

South Dakota Department of Agriculture Pesticide Applicator Newsletter

Summer 2003 Issue 28



2003 Pesticide Container Collections

The South Dakota Department of Agriculture and the Cooperative Extension Service have set the following dates and locations for the 2003 pesticide container collections. All plastic containers up to and including 30-55 gallon drums, plastic minibulk/shuttles, and 30-55 gallon steel drums will all be accepted. **All containers must be triple rinsed or pressure rinsed.**

| City | Date | Location | Time |
|--------------------|---------|----------------------------|--------------|
| Watertown | July 7 | Codington Co Extension | 9:00 – 3:00 |
| Watertown | July 8 | Codington Co Extension | 9:00 – 12:00 |
| Clark | July 8 | Clark Fire Hall | 1:00 – 4:00 |
| Redfield | July 9 | Spink Co Fairgrounds | 9:00 – 12:00 |
| Miller | July 9 | Nelson's Seed Service | 2:00 – 5:00 |
| Huron | July 10 | SD State Fairgrounds | 9:00 – 12:00 |
| Wessington Springs | July 10 | American Legion | 2:00 – 5:00 |
| Martin | July 14 | Bennett Co Fairgrounds | 9:00 – 12:00 |
| Philip | July 14 | Midwest Coop | 2:00 – 5:00 |
| Rapid City | July 15 | Central States Fairgrounds | 9:00 – 12:00 |
| Belle Fourche | July 15 | Dakota Mill & Grain | 2:00 – 5:00 |
| Bison | July 16 | Perkins Co Fairgrounds | 9:00 – 12:00 |
| Timber Lake | July 16 | West River Aerial | 2:00 – 5:00 |
| Murdo | July 17 | SD DOT Yard | 9:00 – 12:00 |
| Chamberlain | July 17 | SD Wheatgrowers | 2:00 – 5:00 |
| Sisseton | July 21 | Country Partners | 9:00 – 2:00 |
| Aberdeen | July 22 | Brown Co Extension | 9:00 – 2:00 |
| Selby | July 23 | Walworth Co Hwy Dept | 9:00 – 2:00 |
| Corsica | Aug 4 | Corsica Coop | 9:00 – 12:00 |
| Olivet | Aug 4 | Hutchinson Co Courthouse | 1:00 – 4:00 |
| Wagner | Aug 5 | Crosstown | 9:00 – 12:00 |
| Tyndall | Aug 5 | Bon Homme Co 4H Grounds | 1:00 – 4:00 |
| Winner | Aug 6 | Tripp Co Recycling Center | 9:00 – 2:00 |
| Pierre | Aug 7 | SDDA Bait Station | 9:00 – 2:00 |
| Howard | Aug 11 | Cenex | 9:00 – 12:00 |
| Madison | Aug 11 | Lake Co 4H Grounds | 1:00 – 4:00 |
| Brookings | Aug 12 | Brookings Reg Landfill | 9:00 – 2:00 |
| Salem | Aug 13 | McCook Co Fairgrounds | 9:00 – 1:00 |
| Mitchell | Aug 14 | Davison Co Extension | 9:00 – 2:00 |
| Flandreau | Aug 18 | Moody Co Hwy Dept | 9:00 – 2:00 |
| Renner | Aug 19 | Renner Fire Hall | 9:00 – 2:00 |
| Hurley | Aug 20 | Eastern Farmers Coop | 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

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Fax 605/773-3481
www.state.sd.us/doa/das

From The Department...

Unusable Pesticide Collection

Unusable pesticides are pesticides that have had their registration cancelled or suspended, are no longer in usable condition, or can no longer be identified.

You can dispose of these products free of charge through a program offered by the South Dakota Department of Agriculture (SDDA). All products must be preregistered and meet the criteria for the disposal program. The purpose of this program is to properly dispose of these pesticides and keep them out of the environment.

Registration forms can be obtained from your local extension office or by contacting the SDDA at 1-800-228-5254. You can also register your products online at: www.state.sd.us/doa/das/disp_frm2.htm

Pesticide Application Summary Information

As a reminder, the department of agriculture **will not** be collecting pesticide application summary information for the year 2003. All commercial applicators were required to report a summary of all 2002 pesticide applications.

If you have not yet completed data for 2002, you must do so at this time. You will not receive your current license until you have reported the 2002 data.

