2005 Pesticide Container Collections

The South Dakota Department of Agriculture and the Cooperative Extension Service have set the following dates and locations for the 2005 pesticide container collections. 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.

### 2005 PESTICIDE CONTAINER COLLECTIONS

<table>
<thead>
<tr>
<th>City</th>
<th>Date</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watertown</td>
<td>July 6</td>
<td>Codington Co Extension</td>
<td>9:00-3:00</td>
</tr>
<tr>
<td>Watertown</td>
<td>July 7</td>
<td>Codington Co Extension</td>
<td>9:00-12:00</td>
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<tr>
<td>Clark</td>
<td>July 8</td>
<td>Clark Fire Hall</td>
<td>1:00-4:00</td>
</tr>
<tr>
<td>Redfield</td>
<td>July 8</td>
<td>Spink Co Fairgrounds</td>
<td>9:00-12:00</td>
</tr>
<tr>
<td>Miller</td>
<td>July 8</td>
<td>Nelson’s Seed Service</td>
<td>2:00-5:00</td>
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<tr>
<td>Huron</td>
<td>July 11</td>
<td>SD State Fairgrounds</td>
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<tr>
<td>Martin</td>
<td>July 12</td>
<td>Bennett Co Fairgrounds</td>
<td>9:00-12:00</td>
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<tr>
<td>Philip</td>
<td>July 12</td>
<td>Midwest Co</td>
<td>9:00-12:00</td>
</tr>
<tr>
<td>Rapid City</td>
<td>July 13</td>
<td>Central States Fairgrounds</td>
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<tr>
<td>Belle Fourche</td>
<td>July 13</td>
<td>Dakota Mill &amp; Grain</td>
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<tr>
<td>Bison</td>
<td>July 14</td>
<td>Perkins Co Fairgrounds</td>
<td>9:00-12:00</td>
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<tr>
<td>Timber Lake</td>
<td>July 14</td>
<td>Airport</td>
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<tr>
<td>Murdo</td>
<td>July 15</td>
<td>SD DOT Yard</td>
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<tr>
<td>Chamberlain</td>
<td>July 15</td>
<td>SD Wheatgrowers</td>
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<td>Sisseton</td>
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<td>Country Partners</td>
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<tr>
<td>Aberdeen</td>
<td>July 19</td>
<td>Brown Co Extension</td>
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<tr>
<td>Herreid</td>
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<td>North Central Farmers Elev.</td>
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<td>Selby</td>
<td>July 20</td>
<td>Walworth Co Hwy Dept</td>
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<tr>
<td>Mitchell</td>
<td>July 21</td>
<td>Davison Co. Extension</td>
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<tr>
<td>Pierre</td>
<td>July 22</td>
<td>SDDA Baitstation</td>
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<tr>
<td>Corsica</td>
<td>July 25</td>
<td>Corsica Coop</td>
<td>9:00-12:00</td>
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<tr>
<td>Wagner</td>
<td>July 25</td>
<td>Crosstown</td>
<td>1:00-4:00</td>
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<tr>
<td>Scotland</td>
<td>July 26</td>
<td>Coop Farmers Association</td>
<td>9:00-12:00</td>
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<tr>
<td>Winner</td>
<td>July 27</td>
<td>Tripp Co. Recycling Center</td>
<td>9:00-2:00</td>
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<tr>
<td>Howard</td>
<td>Aug 1</td>
<td>Cenex Agronomy Center</td>
<td>9:00-12:00</td>
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<tr>
<td>Madison</td>
<td>Aug 1</td>
<td>Lake Co. 4H Grounds</td>
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<tr>
<td>Brookings</td>
<td>Aug 2</td>
<td>Brookings Regional Landfill</td>
<td>9:00-12:00</td>
</tr>
<tr>
<td>Flandreau</td>
<td>Aug 3</td>
<td>Moody Co. Highway Dept</td>
<td>9:00-2:00</td>
</tr>
<tr>
<td>Renner</td>
<td>Aug 4</td>
<td>Renner Fire Hall</td>
<td>9:00-2:00</td>
</tr>
</tbody>
</table>

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). 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.
Diazinon to be Eliminated

As part of an agreement between EPA and diazinon registrants, the phase out and elimination of all residential uses of the insecticide diazinon products registered for outdoor non-agricultural use, including home lawn and garden products, will occur. It is illegal for retailers to sell these products after December 31, 2004. However, consumers may continue to use diazinon products purchased before that date, following all label directions and precautions, until the product is expended.

