



# Odor and Nutrient Management

Winter 2007  
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## Commercial Manure Applicator Workshop Offered Jan. 4

by Karen Grimes, Iowa Department of Natural Resources

### Training Opportunities

Commercial manure applicators can fulfill their annual training requirement Jan. 4 at nearly 80 Iowa State University Extension County offices. The training will be down-linked via satellite from 9 a.m. to noon. Registration begins at 8:30 a.m. and applicators must attend the entire training to become certified.

For out-of-state applicators, training also is offered in Nebraska and Wisconsin. Unlike past years, there will not be joint Minnesota-Iowa training offered this year. Applicators that apply in both states will need to take training specific to each state to become certified.

And for poultry and other dry manure applicators, there will be five sessions on dry manure offered from Feb. 11 to 22. See Table 2, pg 6 for more details.

Applicators and commercial managers also may take the training by watching a videotape at their local ISU Extension County office. Tapes will be available by early February. Or, the training requirements can be met by passing an exam at one of the DNR field offices.

Whether by training or exam, applicators need to make an appointment to watch a video or take an exam. Many ISU Extension and DNR offices cannot accept walk-ins. It is also wise to register for the Jan. 4 training to ensure that adequate materials and space are available. Currently certified commercial applicators should receive a registration brochure in the mail in mid-December.

Commercial applicators need to be certified prior to applying manure, unless they have never been certified before. In that case, new employees may apply manure within sight and sound of a certified applicator during the first 30 days of employment.

### Fees and Deadlines

Commercial applicators must work for a commercial manure service or the business can be a sole proprietorship. The business license fee of \$200 includes the certification fee of one business manager. All persons engaged in transporting, handling, storing or applying manure for the business must be certified. The certification fee is \$75. The manager and any employees, agents or contractors must pay an additional \$25 education fee for the training or to take the exam.

The business and the commercial applicators' certificates expire on March 1 annually. A \$12.50 late fee is charged for applications received after that date.

More information is available on the Iowa Manure Management Action Group's Web site at <http://www.agronext.iastate.edu/immag/maccma.html>. Information on requirements for land application is available on the DNR Web site at <http://www.iowadnr.gov/afo/index.html>.

## 2008 Confinement Site Manure Applicator Workshops

by Angela Rieck-Hinz, Department of Agronomy, Iowa State University

Confinement site manure applicators are required by law to be certified to haul, handle, transport or apply manure from any confinement facility with more than 500 animal units. Iowa State University Extension will offer workshops in January and February 2008 to help applicators meet certification requirements. The focus of this year's programming will include the applicator rules, mortality management, and emergency action response. Confinement site applicators should plan to attend one of the workshops listed in the table to meet their certification requirements or to renew their licenses. In addition to the 80 workshops listed in Table 1, ISU Extension will also offer five dry manure workshops. These dry manure workshops are identified in Table 2.

Due to the expansion of deep-bedded barns for beef production in Iowa, producers who raise dairy and beef in these types of housing or other types of confined housing are also



**(Workshops continued from front page)**

reminded if they have more than 500 animal units (500 beef cows or 357 mature dairy cows) they also need to be certified to haul, handle, transport or apply manure from these facilities.

For exact workshop locations and to confirm exact times or to determine meeting options in the event of bad weather, please call the ISU Extension County office where you plan to attend the workshop. Registration is not required for these meetings, but you may wish to contact the ISU Extension County office to ensure there will be adequate space

and training materials available. There are no fees to attend these workshops except where denoted.

If you can't attend one of these workshops and you need to attend training, please schedule time at your local ISU Extension County office to watch the training videotape. Due to scheduling conflicts, many offices will no longer accept walk-in appointments to watch these tapes. If you can't attend the training, please contact your regional Iowa Department of Natural Resources field office to schedule an appointment to take the exam.

