

# South Dakota Department of Agriculture Pesticide Applicator Newsletter

Spring 2006 Issue 34



## 2006 Pesticide Container Collections

The South Dakota Department of Agriculture and the Cooperative Extension Service have set the following dates and locations for the 2006 pesticide container collections. Plastic containers up to 55 gallon drums, plastic tanks, and up to 55 gallon steel drums will all be accepted. **All containers must be triple rinsed or pressure rinsed.**

### 2006 PESTICIDE CONTAINER COLLECTIONS

City	Date	Location	Time
Watertown	July 5	Codington Co. Extension	9:00-3:00
Redfield	July 6	Spink Co. Fairgrounds	9:00-12:00
Clark	July 6	Clark Fire Hall	1:00-4:00
Rapid City	July 7	Central States Fairgrounds	9:00-3:00
Miller	July 10	Nelson's Seed Service	9:00-3:00
Huron	July 11	State Fairgrounds	9:00-3:00
Martin	July 12	Bennett Co. Fairgrounds	8:00-11:00
Philip	July 12	Midwest Coop	1:00-4:00
Belle Fourche	July 13	Dakota Mill & Grain	9:00-2:00
Murdo	July 14	SD DOT Yard	9:00-12:00
Bison	July 17	Perkins Co. Fairgrounds	9:00-12:00
Lemmon	July 17	Southwest Grain	2:00-5:00
McLaughlin	July 18	SD Wheatgrowers	9:00-11:00
Timberlake	July 18	Airport	1:00-4:00
Chamberlain	July 19	SD Wheatgrowers	9:00-3:00
Sisseton	July 20	Country Partners	9:00-2:00
Aberdeen	July 21	Brown Co. Extension	9:00-2:00
Herreid	July 24	North Central Farmers Elevator	9:00-12:00
Selby	July 24	Walworth Co. Hwy Dept	2:00-4:00
Mitchell	July 25	Davison Co. Extension	9:00-2:00
Pierre	July 26	Department of Ag bait station	9:00-2:00
Corsica	July 27	Corsica Coop	9:00-12:00
Wagner	July 27	Valley Pump and Casino	1:00-4:00
Tyndall	July 31	Bon Homme Co. 4H Grounds	9:00-12:00
Olivet	July 31	Hutchinson Co. Courthouse	1:00-4:00
Winner	Aug 1	Tripp Co. Recycling Center	9:00-2:00
Howard	Aug 2	Cenex Agronomy Center	9:00-12:00
Madison	Aug 2	Lake Co. 4H Grounds	1:00-4:00
Brookings	Aug 3	Brookings Regional Landfill	9:00-2:00
Flandreau	Aug 8	Moody Co. Highway Dept	9:00-2:00
Renner	Aug 9	Renner Fire Hall	9:00-2:00

**All times are local.** For more information contact your county extension office or the South Dakota Department of Agriculture at 1-800-228-5254 or visit [www.state.sd.us/doa/das](http://www.state.sd.us/doa/das) for a map of specific locations. The following locations will accept containers during business hours. Contact Phyllis Packard, Missouri Valley Recycling, Vermillion, 605/677-7076, SDDA-Pierre, 605/773-4432 and Bauman Agency, Huron 605/353-1112.

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ENFORCEMENT CASE UPDATE

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Phone 605/773-4432  
Fax 605/773-3481  
[www.state.sd.us/doa/das](http://www.state.sd.us/doa/das)

## Factors which Effect Drift

Many factors affect the drift of pesticides. It is vital that applicators have good knowledge of these factors in order to minimize the potential for drift. Some of these factors can be controlled by the applicator, while others cannot. Those factors not under control of the applicator will require them to make an on-site judgment of the suitability of conditions for making the application.

