

1. Always read all precautionary labeling directions before using pesticides and follow them exactly. Notice warnings and cautions before opening the containers. Read them each time, no matter how often you use a pesticide or how familiar you are with the directions. Apply material only in the amounts and at the times specified.
2. Keep pesticides out of the reach of children, pets, irresponsible persons, and livestock. They should be stored outside the house, away from food and feed, and under lock and key.
3. Store pesticides in their original containers with a legible label intact. Keep the container tightly closed.
4. Never smoke or eat while applying pesticides.
5. Avoid inhaling sprays or dusts. When directed on the label, wear protective clothing and an approved mask.
6. Should pesticides be accidentally spilled on the skin or clothing, remove contaminated clothing immediately and thoroughly wash contaminated skin for at least 15 minutes.
7. Bathe and change to clean clothing after spraying or dusting. If it is not possible to bathe, wash your hands and face thoroughly and change clothes. Also, wear clean clothing each day.
8. Cover all food and water containers when treating around livestock or pet areas. Be careful not to contaminate fish ponds, streams, or lakes.
10. Dispose of all empty containers after rendering them useless, so that they will not become a hazard to humans, animals, valuable plants, or wildlife. Disposal regulations need to be determined before carrying a load of containers to a landfill.
11. Observe directions and follow recommendations in order to keep the residue on edible portions of plants within the limits permitted by law.
12. If symptoms of illness occur during or shortly after
dusting or spraying, call a physician or get the patient to a
hospital immediately. Also, take a label from the pesticide
container with you.

13. Do not use your mouth to siphon liquids from containers
or to blow out clogged lines, nozzles, etc.

14. Do not spray with leaking hoses or connections.

15. Do not work in the drift of a spray or dust.

16. Confine a pesticide to the property being treated. Avoid
drift to adjacent properties by stopping treatment if weather
conditions become unfavorable.

17. Notify all nearby beekeepers before applying any
insecticide.

18. If laborers are working in crops with heavy foliage, such
as cotton, tomatoes, peaches, or tobacco, that has been treated
with highly toxic compounds, be sure the restricted entry
interval (REI) between treatment and entrance into the treated
area is observed. REIs are listed on the pesticide label. Workers
in such fields should follow the same precautions as given
for the applicators in regard to changing clothes and wearing
protective clothing, eating or smoking, and bathing. If workers
become ill while working under these conditions, take them to
the emergency room immediately. Be sure to take the pesticide
label.

Precautions for Using Highly Toxic Chemicals

Use extreme caution when handling concentrates of any
restricted use pesticides or other highly toxic pesticides. When
using these materials, observe the following rules:

1. Wear liquid-proof gloves. The pesticide label will tell you
what gloves to use. Remember, however, that some fumigants
are readily absorbed by neoprene.

2. When mixing and applying these materials, wear a
cartridge respirator approved for the specific pesticide and
also wear protective clothing such as a long-sleeved shirt and a
washable rain hat.

Specific types of cartridges and canisters protect against
specific chemical gases and vapors. Be sure you choose one
that is made for the pesticide you are using. Use only those
that are approved by the National Institute for Occupational
Safety and Health (NIOSH) or by the Mining Administration
(MESA). This information can be found on the label.

The respirator must fit your face well. Read the
manufacturer’s instructions on the use and care of any
respirator and its parts before you use it.

When applying pesticides, if you have trouble breathing
or if you smell the pesticides, change the respirator’s filters,
cartridges, and canisters. Remove and discard the filters,
cartridges, and canisters after use. Then wash the face piece
with detergent and water, rinse it, and dry it with a clean cloth.
Store it in a clean, dry place away from pesticides.

3. Start each day with clean clothing. Change garments
when they become wet with spray. Bathe before returning to
work. Take a thorough bath as soon as the work day is finished.

4. Have soap, clean water, and clean clothes on hand in the
field in case of an accidental contamination.

5. Aircraft pilots should not assist in mixing or loading the
chemicals into the plane.

6. Avoid overhead or into-the-wind application.

Precautions For Protecting Water Quality

Protecting the quality of our water is one of the
Environmental Protection Agency’s objectives for an overall
cleaner environment. Pesticides have been identified as a
potential source of water contamination. The EPA has begun a
review of pesticide registrations to determine which pesticides
pose undue risks to water supplies.

Users should be aware of the surface-loss and leaching
potentials of pesticides and of practices that could contribute
to ground water contamination. The following suggestions can
help prevent water contamination.

1. Triple rinse your empty pesticide container and pour the
rinse water into a spray tank. Then, apply it to the area or site
being treated.

2. Prevent any back-siphoning of the chemical when filling
a spray tank by leaving an air-gap between the high water level
and the end of the water hose or by adding the pesticide after
the desired water level has been reached in the spray tank.

3. Catch the rinse water from the spray tank instead of
emptying it onto the ground in one area. Then, spray it over the
area being treated.