The 2003 Legislature passed a bill stating that the department may not require commercial applicators to submit annual summaries more than once in any five-year period, unless circumstances require that such data is needed to protect the health and well-being of the citizens of the state.

Checklist for Recycling Containers

To be acceptable for recycling, plastic crop protection product containers, including agricultural, turf, forestry, vegetation management and specialty pest control (excluding consumer packages) as well as adjuvants, crop oils, and surfactants must be empty, clean, inspected, uncapped, and dry. Follow this checklist to make sure your containers are acceptable.

EMPTY – Plastic containers must be empty to be recycled.

CLEAN – Pressure or triple rinse the container as soon as it is emptied. Add the rinse water to the spray mix. Containers must be cleaned or they will not be accepted into the recycling program.

INSPECT – Check the container inside and outside after rinsing to insure that no formulation residue is present. Make sure to check the threads and lip of the container.

DISCARD CAP – Caps are usually made of a different kind of plastic and cannot be recycled. Be sure to clean the cap at the time the container is rinsed. Never put a cap back on a cleaned container. Dispose of cleaned caps as normal solid waste.

KEEP CONTAINERS DRY – Cleaned containers must be kept out of the rain and away from rainwater. The recycler will not accept containers that have liquid in them because they have no way to dispose of the liquid. Store cleaned containers in a roofed building, an enclosed trailer, or in plastic bags.

LABELS – There is no need to remove labels from cleaned containers.

STAINS – Containers that originally held products known to stain plastic (e.g. Treflan, Sonalan, etc.) are acceptable for recycling if the plastic is stained but otherwise clean.

Residential Uses of CCA Treated Wood Cancelled

Registrants of chromated copper arsenate (CCA) have voluntarily cancelled the use of CCA for residential uses. CCA contains arsenic, a known human carcinogen, which poses a threat to human health. Residential uses of CCA treated wood include play structures, decks, picnic tables, landscaping timbers, residential fencing, patios and walkways/boardwalks.

After December 31, 2003, EPA will not allow CCA products to be used to treat wood intended for most residential settings. However, existing stocks may be sold, distributed or used until supplies are depleted.

Several alternatives to CCA are available on the market. Wood alternatives such as cedar and redwood along with non-wood alternatives such as metals and plastics provide acceptable solutions to CCA treated lumber. Other alternatives including wood treated with ammoniacal copper quat (ACQ) and copper boron azole (CBA) are already available at home improvement centers.

CCA is used to protect wood from dry rot, fungi, molds, termites and other pests that can threaten the integrity of wood products. Other common uses of CCA include highway noise barriers, signposts, utility posts and retaining walls. It has been used as a wood treatment product since the 1970s.

CCA treated wood will still be allowed on permanent wood foundations and fence posts for agricultural uses.

Consumers who currently have structures made with CCA treated wood are not being advised to remove or replace them; however, a few safety precautions should be followed. If you have more questions about products treated with CCA or questions about how they should be handled, visit www.epa.gov/pesticides/factsheets/chemicals/1file.htm or contact the South Dakota Department of Agriculture at 605/773-4432 or (800) 228-5254.

Horse Owners Encouraged to Vaccinate for West Nile Virus

Last year over 700 horses tested positive for West Nile virus in South Dakota. About 40% of these horses died from the disease or were euthanized.



The time frame to start vaccinating horses is critical; horses should be vaccinated before mosquitoes start appearing. The timeframe is especially critical when vaccinating horses the first year because the first vaccination must be given in two doses, three to six weeks apart. After the initial two-dose vaccination, a yearly booster vaccine is needed. The vaccination in various clinical studies has a 95% success rate if it was administered correctly. The vaccine must be purchased from a licensed veterinarian, but can then be administered by the horse owner.

There is no standard treatment for horses once they contract the WNV, however your local veterinarian can administer supportive care in hopes of recovery.

WNV can cause encephalitis in horses, which is an inflammation of the brain and spinal cord. Birds serve as the host for the virus, and then mosquitoes spread it to other birds and susceptible animals such as horses and humans. For more information, visit the department of health's west nile website at www.state.sd.us/doh/westnile/index.htm.

Commercial Applicator Requirements

Any commercial applicators that will be spraying for mosquitos for cities, municipalities, counties or any commercial business must be certified in Category 9, Public Health Pest Control.