### FACTORS UNDER APPLICATOR CONTROL

- 1. Droplet Size:** Droplet size is a primary factor in minimizing the potential for drift because it interacts with many of the other factors which affect drift. Smaller droplets lead to a greater potential for drift.
- 2. Nozzle Type and Size:** The discharge of a nozzle is made up of several sizes of droplets which are measured in microns. It is vital that the applicator choose the correct type of nozzle for the application to be performed and then operate the nozzle at the manufacturers recommended pressure and release height.
- 3. Operation Pressure:** Nozzles will have an acceptable operating pressure range printed on the labeling. It is usually best to select the lowest operating pressure range for that particular nozzle while still providing adequate coverage. Remember, for any given nozzle size, the higher the pressure, the greater the number of smaller droplets.
- 4. Release Height:** Some applicators may attempt to increase swath width and discharge rate by raising the height of the nozzle while increasing pressure. This will increase potential for drift. Follow the manufacturers recommended release height and pressure for that particular nozzle.
- 5. Nozzle Orientation:** This is the angle at which the nozzle is held in relation to the targeted surface. The primary reason for canting the nozzle is that it exposes a greater surface area of the target and permits slight lowering of the nozzle.

- 6. Ground Speed:** Excessive speed can result in bouncing of the booms, which results in poor coverage and increased drift potential.

### FACTORS NOT UNDER APPLICATOR CONTROL.

- 1. Wind Speed:** Wind is the lateral movement of air over the area to be treated. High wind speeds create greater drift potential.
- 2. Wind Direction:** The applicator must always be aware of wind and the direction in which it is moving to be able to determine if drift will be deposited on sensitive non-target areas and to prevent exposure to the applicator.
- 3. Air Inversions:** Normal atmospheric conditions result in air being warmed at the ground surface and rising to higher altitudes. This normal vertical mixing of air permits a high percentage of the fine droplets to be lifted to high altitudes and dispersed over a large area, resulting in off-target injury.
- 4. Temperature:** The effect of temperature decreases droplet size and increases drift potential due to the effects of evaporation. The higher the temperature, the more energy that is generated which increases the potential for volatilization.
- 5. Humidity:** Humidity affects liquid spray applications by slowing down the evaporation of spray droplets while airborne and thus, increasing the potential for drift.

The conscientious applicator needs to consider all of these factors before making the decision to spray. This further emphasizes the point that the applicator is the most important component in the pesticide application process.

## Special Label Requested for Alternative Prairie Dog Bait.

The South Dakota Department of Agriculture (SDDA) recently received requests to issue a special label authorizing the use of Rozol Pocket Gopher Bait to control prairie dogs. SDDA initially reviewed the Rozol product after a request was received last year, and denied the special label request (which was affirmed this year) for the following reasons.

The request did not meet the conditions specified in the federal regulations. The state does not have the authority to issue a special label in this case, because other registered products are available.

From information provided, SDDA determined that Rozol bait provided less than acceptable control in baiting studies (Lee, 2002). Other registered prairie dog baits, when used as directed, have shown 90% or better control.

While all poison baits present hazards, SDDA determined that Rozol bait presented a significant secondary poisoning hazard to non-target animals that other registered products did not. Rozol bait is an anti-coagulant, which means it is dispersed through the blood stream and causes internal or external hemorrhaging. This fact poses a significant threat to any animal that may eat the poisoned carcass of a Rozol baited prairie dog, such as eagles, hawks, coyotes swift fox, and even the endangered Black Footed Ferret.

It has been presented that Rozol treatments are a one-step baiting procedure, which is not the case. The Rozol label states that a constant supply of bait must be maintained as long as there is activity at the site. A Rozol treatment site, according to the label, must be monitored and prairie dogs that have died above ground must be collected and buried immediately at least 18 inches below ground.

SDDA also reviewed the cost and use rate of Rozol baiting versus zinc phosphide baits. The Rozol label requires that ¼ cup (54 grams) bait be applied to all active holes, while 2% zinc phosphide baits call for 1 teaspoon (4 grams). SDDA determined that the Rozol treatments are at least 50% higher in cost, primarily because it requires a much larger amount of bait than the zinc phosphide applications. SDDA has suggested that those requesting the special label and the manufacturer of Rozol bait pursue federal registration through EPA to get the bait labeled for use on prairie dogs. There are currently 5 baits and 12 fumigants registered in S.D. to control prairie dogs.