**Table 1. Confinement Site Manure Applicator Workshops**

County	Workshop Location	Telephone	Date	Time	Alternate Meeting Location
Adair	City Hall in Adair	641-743-8412	January 22, 2008	1:30 p.m.	See Adams or Dallas or East Pottawattamie
Adams	Boz's Kitchen in Corning	641-322-3184	January 16, 2008	1:30 p.m.	See Adair or Page
Allamakee	County Extension Office in Waukon	563-568-6345	February 13, 2008	1:30 p.m.	See Clayton or Fayette
Benton	County Extension Office in Vinton	319-472-4739	February 7, 2008	9:30 a.m.	See Buchanan or Tama
Boone	County Extension Office in Boone	515-432-3882	January 29, 2008	1:30 p.m.	See Greene or Story
Black Hawk	Memorial Building in Dike	319-234-6811	January 25, 2008	9:30 a.m.	See Benton, Buchanan or Butler
Buchanan	County Extension Office in Independence	319-334-7161	January 10, 2008	1:30 p.m.	See Delaware or Fayette
Buena Vista	County Extension Office in Storm Lake	712-732-5056	February 19, 2008	9:30 a.m.	See Clay, Cherokee or Sac
Buena Vista	County Extension Office in Storm Lake	712-732-5056	February 28, 2008	7:00 p.m.	See Clay, Cherokee or Sac
Butler	Northeast Research and Demonstration Farm at Nashua	319-267-2707	January 31, 2008	9:30 a.m.	See Floyd or Franklin
Calhoun	County Extension Office in Rockwell City	712-297-8611	February 12, 2008	9:30 a.m.	See Pocahontas, Sac or Webster
Carroll	County Extension Office in Carroll	712-792-2364	February 12, 2008	1:30 p.m.	See Calhoun, Crawford or Greene
Cedar	County Extension Office in Tipton	563-886-6157	January 31, 2008	9:30 a.m.	See Clinton, Scott or Muscatine

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## Iowa Manure Matters: Odor and Nutrient Management



County	Workshop Location	Telephone	Date	Time	Alternate Meeting Location
Cerro Gordo	County Extension Office in Mason City	641-423-0844	February 11, 2008	7:00 p.m.	See Hancock, Floyd or Franklin
Cherokee	County Extension Office in Cherokee	712-225-6196	February 15, 2008 Registration is required	9:30 a.m. or 1:30 p.m.	See Plymouth, O'Brien or Buena Vista
Chickasaw	County Extension Office in New Hampton	641-394-2174	January 31, 2008	1:30 p.m.	See Howard or Floyd
Clay	Dickens Community Center	712-262-2264	February 5, 2008	7:00 p.m.	See Dickinson or O'Brien
Clayton	Freedom Bank in Elkader	563-245-1451	February 14, 2008	1:30 p.m.	See Allamakee or Fayette
Clinton	Community Center in DeWitt	563-659-5125	January 14, 2008	1:30 p.m.	See Cedar or Scott
Crawford	Western Iowa Research Farm at Castana	712-263-4697	February 22, 2008	1:30 p.m.	See Ida, Monona, Carroll or Shelby
Dallas	County Extension Office in Adel	515-993-4281	January 16, 2008	1:30 p.m.	See Greene or Boone
Davis	County Extension Office in Bloomfield	641-664-2730	January 29, 2008	1:30 p.m.	See Wapello or Jefferson
Delaware	County Extension Office in Manchester	563-927-4201	January 17, 2008	9:30 a.m.	See Buchanan or Dubuque
Des Moines	County Extension Office in Burlington	319-754-7556	January 17, 2008	9:30 a.m.	See Henry or Lee
Dickinson	County Extension Office in Spirit Lake	712-336-3488	January 30, 2008	1:30 p.m.	See Osceola or Emmet
Dubuque	County Extension Office in Dubuque	563-583-6496	January 16, 2008	1:30 p.m.	See Clayton or Delaware
Emmet	County Extension Office in Spirit Lake	712-362-3434	January 30, 2008	1:30 p.m.	See Dickinson or Kossuth
Fayette	County Extension Office in Fayette	563-425-3331	January 30, 2008	1:30 p.m.	See Clayton or Chickasaw
Fayette	County Extension Office in Fayette	563-425-3331	February 22, 2008	1:30 p.m.	See Clayton or Chickasaw
Floyd	Northeast Research and Demonstration Farm at Nashua	641-228-1453	January 31, 2008	9:30 a.m.	See Mitchell or Chickasaw
Franklin	County Extension Office in Hampton	641-456-4811	February 20, 2008	9:30 a.m.	See Hardin or Wright