Retailers can play an important part in responsible stewardship of diazinon products by not selling inventories of diazinon lawn and garden products after December 31, 2004 and by understanding product recovery and disposal options for diazinon products not sold. Retailers will be responsible for safe storage and disposal of any diazinon products not sold or managed under the buy-back program. Retailers should be prepared for disposal costs. Retailers may contact the Department of Agriculture for our disposal program for unused pesticides. For more information go to the EPA and diazinon website or the South Dakota Department of Agriculture website at www.epa.gov/oppsrrdl/op.diazinon.htm www.state.sd.us/doa/das

FDA approves Monensin for dairy cows

The FDA recently approved monensin in lactating dairy cows for increased milk production efficiency. Since this approval, there have been many questions on proper use of monensin in dairy cows. Dairy cows given monensin must be fed a total mixed ration (TMR). No other methods of feeding, such as top dressing or free choice, are approved. The ration must contain at least 11 g/ton and not more than 22 g/ton of monensin on a 100% dry matter basis. For answers to frequently asked questions check the FDA’s website at www.fda.gov/cvm/index/uploads/MonQAup.htm or contact the Department of Agriculture at 605/773-4432.
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.

Though slightly more expensive than CCA, the appearance, strength, and handling characteristics of CCA alternatives are very similar to those of CCA. However, the treated wood costs from 10% to 30% more than CCA-treated wood. (Lebow, USDA)

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

Unconventional Fertilizer 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 unconventional fertilizers and soil amendments to become more prominent in the marketplace.

What are unconventional fertilizers and soil amendments?
Unconventional fertilizers and soil amendments are those that are not normally found in the common 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 unconventional products from conventional products are the claims made regarding the performance of the product.

A general rule of thumb for product claims is “If it sounds too good to be true… it usually is”. When considering purchase of a fertilizer or soil amendment product, the consumer should 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.

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 certainly the development of the internet allows for 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 claims of the products unbeknownst to the Department which may be false or misleading. (Continued on Page 4-Unconventional Fertilizers)
Useful Websites

www.state.sd.us/doa/das – SD Department of Agriculture, Division of Agricultural Services
www.epa.gov/pesticides/factsheets/chemicals/lfile.htm – Information about CCA and Treated wood
www.epa.gov/oppsrrdl/op.diazinon.htm - EPA and diazinon website
www.fda.gov/cvm/index/updates/MonQAup.htm - website for Monensin for dairy cows
www.state.sd.us/doa/das/frst/tblFertilizerlist.asp - webpage of registered unconventional fertilizer in South Dakota.

(Continued from page 3-Unconventional fertilizers)

Consumers must also consider that government does not regulate the price of a product. Consumers must consider the cost of the product versus the benefit or “bushels per acre” that use of the product will provide.

Are the claims made of the product reasonable?
What may be reasonable to one person may not be to another. However, the consumer should consider: What the product is made of? How much is recommended for use? How does it help the plant or soil? Will the product’s action actually lead to an increase in profit? Beware of claims made of the product verbally or if the company representative claims a conspiracy attempting to prohibit the sale of a product. 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. The consumer should evaluate it to determine if the information is valid. Beware of testimonials from individuals who have used it. If testimonial information is a true representation of information provided by a user of the product, consider that these are best case scenarios; benefits realized from use of the product may be results after one year or may not result from use of the product at all.
If performance data is provided, carefully examine that data considering that all experiments have some degree of error associated with it. If differences between a treated and untreated area are shown in the data, is there information presented to indicate that statistically there is an advantage?

The Department administers the fertilizer and soil amendment program in the state to address many facets of fertilizer and soil amendment distribution, one of those being 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 fabulous claims. For more information on unconventional fertilizers registered in South Dakota, visit www.state.sd.us/doa/das/frst/tblFertilizerlist.asp

(Continued on page 5)

Retinal Degeneration and Fungicide Use

The U.S. Department of Agriculture’s Animal and Plant Health Inspection Service has confirmed the presence of soybean rust in the continental US. Retinal or macular degeneration is the leading cause of visual impairment in older adults. What in the world do these two statements have in common? When it comes to pesticide applicators the answer could be fungicide use.

The discovery of soybean rust (soybean rust is caused by either of two fungal species, *Phakopsora pachyrhizi*, also known as the Asian species, and *Phakopsora meibomiae*, the New World species) and its potential to cause up to 2 billion dollars worth of damage to the US soybean crop. The USDA estimates this will dramatically increase the use of fungicides, one method used to control this pest. Add on to this the fact that U.S. farmers and commercial applicators have only limited experience with fungicide use on this crop and one can see that state lead agencies regulating pesticide use will need to step up the training provided to applicators so that they can protect themselves from fungicide exposure.

Retinal degeneration is damage or the breakdown of the retina, the inner layer of the eye that transmits images from the lens to the brain. This condition causes vision to be reduced or totally lost. The risk of developing retinal degeneration increases with age and is greater in women than in men. Other factors that may be related are light eye color, hypertension, diabetes, and sun exposure.