Questions regarding Special Local Needs labeling and registered prairie dog baits may be answered by calling the South Dakota Department of Agriculture at 1-800-228-5254.

## Non-conventional Fertilizers and Soil Amendment Products

Rising energy costs historically have led to an increase in fertilizer costs. Unfortunately, commodity prices have remained relatively steady over the past several years. These factors result in situations where producers are faced with reduced profitability due to increased cost of production which forces farmers to evaluate reducing production costs to maintain profitability. During these types of economic situations, it is not uncommon for non-conventional fertilizers and soil amendments to become more prominent in the marketplace.

### ***What are non-conventional fertilizers and soil amendments?***

Non-conventional fertilizers and soil amendments are those that are not normally found in the marketplace or are not commonly used by the average modern crop producers. However, these products may include ingredients that are commonly used in crop production. Often what distinguishes non-conventional products from conventional products are the claims made regarding the performance of the product.

A general rule of thumb is, "If it sounds too good to be true...it probably is." When considering whether to purchase a fertilizer or soil amendment product, consider the following:

### ***Is the company licensed to distribute fertilizer in South Dakota?***

The Department issues a license to distribute fertilizer in the state. State law prohibits the sale of any fertilizer product that may cause harm or where the company makes false or misleading claims. All product claims must be substantiated with current, accepted science or with results from actual field trials conducted in a manner consistent with current acceptable scientific methods. For a list of companies licensed in South Dakota go to [www.state.sd.us/doa/das/fdft/fdft\\_searchlist.asp](http://www.state.sd.us/doa/das/fdft/fdft_searchlist.asp)

### ***Is the product registered for distribution in South Dakota?***

The Department registers soil amendment products. Laws similar to those pertaining to fertilizer prohibit the sale of products that may cause harm or that make claims inconsistent with current accepted science or do not have results from actual field trials conducted in a manner consistent with current acceptable scientific methods.

Today's marketplace stretches far beyond the local dealer. Producers are presented with products over the telephone, mailings, and internet which allows distribution of products from anywhere in the world. The consumer's first line of defense is to determine if a product is legal for sale in South Dakota. The only way to really be sure is to contact the Department directly. Unscrupulous vendors may claim to have a product registered or hold a license when in fact they do not. Still others may have products registered and/or hold a license to distribute but make unapproved claims of the products unbeknownst to the Department which may be false or misleading.

***Are the claims made of the product reasonable?***

What is reasonable for one person may not be to another. However, it is important to consider what the product is made of. What is the recommended use rate? How does it help the plant or soil? Will the product's action actually lead to an increase in profit? Beware of verbal, unsubstantiated claims. If a product has merit, the marketplace will ensure its success.

***Does the company have any scientific data to prove claims of the product?***

In most cases, products will have some type of supporting information. Beware of testimonials from individuals who have used it. These can be best case scenarios and could vary by geographic location.

The Department administers a fertilizer and soil amendment program in the state to address many issues including consumer protection. The agricultural community can actively participate in these programs by contacting the Department if any questionable products or companies offer products for sale that seem out of the ordinary or make extraordinary claims. For more information on fertilizers companies licensed and soil amendments registered in South Dakota, visit [www.state.sd.us/doa/das/frs/tblFertilizerlist.asp](http://www.state.sd.us/doa/das/frs/tblFertilizerlist.asp) or [www.state.sd.us/doa/das/fdft/fdft\\_searchlist.asp](http://www.state.sd.us/doa/das/fdft/fdft_searchlist.asp)

**Labeling Treated Seed**

Commercial applications of treated seed must be labeled properly according to SDCL 38-12-7. For all named seed which is treated, for which a separate label may be used, the label shall contain:

- (1) A word or statement to indicate that the seed has been treated
- (2) The commonly accepted, coined, chemical, or abbreviated generic chemical name of the applied substance;
- (3) The caution statement "Do not use for food, feed, or oil purposes" if the treatment or coating is present in an amount that is harmful to human or other vertebrate animals;
- (4) In addition, for highly toxic substances, a poison statement or the skull and crossbones symbol shall be shown on the label;
- (5) A word or statement describing the purpose for a treatment if the treatment is not of pesticide origin;
- (6) The date beyond which the "Inoculants expires (month and year)" or wording that conveys the same meaning;
- (7) The percentage by weight of coating in each container;
- (8) The percentage by weight of pure seed with coating material removed. The percentage of germination on coated seed shall be labeled by determination made on 400 pellets, whether or not they contain seed.