Certification may be obtained by taking an open book exam at any local extension office. Certification is valid for two years. There is no fee for the test, but all applicators must obtain their license from the state. Licenses are \$25 and are also valid for two years. Government employees are exempt from the license fee, but must still take the exam and apply for the license. For more information on pesticide certification, visit the department's website at www.state.sd.us/doa/das.

Reciprocity with Nebraska

The Nebraska Department of Agriculture has informed us that beginning June 1, 2003, they will no longer offer reciprocal licenses to South Dakota applicators. The Nebraska Pesticide Act does not allow for open-book examinations, therefore they cannot issue reciprocal licenses based on examination scores from states that do.

Therefore, as of June 1, 2003, the NDA will no longer recognize South Dakota open-book examinations as a legitimate means for a person to fulfill the requirements for issuance of a new reciprocal commercial or non-commercial pesticide applicator license in Nebraska.

Therefore, reciprocal licenses will not be issued in either state.

So, what does this mean to you?

For existing applicators, nothing will change. They will still be able to attend recertification classes in either state and get credit. New commercial applicators will now need to test in both states in order to receive licenses in both states.

All licenses issued prior to June 1, 2003 will be honored in both states until their expiration dates.

For more information, contact the SDDA at 605/773-4432 or the NDA at 402/471-2394.

Useful Websites



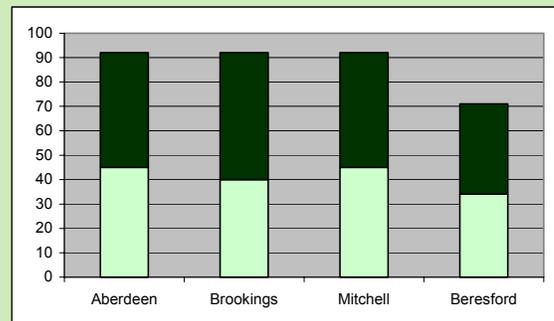
- www.state.sd.us/doa/das – SD Department of Agriculture, Division of Agricultural Services (links to pesticide container recycling, commercial applicator certification, prairie dog control, grain fumigation)
- www.state.sd.us/doa/das/disp_frm2.htm – Pre-Register for Unusable Pesticide Collection
- www.state.sd.us/doh/westnile.index.htm – West Nile Virus
- www.epa.gov/pesticides/factsheets/chemicals/1file.htm – Information about CCA and Treated Wood
- www.epa.gov/pesticides/imp – Integrated Pest Management

Wind Conditions in South Dakota

A general misconception throughout the state is that the wind always blows, and it is always blowing at 100 mph. That may be a bit of an exaggeration, but one that is not unusual for us to hear. To find out if this theory is true the department put together a report to show wind conditions across the state during the spraying season. This report is general in nature and is meant to show that there are several days in SD when wind conditions are appropriate for spraying.

We picked four locations across the state to represent areas where major crop production takes place: Aberdeen, Brookings, Mitchell and Beresford. We looked at wind conditions at each location from May 1, 2002 through July 31, 2002. We looked at the times from 6:00 am to 9:00 pm and removed any days that had over 0.5 inches of precipitation or an average wind speed over 11.0 mph. While drift can still occur when wind speeds are less than 11.0 mph, it is generally accepted that wind conditions above that require more management to control drift.

Following are the results of our report:



Aberdeen: 45/92 days were suitable for spraying, according to our criteria. That is nearly half the days (49%) in the period.

(Continued on page 5, Wind Conditions)

Prairie Dog Control: What's Legal?



Chemical control involves the use of rodenticides for lethal control of prairie dogs. Two classes of rodenticides are currently used in prairie dog control: Baits and fumigants. Certified applicators, both

private, are required to keep records of the application of restricted use pesticides.

There are three registered baits for use in prairie dog control in South Dakota:

1. Bell Labs Zinc Phosphide Bait
Baiting period: July 1 - Dec. 31
2. Hacco Inc Zinc Phosphide Bait
Baiting period: July 1 - Dec. 31
3. SD Dept of Ag. Zinc Phosphide Bait:
Baiting period July 1 - Jan. 31

Fumigants are used primarily as a follow-up treatment after a baiting program has taken care of the majority of the prairie dogs. Fumigants registered for use on prairie dogs include aluminum phosphide products and gas cartridge. All aluminum phosphide products are restricted use pesticides and therefore must be purchased with a private certification card or a commercial license. Numerous companies sell these products. Another fumigant, the gas cartridge is a general use product that can be obtained through some County Weed & Pest Boards.