In order to investigate the relationship between pesticide exposure and retinal degeneration, information gathered from the Agricultural Health Study, a long-term study of licensed pesticide (Continued on page 5)
10 Tips to Protect Children from Pesticide and Lead Poisonings

These simple steps can save children from environmental hazards around the home:

1. Always store pesticides and other household chemicals, including chlorine bleach, out of children’s reach -- preferably in a locked cabinet.

2. Read the Label FIRST! Pesticide products, household cleaning products, and pet products can be dangerous or ineffective if too much or too little is used.

3. Before applying pesticides or other household chemicals, remove children and their toys, as well as pets, from the area. Keep children and pets away until the pesticide has dried or as long as is recommended on the label.

4. If your use of a pesticide or other household chemical is interrupted (perhaps by a phone call), properly re-close the container and remove it from children’s reach. Always use household products in child-resistant packaging.

5. Never transfer pesticides to other containers that children may associate with food or drink (like soda bottles), and never place rodent or insect baits where small children can get to them.

6. When applying insect repellents to children, read all directions first; do not apply over cuts, wounds, or irritated skin; do not apply to eyes, mouth, hands, or directly on the face; and use just enough to cover exposed skin or clothing, but do not use under clothing.

7. Many homes built before 1978 have lead-based paint. If you plan to remodel or renovate, get your home tested. Don’t try to remove lead paint yourself.

8. Ask about lead when buying or renting a home. Sellers and landlords must disclose known lead hazards in houses or apartments built before 1978.

9. Get your child tested for lead. There are no visible symptoms of lead poisoning, and children may suffer behavior or learning problems as a result of exposure to lead hazards.

10. Wash children’s hands, toys, and bottles often. Regularly clean floors, window sills, and other surfaces to reduce possible exposure to lead and pesticide residues.

(Continued from page 4 - Retinal degeneration and fungicide use)

applicators in Iowa and North Carolina, data was analyzed from self-administered questionnaires from over 17,000 applicators who did not report this condition to the farming practices and pesticide use of 154 applicators that reported doctor diagnosed retinal degeneration. The study found that those who reported retinal degeneration (less than 1%) were more likely to have had orchards and to have used fungicides. The associations were not restricted to one specific fungicide. The participants in this retinal degeneration study were farmers (99%) and were white men (97%). Because this was a first look and this study did not verify by a medical exam the diagnosis, additional studies will need to be conducted before any firm conclusions or recommendations can be made. We believe one significant question that will need to be answered will be - Did wearing eye protection during mixing, loading and application reduce or eliminate potential fungicide exposure?

For more information go to the following web site: www.aphis.usda.gov/lpa/issues/sbr/sbr.html.
Spraying for Asian Soybean Rust

In light of recent news that Asian soybean rust has been confirmed over wintering in kudzu plants in southern Florida, soybean growers may be getting nervous, especially in southern states where they are gearing up to plant. If you are wondering when to spray fungicides and how to know if the spores are close enough to merit applications, here's help.

Soil temperatures in southern areas of the Gulf Coast states are predicted to reach 50-60 degrees F by the end of March. This means planters could be rolling in soybeans not long after.

First, it's probably important to keep in mind that while symptoms are most commonly found during and after flowering, plants are susceptible to rust at any developmental stage.

Research from tropical and subtropical regions suggests that the first fungicide application should be made at the first flowering stage (R1), but earlier sprays may be recommended if the disease is detected early in the growing season, according to materials posted on the Iowa State University plant pathology web site about Asian soybean rust.

ISU plant pathologists say for the North Central region of the US, for example, the first application of fungicide will be necessary when the disease is detected nearby and if favorable environmental conditions for disease development exist.

If leaves are wet for 6-12 hours and temperatures are between 46 and 82 degrees F those are the favorable conditions for development of the disease. Extended periods of cool, wet weather during the growing season would favor soybean rust epidemics, according to materials from University of Missouri Extension.

Marty Draper, South Dakota State pathologists says he expects the greatest potential for treatment will be from about mid July to mid August in South Dakota.

During this time the crop will be in a reproductive stage and before full seed and the rows will have closed in, providing an environment that favors disease development. Disease potential is much greater in the southern parts of South Dakota. The best control comes with early detection and timely applications of fungicides. Growers in South Dakota are hoping that only one fungicide application is needed, unless the pathogen arrives before the R3 crop stage (early pod).

The second application should be applied 14 to 21 days later, depending on the fungicide used and whether environmental conditions are favorable for continued and rust disease development.

You can keep an eye on the spores' northward progress using a national network of soybean rust surveillance that is being developed by USDA and representatives from industry, states, and universities. The network will monitor the movement of spores and let growers know if fungicide sprays are needed. Forecasts will be generated on Monday, Wednesday and Friday each week from March through October.