## Hazardous Chemical Storage

### What Farmers and Ranchers should do to help Local Emergency Responders?

In 1986, Congress passed the Superfund Amendments and Reauthorization Act (SARA). One part of the law required local governments to write plans for responding to chemical emergencies. The rules also require businesses that store hazardous chemicals to report their storage so local planning committees can collect the information they need for writing their emergency plans. Bulk fuel facilities, bulk agricultural chemical facilities, and many other businesses report their chemical storage and have been doing so for many years. The information these businesses provide can be instrumental to saving the lives of firefighters and the general public when an emergency situation occurs. When emergency responders know the types of chemical present at a facility, they can customize their response to address the problems they will encounter. For example, they can fight a fire from a safe distance if they know there is danger of an explosion, or they can wear a self-contained breathing apparatus if they know hazardous, life-threatening fumes are being emitted from a burning product.

Many farms and ranches have not notified anyone of their chemical storage. For this reason, the State Emergency Response Commission (SERC) is encouraging farm and ranch operations to submit notification of chemical storage. When a fire or other emergency situation occurs at your farm or ranch, you may be injured or you may not be home. For this reason, it is important that the local fire department know if you have hazardous chemicals and where they are stored. They can use the information you provide to protect you, your family, their personnel, and your livestock from hazardous fumes or explosive situations. (Continued on page 5)

## SEED ADVERTISING GUIDELINES

Any person exempted from a seed permit, pursuant to SDCL 38-12A-11, who advertises seed in this state, shall comply with this chapter by including the following information in the seed advertisement. The advertisement shall include but is not limited to: 1). Kind, or kind and variety, or kind and "variety not stated"; (Variety not stated" labeling is only allowed on a limited number of species). 2). Percentages of purity analysis (pure seed, inert matter, weed seed, other crop seed) and germination. 3). Rate of occurrence (number per pound) of any restricted noxious weed seed, if present. 4). Name and telephone number OR the name and address of the person or firm commissioning the advertisement.

If the variety is protected under Title V (certification option) of the United States Plant Variety Protection Act (PVPA) you must state the class of seed (certified or registered) in the ad. Seed advertisements must have the proper certification tag on the bags or in the case of bulk seed, the proper bulk transfer certificate and certifications papers, authorized by an official certification agency. Otherwise it cannot be advertised as a class of certified seed. Advertisements which claim "one year from certified" or "grown from certified seed" or other such statement is also prohibited.

If you should have any questions pertaining to seed labeling and advertisement, or need a copy of SD State Seed Law please contact the South Dakota Department of Agriculture, Division of Agricultural Services, Foss Building, Pierre, SD 57501, or call (605) 773-3796 or email Nels Brosted at nels.brosted@state.sd.us. If you do not know the proper procedure, find out before the ad is placed. The newspaper is not liable for content. Be sure the variety name is spelled correctly as mistakes made in the ad reflect negatively on you as a seller.



## 2005 Enforcement Summary

There were a total of 128 complaints/incidents filed with the Department of Agriculture during fiscal year 2005. The greatest numbers of incidents were drift complaints at 57 cases. There were 13 spills which included building fires (2), truck accidents (2), helicopter crashes (2), airplane crash (1), tanks not secured in transit (3), sprayer accidents (2), and tornado (1). There were also (13) misapplications, (8) license violations, (7) sales or use of unregistered products, (7) dumping, (5) RUP sales or purchase to non-certified persons, (4) pesticide containment not compliant, (2) vandalism, (2) repack violations, (2) site contaminations, (3) human exposure, (1) animal exposure, (1) tank contamination, and (1) non-performance.