Zinc phosphide treated grain poses no risk of secondary poisonings to non-target species nor does the zinc phosphide label require black-footed ferret surveys prior to treating prairie dog colonies

Every year the SDDA deals with numerous questions on what products are legal for prairie dog control. A common question that arises every year is, "Are the old strychnine treated grain baits still legal for use?" The answer is "NO." These products are no longer legal to use in prairie dog control. Strychnine was banned because of the risk of secondary poisonings to non-target animals (eagles, hawks, ferrets) that

would feed on prairie dog carcasses. If you have any of these products on hand you can properly dispose of strychnine treated grain through the SDDA Waste Pesticide Program.

Another common question is "Can other products such as Rozol Pocket Gopher Bait be used to control prairie dogs?" The answer again is "NO."

You have to read the label on the product and follow the label. Remember the label is the law and to legally use the product, you can only use it on the site it is listed for. If you use the product on non-labeled site, it is a violation of South Dakota Codified Law 38-21-44 (2) Store, Transport, Apply, Dispose or Handle a pesticide inconsistent with the labeling. Monetary penalties up to \$5000.00 dollars per count may be incurred depending on the severity and intent of misuse.

In conclusion if you are unsure if a product is labeled and legal to use for prairie dog control, please call the SDDA before making an application.

Wind Conditions in South Dakota

(Continued from page 4)

Brookings: 40/92 days were suitable for spraying, which equals 43% of the days

Mitchell: 45/92 days were suitable for spraying or 49% of the days

Beresford: 34/71 days were suitable for spraying or 48% of the days (The Beresford weather station did not report every day of the period)

Our data shows that nearly half of the days during the spray season have wind conditions that are generally acceptable for spraying. Applicators must also evaluate equipment factors such as droplet size; other weather factors such as temperature and inversion conditions; and factors such as distance to susceptible crops or non-target sites before deciding if conditions at the site of application are acceptable for spraying. Applicators should also read and follow any other label directions. Ultimately, the applicator is liable for any drift that occurs from his applications.

Integrated Pest Management

Integrated Pest Management is an encompassing approach to pest control, which includes weed control, insect control and a variety of other pests. IPM utilizes a proactive approach to pest management. IPM uses inspections, pest life cycles, action thresholds, and an understanding of the target facility, such as a school, to determine when and what action should be taken.

IPM utilizes four basic types of control for preventing pest outbreaks and eliminating current pest problems.

- Physical control

Includes creating barriers, changing favorable pest conditions, trapping or manually weeding

- Cultural control

Uses preventative measures such as fertilization, plant selection, and sanitation

- Biological control

Uses nature's natural enemies such as beneficial insects or bacteria to control pests

- Chemical control

Used only after all other control measures have been evaluated. Pesticides are used to minimize exposure to humans and non-target organisms but also to effectively control pest problems.

There are four basic components of IPM:

Grain Fumigation

As a reminder: Commercial applicators are required to be certified in category 14, Grain Fumigation and Pest Control in order to use any fumigants.

Many grain fumigants are also restricted use pesticides. Private applicator certification is required to purchase or use these pesticides, if the applicator is a farmer.

Phosphine Fumigants

The only way to effectively and safely use phosphine fumigants is by using them as the product label directs. It is important to remember that these substances are toxic and potentially harmful to humans. Using approved application methods and placarding all storage bins containing treated grain and transports carrying fumigated grain are the best means of ensuring the safety of all grain handlers.

(Continued on page 7, Grain Fumigation)

1. Monitoring
This includes inspecting for pests, identification of pests and prioritizing problem areas.
2. Setting Action Levels
Setting thresholds includes determining the number of pests that can be tolerated before treatment is necessary. For example, in or around a school, the tolerance for problem weeds would be much higher than the tolerance for rodents.
3. Applying IPM Strategies
IPM uses a multi-faceted approach for control and treatment. Certain criteria are used for selecting a treatment strategy such as:
 - Least hazardous to human health
 - Least disruptive of natural controls
 - Least toxic to non-target organisms
 - Most likely to be permanent
 - Easiest to carry out safely and effectively
 - Most cost effective
 - Most site appropriate
4. Evaluation
Evaluation involves reviewing monitoring data, actions taken, and impact and effectiveness of treatments. Program evaluation can help modify the program for future uses to make sure the most safe and effective tools are being used.