If you suspect soybean rust, you should contact your Local Extension Educator, or a Certified Crop Consultant for proper identification. Confirmed reports of outbreaks will be incorporated into the forecast system.

First detector training for Asian Soybean Rust will be during May and June. First Detectors are Ag professionals that have experience in the field with many pests and production problems. First detector certification is provided through the National Plant Diagnostic Network for the USDA and Department of Homeland Security. Training sessions will be from 3-6 hours in length and will be held in several interactive video locations around the state. Watch for press releases for dates and locations of training.

Approved Fungicides for Soybean Rust

The S.D. Department of Agriculture applied for and was granted several Section 18 emergency exemptions from the EPA for the 2005 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.

Useful websites for Asian Soybean Rust

www.stopsoybeanrust.com - Used to follow the areas of the U.S. that has detected soybean rust.  
www.plantsci.sdstate.edu/planthealth/ - South Dakota State University Plant Science web page.  
www.unitedsoybeanrust.org - United Soybean Board web page.  
www.farmstart.com - Dow Agrosciences rust web page.  
www.plantmanagementnetwork.org/infocenter/topic/soybeanrust/ - Plant Management Network  
www.state.sd.us/dao/das/sec_18.htm Section 18 website for the South Dakota Department of Ag
You have a liquid fertilizer secondary containment that is full of water from rain or snow. Is it acceptable to pump the water over the side of the containment on the ground?

NO.

According to South Dakota Rule rules when any liquid or material within secondary containment contains a fertilizer, the liquid or material must be applied to a field or fields at normal fertilizer rates or used in a mixing operation.

The best means to handle precipitation accumulation is to use it as make up water. We require testing before pumping water over the side of the containment. There is no standard to what is “clean”. We suggest using the drinking water level of 10 ppm of nitrates or less, as your maximum for disposing of rainwater.

What is the Department of Environmental and Natural Resource (DENR) position on dumping secondary containment water?

DENR recommends testing the water before disposing of the water. If the water contains a fertilizer or pesticide use of recommended fertilizer and pesticide rates.

Can you dispose of your storm water over the side of your operational area containment?

YES if

Accumulations of precipitation may be discharged from the pesticide operational area containment as surface runoff if the operational area containment was cleaned after the last use.

No if

Accumulated liquids or materials containing pesticides must be disposed of in accordance with chapter 12:56:02.

Consult the South Dakota Department of Agriculture’s Fertilizer and Pesticide Bulk Facility Manual located on the web at www.state.sd.us/doa/das/Fert%20Pest%20Man.pdf

2004 Pesticide Exposure Cases in South Dakota

The Department of Agriculture receives quarterly reports from the Hennipin County Regional Poison Center in regards to all South Dakota pesticide exposures that are called in by concerned individuals to the poison control number and area hospitals. Exposures are defined as symptomatic cases involving various categories of pesticides which include fumigants, herbicides, insecticides, repellants and rodenticides. The information is used by the department to focus on where training and education emphasis needs to be placed to limit these exposures in the future. The patient information that the department receives includes the individuals gender and age, for privacy reasons the individuals name is not disclosed in the incident report. The chart below indicates the status of the patient as being exposed and exhibiting systematic poisoning symptoms and subsequently recovering or had died from a pesticide poisoning. The chart is updated on a quarterly basis.

<table>
<thead>
<tr>
<th>2004 Exposures</th>
<th>1st Qtr</th>
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<td>1</td>
<td>22</td>
<td>21</td>
<td>46</td>
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** No deaths were reported in 2004
ENFORCEMENT CASE UPDATE

Northeastern SD—The Department received a complaint alleging that a firm was selling restricted use pesticide (RUP) without a dealer’s license. The Department determined that the firm made three sales of RUP’s without a pesticide dealers license and the required RUP dealer records were not kept. The matter was settled by a payment of $400 and a warning was issued for the records violation.

Western SD—The Department received information that 2 applicators were making pesticide applications as part of their employment without licenses and they were not keeping records for their applications. The applicators settled with the Department for $310 each and were required to obtain applicator licenses.

Central SD—The Department received a complaint alleging pesticide damage to a soybean field. An aerial application of Tordon and 2-4D was made adjacent to the soybeans and a definite drift pattern was found. The applicator settled with the Department of Agriculture for $385.

Southeast SD—The Department received a complaint alleging pesticide damage to trees near the person’s home. The Department found that an application of Roundup and Aim was made adjacent to the trees with wind blowing toward the trees. The active ingredients were found in the foliage of the trees. The applicator settled with the Department for $385.

Southeast SD—The Department received a complaint alleging that a pesticide application was made in high winds and the person was concerned about drift to adjacent property. The Department determined that a spot spray application of Tordon and 2-4D was made in winds blowing 13 to 20 mph, with higher gusts. The applicator settled with the Department for $385.