(Continued from page 4) **Hazardous Chemical Storage**

To make the chemical notification process easy, the SERC has prepared a one page form for farm and ranch chemical storage submittals. If you store bulk chemical including fuel, you can obtain a copy of the notification form by calling (800) 433-2288 or by going to the following website: <http://www.state.sd.us/titleiii>. The SERC will forward copies of your completed form to your local fire department and to local emergency planners.



## Drift Complaint Process

The South Dakota Department of Agriculture is required to investigate all properly filed pesticide damage complaints. Any person claiming damages from pesticide use must file the complaint within 30 days after the damage occurred. If a growing crop is damaged, the complaint must be filed before 25% of the crop has been harvested.

After receiving the complaint, Department personnel will assign it to an inspector who will inspect the complaint. The inspector makes arrangements to meet with the complainant as soon as possible to start the investigation process. The inspector will ask the complainant the following questions:

- What was damaged?
- Did you see the actual application?
- Do you know who did the spraying?
- What were the weather conditions at the time of spraying?
- Did you do any spraying on your property? And if so, do you have any application records?

The investigator will typically proceed to the damaged area, obtain foliage and soil samples, take photos of the area, and visually examine the area for a drift pattern. The investigator will also contact producers with adjoining land to document all spraying that took place around the area of the alleged damage. This includes the complainants spraying activities, private or commercial applications and any right-of-way applications. The person accused of causing the damage will receive a copy of the complaint form.

If collected, the investigator then sends in samples to the lab. Weather data is obtained from the weather station nearest to the complaint site for the purpose of checking weather information for all dates that spraying took place around the damaged area. After the investigator completes the investigation, all evidence gathered during the course of the investigation is forwarded to Pierre.

The department typically receives lab sample results within 60-90 days. After the lab sample results are received in Pierre, an Ag Program Specialist will review all the evidence gathered and recommend a course of action to pursue. Staff meets and reviews the data to determine if action is warranted. Penalties may be warranted based on the outcome of the evidence gathered during the complaint investigation. The types of penalties that may be recommended are:

- No action, no evidence to support complainants.
- Warning letter
- Civil penalty
- Revocation/suspension of license
- Prosecution as a criminal offense

Once the case has been reviewed by staff with expertise in several areas, a penalty is determined using a penalty matrix.

A determination letter to the respondent may be sent depending on the action pursued. The respondent can agree to the settlement terms of the letter or contact staff to discuss the details of the case and the penalty recommendation.

The complainant will also be notified of the outcome of the case, after it has been settled.

There is a considerable amount of time and expense involved in the investigation of pesticide drift and spill complaints by the Department of Agriculture and every effort is made to conduct a thorough and complete investigation.

If you have questions on how the process works you can obtain further information by contacting the Department of Agriculture at 605-773-4432.



### Handling Pesticides Properly

All applicators need to be aware of the safety precautions and requirements to have a safe spray season. Emergency Discharge Response Planning is one area where it really pays to be prepared.

Reviewing your pesticide handling methods and planning ahead for potential pesticide spills can be time well spent should an emergency arise. How and where you handle your pesticides and supplies you have on hand may ensure your own safety and greatly reduce the risk of adverse effects.

State law requires all certified pesticide applicators to have a written plan outlining proper pesticide handling procedures and spill response procedures. This is called a "Pesticide Handling and Emergency Discharge Response Plan." It is simply a written plan of your handling procedures and what plan of action you take in your everyday spray operations or what action you would take should there be a spill in your pesticide operation. The plans are to be kept current and available for inspection by the SD Department of Agriculture.

There is no standard form for a Handling and Emergency Discharge Response Plan. It just needs to fit your operation, be in written form and be reviewed annually. A proper plan should include the following:

- Methods and procedures for properly handling pesticides, pesticide containers, and application equipment.
- Methods and procedures for inspection and repair of pesticide application, storage, and handling 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 outside or inside of a pesticide containment area (if required).
- Emergency phone numbers to be contacted if a pesticide spill occurs.