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## Iowa Manure Matters: Odor and Nutrient Management



County	Workshop Location	Telephone	Date	Time	Alternate Meeting Location
Greene	County Extension Office in Jefferson	515-386-2138	January 17, 2008	7:00 p.m.	See Carroll or Boone
Grundy	Memorial Building in Dike	319-824-6979	January 25, 2008	9:30 a.m.	See Hardin or Marshall
Hamilton	County Extension Office in Webster City	515-832-9597	February 7, 2008	1:30 p.m. or 7:00 p.m.	See Webster or Wright
Hancock	County Extension Office in Garner	641-923-2856	February 20, 2008	1:30 p.m.	See Kossuth or Wright
Hardin	County Extension Office in Iowa Falls	641-648-4850	January 30, 2008	1:30 p.m. or 7:00 p.m.	See Hamilton or Franklin
Harrison	St. Mary's Parish Center Portsmouth	712-664-2105	January 29, 2008	1:30 p.m.	See Shelby or Monona
Henry	County Extension Office in Mount Pleasant	319-385-8126	January 17, 2008	1:30 p.m.	See Des Moines, Jefferson or Lee
Howard	County Extension Office in Cresco	563-547-3001	February 11, 2008	9:30 a.m.	See Mitchell or Chickasaw
Humboldt	County Extension Office in Humboldt	515-332-2201	February 18, 2008	1:30 p.m.	See Pocahontas or Wright
Ida	Correctionville Community Center	712-364-3003	February 13, 2008	9:30 a.m.	See Sac, Cherokee or Crawford
Jasper	County Extension Office in Newton	641-792-6433	January 28, 2008	1:30 p.m.	See Marshall or Mahaska
Jefferson	County Extension office in Fairfield	641-472-4166	February 5, 2008	9:30 a.m.	See Keokuk, Wapello or Washington
Johnson	Stutsman, Inc. in Hills	319-337-2145	January 22, 2008	9:30 a.m.	See Cedar or Washington
Jones	County Extension Office in Anamosa	319-462-2791	February 7, 2008	1:30 p.m.	See Cedar or Dubuque
Keokuk	Expo building, Keokuk County Fairgrounds	641-622-2680	February 12, 2008	9:30 a.m.	See Mahaska, Washington or Wapello
Kossuth	Community Center in Burt	515-295-2469	January 28, 2008	1:30 p.m.	See Hancock or Humboldt
Lee	Pilot Grove Savings Bank Community Room in Donnellson	319-835-5116	February 5, 2008	1:30 p.m.	See Henry or Des Moines
Louisa	SE Research Farm at Crawfordsville	319-523-2371	January 22, 2008	1:30 p.m.	See Washington, Muscatine or Des Moines

