any of us that have been in the turf management industry for a number of years assume that we know how to safely handle pesticides. However, after putting this article together, I was surprised how many of the "Do Nots" that I actually was guilty of doing. So, I hope that this article will make you more aware of safely handling pesticides. You, as a supervisor or a pesticide applicator, should have one goal in mind when dealing with pesticides: The utmost concern for the safety of your employees and the environment.

Common sense

• Do not mix pesticides near a water source (well, stream, river, lake, etc.).
• Do not put the filler hose into the pesticide mixture. This could allow for the pesticide to siphon out of the tank into the hose.
• Do not leave a pesticide tank unattended when filling or leave any container (empty or not), unattended at the application site.
• Do not eat, drink, or smoke when handling pesticides.
• Do not use your hands to stir the pesticides. Also, keep your head high enough above the tank opening to prevent pesticides from splashing in your face.
• Do not store pesticides in old bottles or food containers where they could be mistaken for drink or food for people or animals.

Storage

Here are some suggestions for properly storing pesticides:

• If possible, the storage facility should be separate from the main facility. In many cases, if the pesticide storage facility is part of the main facility and catches fire, the fire department will let the whole structure burn because of potential contamination problems to any drains leading to water sources or actual water sources like streams, lakes, rivers, etc.).
• The storage facility should contain an impervious floor such as concrete (easier to contain spills and leaks and is easier to keep clean). It should be dry, well lighted, and ventilated, maintained at a temperature range between 50-75 degrees, equipped with fire protection, marked with signs (DANGER, PESTICIDE STORAGE) and secured by a fence and/or locked doors. Pesticide containers should be stored on metal shelves in rows with labels plainly visible. If possible, store pesticides according to use (fungicides, insecticides, herbicides, etc.) Regularly check all containers for corrosion or leaks.
• Maintain a complete, up-to-date inventory. Give this inventory list to your fire department along with home and/or cell phone numbers of responsible persons at your facility.
• Never store spill and/or first aid kits, MSDS, and personal protective clothing in the actual storage facility.

Protective clothing

Pesticides can enter the body through the skin, the mouth, the nose, and the eyes. Remember to read the label to find out what personal protective clothing should be worn.

• Personal protective clothing to wear when mixing, loading, or applying the product
• User safety recommendations
• First aid if swallowed, inhaled, eye and/or skin contact.

Mixing

The greatest chance for a pesticide poisoning exposure can come from the mixing operation.

• Remember that small quantities of pesticide spilled over a period of time in one area may accumulate and cause a potential contamination problem.
• In many states it is mandatory that you provide an available water source at the mixing site for emergency decontamination. Soap, paper towels, and an additional change of clothing must be available to the applicator as well. An eye wash station is also recommended.
• In close proximity to your mixing or storage area, have a pesticide first aid kit readily available. Check the product label for instructions; in the event a pesticide is swallowed or serious dermal or inhalation exposure occurs, call the nearest poison control center. This number should be posted at various, prominent locations throughout your facility.
• A spill kit should also be located near the mixing or storage area. This kit should include absorptive material such as activated charcoal, vermiculite, or cat litter, drums/drum with a lid for storing the contaminated material and personal protective clothing.
• Rinse pesticide residues from application equipment before storage and/or repair.
• Clean pesticide containers as soon as they are emptied. Triple-rinse and slit them. Spray the rinseate water to varying turf areas versus repeatedly spraying the same area.
• Have several empty drums available in case a sprayer tank needs to be drained.
• Some states require rinseate pads. It is best to check with the appropriate state officials to see what these requirements are.

Training
Time should be taken with your staff to review proper pesticide handling methods and also planning ahead to handle pesticide spills. Training in these areas will provide invaluable, especially when an emergency arises.
Many states now require all certified pesticide applicators to have a written plan outlining proper pesticide handling and spill response procedures for their individual operation. This plan could include: methods and procedures for properly handling pesticides, pesticide containers and application equipment; methods and procedures for inspection and repair of pesticide application, storage and application equipment; methods and procedures for rinsing/washing pesticide containers and application, storage and transportation equipment; methods and procedures to be used to contain, recover, handle and dispose of pesticide spills either inside or outside of the pesticide storage facility.

Emphasis must be put on regularly training employees and providing them with proper equipment to safely apply pesticides. OHSA regulations stipulate that you must document your training efforts.