The South Dakota Department of Agriculture has a plan template for distribution. Please contact the South Dakota Department of Agriculture if you have any questions at 605-773-4432. (source: South Dakota State University Extension)

It is no longer legal to burn pesticide containers. According to South Dakota law certain open burning practices are illegal.

Open burning of plastic containers releases several chemicals into the atmosphere considered to be hazardous air pollutants. The released chemicals are known to be poisonous, toxic, or carcinogenic. From a health perspective, open burning of plastics may cause unnecessary human exposure to released chemicals. A list of chemicals released during open burning can be found on the Department of Environment and Natural Resources website at [www.state.sd.us/denr/DES/WasteMgn/SWaste/OpenBurning.htm](http://www.state.sd.us/denr/DES/WasteMgn/SWaste/OpenBurning.htm). (Click on Chemicals Released During Open Burning).

Open burning practices that are prohibited include those practices that create a nuisance or a hazard to public health.

The South Dakota Department of Agriculture has been actively collecting triple rinsed pesticide containers for recycling since 1992. This is a no cost recycling program for the retailers, farmers and ranchers in South Dakota. The 2006 Pesticide Container Collection schedule is located on page 1 of the newsletter and at the South Dakota Department Agriculture web page at [www.state.sd.us/doa/das](http://www.state.sd.us/doa/das).

Plastic containers up to 55 gallons are accepted if they have been properly triple rinsed or pressure rinsed. Please remove the lids, plastic sleeve labels, and any auxiliary paper label booklets at the time they are triple rinsed. A single layer of glued on paper label may remain on the container.

If you are a large quantity generator of containers the Department of Agriculture staff may come directly to your location and collect the containers. Contact the Department at 605-773-4432.

### Soybean Rust Update

In 2006, (SBR) has been detected in 21 counties in 4 states (Alabama, Georgia, Florida, Texas). The S.D. Department of Agriculture applied for and was granted several Section 18 emergency exemptions from the EPA for the 2006 growing season. The approved fungicides are: **Propimax, Tilt, Bumper, Folicur 3.6F, Laredo EC, Laredo EW, Stratego, and Domark 230 ME Fungicide**. Check the label for application instructions and restrictions. For more info visit [www.state.sd.us/doa/das/sec\\_18.htm](http://www.state.sd.us/doa/das/sec_18.htm).

**DEPARTMENT OF AGRICULTURE**  
**Division of Agricultural Services**  
**Office of Agronomy Services**  
**523 East Capitol – Foss Building**  
**Pierre, South Dakota 57501-3182**

Bulk Rate  
U.S. Postage  
**PAID**  
Permit #1209  
Sioux Falls, SD

## ENFORCEMENT CASE UPDATE

**Southeast** – The Department received a complaint alleging that an airplane over sprayed a pasture, and scaring the cattle. The Department determined that a misapplication occurred and samples were found to contain the pesticide in the pasture. The matter was settled out-of court with a settlement agreement and payment of \$1,375. It was the applicators second violation for misapplication.

**Central** – The Department received a report of a possible human endangerment from fumigation applications. The Department determined that several violations occurred and no records were kept for the applications. The applicator entered into a settlement agreement and paid \$4,700. Several warnings were also issued.

**Northeast** – The Department received a complaint alleging pesticide damage to trees. The Department determined that an applicator applied 2, 4-D ester with winds conducive for drift and several mature trees were severely damaged or destroyed. The applicator entered into a settlement agreement and paid \$675.

**Southeast** – The Department received a complaint alleging pesticide damage to trees. The Department determined that 2 applicators made off-label applications of Tordon to lawn and turf. Samples indicated the presence of Tordon in the trees. The applicators entered into a settlement agreement and paid \$1,080.

**Northeast** – The Department received a complaint alleging that a pesticide application drifted and damaged trees. The Department determined that the applicator applied 2, 4-D and dicamba with winds conducive for drift and 2, 4-D and dicamba were found in the trees. The applicator entered into a settlement with the Department and paid \$1,375 for a second violation.