4. Protect the well head from surface water entering the top
of the well. Use a concrete apron around the well head with an
appropriate cover.

5. Determine if the pesticide you are using may create
a problem with leaching. Your county Extension agent can
provide you with this information.

6. Calibrate your application equipment to ensure that the
correct rate is being applied.

7. Do not fill spray tanks from streams, drinking water
tanks, or farm ponds. Pesticide label directions may specify a
distance from the well head to fill a spray tank or for handling
rinse water.

Endangered Species

The Endangered Species Protection Act of 1973 requires all
federal agencies to help protect the environment—specifically,
the habitat and species of animals and plants that are almost
extinct because of human encroachment or changes in the
environment.

A specific pesticide label program was initiated by EPA
to identify sites and chemicals that could endanger certain
species and their habitat. The final federal regulations have
been delayed, but interim county maps are available on the
world-wide web (www.acesag.auburn.edu/department/ent/).
These maps show areas where endangered species have been
identified.

Chronic Toxicity

Toxic doses of chemicals can cause either chronic or acute
health effects. An acute effect usually follows a large dose.
However, if the chemical is highly toxic, a very small amount
can cause symptoms of poisoning. Labels of highly and
moderately toxic pesticides list poisoning symptoms.

Generally, chronic toxicity occurs periodically after long-
term exposure. Symptoms are difficult to describe because specific data is often not available. Most long-term effect studies have failed to identify specific pesticides and their role in chronic toxic symptoms.

Pesticide users who experience unusual sinus problems, watery eyes, or some type of skin condition that does not clear up should seek medical attention.

**Disposal**

**Excess Pesticides**

The EPA recommends ways to dispose of excess pesticides. Consult local authorities for procedures in your area. If you have excess organic pesticides, use them as directed on the label or store the pesticides until you can use them. If you have any questions concerning the disposal of excess pesticides, contact:

Kristen Lashley  
Biologist II and Special Program Manager  
Alabama Department of Agriculture and Industries  
Pesticide Management Section  
1445 Federal Drive  
Montgomery, AL 36107 Phone: 334-240-7224 (office)  
kristen.lashley@agi.alabama.gov

Mr. Tony Cofer  
Program Director–Pesticide Management  
P.O. Box 3336  
Montgomery, AL 36109-0336 Phone: 334-240-7242

**Containers**

To prepare a container for disposal:

1. Empty the container into the spray tank. Then, let it drain for an additional 30 seconds.
2. Fill it one-fourth full of water.
3. Replace the lid and gently shake the container. Turn the container upside-down to rinse all of the side surfaces.
4. Carefully drain the rinse water from the container into the tank. Let the container drain for 30 seconds.
5. Repeat steps 2 through 4 at least two or more times for a total of at least three rinses. Remember to empty all rinse solutions into the spray tank.

The EPA recommendations divide containers into three groups and tell you how to dispose of each kind.

**Group I Containers.** These are containers which will burn. They hold organic or metallic organic pesticides but not an organic mercury, lead, cadmium, or arsenic compound. Dispose of them in one of the following ways:

- Burn them in an approved pesticide incinerator.
- Bury them in a specially designated landfill.
- Burn small numbers of them as directed by state and local regulations.

Air pollution boards or other designated regulations control certain burning conditions.

**Group II Containers.** These are containers which will not burn. They hold organic or metallic organic pesticides but not organic mercury, lead, cadmium, or arsenic compounds. First, rinse the containers three times. Then, dispose of them in one of the following ways:

- Send or take the rinsed containers to a place that can recycle them as scrap metal or dispose of them for you.
- Many large containers in good shape can be reused by your supplier. Return them to the pesticide manufacturer, formulator, or drum reconditioner.
- All rinsed containers may be crushed and buried in a sanitary landfill. Follow state and local standards.
- Bury rinsed containers in a field or property that you own, if you have obtained a certificate of exception from your county or municipal health department. To get a certificate of exception, file an application and plan for disposal with your county health officer. The officer must investigate the plan and site before approval and certification.

If the containers have not been triple rinsed, they can be buried only in a specially designated landfill.

**Group III Containers.** These include containers which hold organic mercury, lead, cadmium, arsenic, or inorganic pesticides. Dispose of them in one of the following ways:

- Rinse them three times and dispose of them in a sanitary landfill.
- If they are not rinsed, bury them only in a specially designated landfill.
FOR MORE INFORMATION on pesticides, pesticide safety, or submitting samples for analysis, see the following publications in the IPM series:
IPM 1294, “Submitting Samples.” Procedures for submitting samples for diagnosis, analysis, and identification
IPM 1295, “General Pesticide Information.” Federal and state restricted use pesticide lists; pesticides and water quality
IPM 1317, “Appendix.” Pesticide guidelines for agronomic crops, including preharvest intervals; rain-free requirements; grazing restrictions; crop rotation guidelines; and the names, classifications, and toxicities of pesticides.

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