## Iowa Manure Matters: Odor and Nutrient Management



County	Workshop Location	Telephone	Date	Time	Alternate Meeting Location
Lyon	Forster Community Bldg. in Rock Rapids	712-472-2576	February 4, 2008	1:30 p.m.	See Osceola, Sioux or O'Brien
Mahaska	County Extension Office in Oskaloosa	641-673-5841	February 12, 2008	1:30 p.m.	See Keokuk or Jasper
Marshall	County Extension Office in Marshalltown	641-752-1551	February 15, 2008	1:30 p.m.	See Jasper, Story or Tama
Mitchell	County Extension Office in Osage	641-732-5574	February 11, 2008	1:30 p.m.	See Howard or Floyd
Monona	Western Iowa Research Farm at Castana	712-423-2175	February 22, 2008	1:30 p.m.	See Crawford or Woodbury
Muscatine	County Extension Office in Muscatine	563-263-5701	January 31, 2008	1:30 p.m.	See Cedar, Johnson or Scott
O'Brien	Northwest Iowa Community College Bldg C in Sheldon	712-957-5045	February 4, 2008	7:00 p.m.	See Osceola, Sioux, Clay or Cherokee
Osceola	County Extension Office in Sibley	712-754-3648	February 27, 2008 Registration is required	9:30 a.m. <b>or</b> 1:30 p.m.	See Lyon, Dickinson or O'Brien
Page	County Extension Office in Clarinda	712-542-5171	February 7, 2008	1:30 p.m.	See Adams or East Pottawattamie
Palo Alto	Dickens Community Center	712-852-2865	February 5, 2008	7:00 p.m.	See Clay or Kossuth
Plymouth	Prime Bank in LeMars	712-546-7835	February 11, 2008	1:30 p.m. <b>or</b> 7:00 p.m.	See Sioux, Cherokee or Woodbury
Pocahontas	Rolfe Community Center	712-335-3103	January 25, 2008	1:30 p.m.	See Buena Vista or Humboldt
Pottawattamie East	Fire Station Meeting Room in Hancock	712-482-6449	January 8, 2008	7:00 p.m.	See Shelby or Harrison
Sac	County Extension Office in Sac City	712-662-7131	February 6, 2008	1:30 p.m.	See Ida, Carroll or Buena Vista
Scott	County Extension Office in Bettendorf	563-359-7577	January 14, 2008	7:00 p.m.	See Clinton, Cedar or Muscatine
Shelby	St. Mary's Parish Hall in Portsmouth	712-755-3104	January 29, 2008	1:30 p.m.	See East Pottawattamie or Crawford
Sioux	County Extension Office in Orange City	712-737-4230	January 31, 2008 Registration is required	9:30 a.m. <b>or</b> 1:30 p.m.	See Lyon or Plymouth
Story	County Extension Office in Nevada	515-382-6551	January 31, 2008	1:30 p.m.	See Boone or Marshall
Tama	County Extension Office in Toledo	641-484-2703	February 27, 2008	7:00 p.m.	See Marshall or Benton

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County	Workshop Location	Telephone	Date	Time	Alternate Meeting Location
Wapello	Eddyville-Blakesburg High School	641-682-5491	January 29, 2008	7:00 p.m.	See Keokuk, Jefferson or Davis
Washington	County Extension Office in Washington	319-653-4811	February 14, 2008	7:00 p.m.	See Johnson, Keokuk or Louisa
Wayne	Courthouse in Corydon	641-872-1755	January 17, 2008	1:30 p.m.	See Davis
Webster	County Extension Office in Ft. Dodge	515-576-2119	February 4, 2008	1:30 p.m.	See Calhoun, Humboldt or Hamilton
Woodbury	Correctionville Community Center	712-276-2157	February 13, 2008	9:30 a.m.	See Plymouth or Monona
Wright	County Extension Office in Clarion	515-532-3453	February 6, 2008	1:30 p.m.	See Franklin, Hamilton or Humboldt

**Table 2. Five Manure Applicator Workshops for Dry Manure Applicators**

These workshops will focus on dry manure issues. Each workshop will start at 9 a.m. and end at noon. Dry manure workshops will meet certification requirements for both confinement site manure applicators and commercial manure applicators. Please register for one of these meetings by calling the appropriate site.