The key to a good IPM program is adaptability and allowing for continuous fine-tuning. For more information on IPM visit www.epa.gov/pesticides/ipm

From MDA Update, Minnesota Department of Agriculture, Agronomy and Plant Protection Division.

Grain Fumigation

(continued from page 6)

Commodity Temperature

Phosphide labels require the internal commodity temperature be tested before the fumigant is applied. If the internal commodity temperature is below 40° F, fumigation should not take place, because the temperature is too low for the phosphide tablets to react. If applied to cold grain, unspent tablets will not begin to react until the temperature rises.

Placarding

Phosphide labels require the applicator to placard or post all entrances to the fumigated area with signs bearing:

- 1) The signal word “DANGER” and the skull and crossbones symbol in red.
- 2) The statement, “Area and/or commodity under fumigation, DO NOT ENTER.”
- 3) The statement, “This sign may only be removed after the commodity is aerated (contains 0.3 ppm or less phosphine gas.) If incompletely aerated commodity is transferred to a new site, the new site must also be placarded and workers must not be exposed to more than 0.3 ppm phosphine.”
- 4) The date and time fumigation begins and is to be completed.
- 5) Name of fumigant used.
- 6) Name, address and telephone number of the applicator.

Phosphine gas produced in a sealed area can cause severe poisoning to an individual upon opening. This is especially true when placards are not attached to warn grain handlers of the danger with commodity shipments.

Placards on railroad cars must be placed on both sides of the car near all ladders, hatches and doors.

Placards may not be removed until the treated commodity is completely aerated. The commodity must be monitored until it contains less than 0.3 ppm of phosphine gas in the air space around and, when

feasible, in the mass of the commodity. If more than 0.3 ppm is detected, the placard must be transferred with the treated commodity.

Failure to properly placard fumigated areas may expose inspectors, samplers, and other grain handlers to dangerous levels of fumigants.

Because applications to commodities are not obvious if placards are not properly posted, individuals may not realize the grain has been treated until after exposure has occurred.

Vehicles under fumigation cannot be transported over public roads or highways.

Monitoring Devices

Various types of monitoring devices are available for determining fumigant concentrations in commodities. Accurate readings are obtained by using the instrument according to the instructions, and by selecting the appropriate monitoring tube for the fumigant being used.

Fumigant Safety

Direct inhalation of toxic phosphine fumes may cause weakness, tremors, vomiting, coughing, difficult or labored respiration, and possibly congestive heart failure.

For safety purposes, phosphide labels require applicators and grain handlers to wear respiratory protection during exposure to grain fumigant concentration greater than 0.3 ppm, or when concentrations are unknown.

Application Records

Fumigating grain is considered a pesticide application. An application made by an elevator employee to grain is considered a commercial application. Therefore, in accordance with South Dakota Law, each application of a pesticide, including phosphine, to storage bins, railcars or other sites, requires completion of commercial pesticide application records. Private applicators must also maintain records for restricted-use pesticide applications made to their stored grain.

DEPARTMENT OF AGRICULTURE
Division of Agricultural Services
Office of Agronomy Services
523 East Capitol – Foss Building
Pierre, South Dakota 57501-3188

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

ENFORCEMENT CASE UPDATE

Northeastern SD– A commercial applicator was found to have applied Capture 2 EC during weather conditions which were conducive for drift. The applicator settled by way of payment of \$1375. This violation was the second on record for the commercial applicator.

Eastern SD – A seed company paid \$500 for not having seed bags labeled upon sale and not having state-of-origin on seed label.

Eastern SD– A pesticide facility was fined \$697 for not having a Pesticide Dealers License and selling restricted-use pesticides to an uncertified applicator.

Southeastern SD – During a routine investigation a pesticide facility failed to have a Pesticide Handling and Discharge Response Plan on file and overall upkeep of facilities were not in compliance. The facility settled with Department by payment of \$400.

Central SD – A commercial applicator made an application of Class 40A 2,4-D to school grounds during a time with possible human exposure. The Department settled with this individual by payment of \$240.

Central SD – A fertilizer plant was in violation for making false invoices. An application of Fulltime was made on a sorghum field but billed out to the landowner as Lasso and Atrazine. The plant settled with the Department by payment of \$350.

Western SD – An ag inspector was conducting an USDA Restricted Use Pesticide sales audit on a private pesticide applicator. During the sales audit it was found that Tordon 22K was being packaged and sold in an unauthorized container. A warning was issued for selling product in anything other than in an authorized container and without the required label.