- February 11, 2008,** Branding Iron Restaurant, Thompson, IA 641-584-2261
- February 14, 2008,** Buena Vista County Extension Office, Storm Lake, IA 712-732-5056
- February 19, 2008,** Washington County Extension Office, Washington, IA 319-653-4811
- February 20, 2008,** Adair County Extension Office, Greenfield, IA 641-743-8412
- February 22, 2008,** Heartland Museum, Clarion, IA 515-532-3453

**Please register for one of these meetings by calling the appropriate site.**

## Manure Applicators Have Good Track Record

by Karen Grimes, Iowa Department of Natural Resources

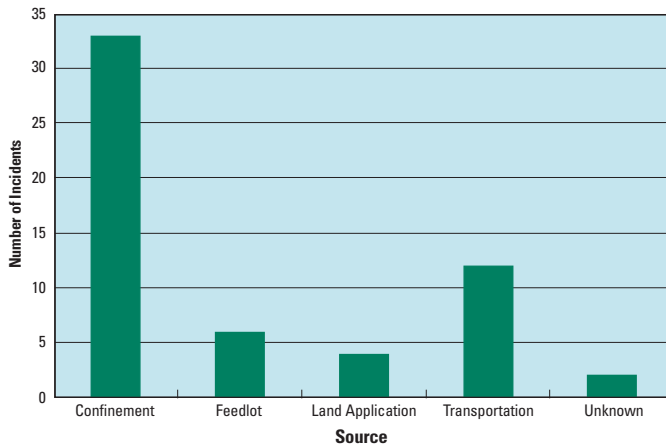
Spreading manure is big business in Iowa. There were more than 400 commercial manure application businesses in Iowa and nearly 4,000 certified commercial and confinement site manure applicators as of Nov. 16, 2007. Together they spread roughly 50 million tons of manure annually, over two short periods of time each year.

These 1,612 commercial and 2,125 confinement site applicators have a good track record. Despite the long hours, they have been involved in a relatively small number of reported manure releases. As of Nov. 16, 2007, there were 58 for the calendar year, according to Iowa Department of Natural Resources' records. Most of them happened at the facility, whether confinement buildings or open feedlots, see Table 1. (Note that confinements and open feedlots include facilities of all sizes.). Another way to look at that is averaged over all certified applicators, only 1.6 percent have had a reported manure release. Yet, as noted below, that percentage could be even less.



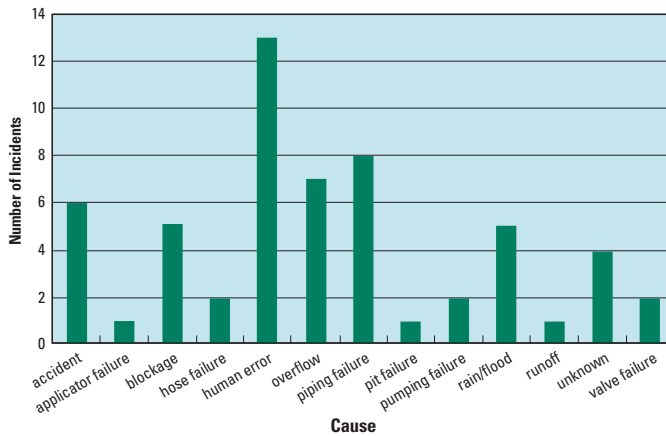


**Table 1. Source of Incident**



The number one cause of manure releases in 2007 was human error. (See Table 2.) The specific examples vary from leaving a pump while it's running to tipping over a spreader to forgetting to shut a valve completely. These were preventable events.

**Table 2. Causes of Release**



Other causes include a number of equipment failures: blocked pipes, hose leakage and pumping failure. Even the category “applicator failure” is due to a failure of application equipment. Added together they are significant sources of manure releases. For applicators and for livestock producers, the message seems clear. It's important to maintain and check equipment frequently.

Although training for certified applicators plays a part in preventing manure releases, the one factor that seems to play a large role is the weather. Wet, rainy falls produce more manure spills than long, dry falls. However, DNR field inspectors indicate that because of the training, certified applicators are better prepared to prevent releases from reaching a water of the state. They know what to do and where to go for resources.

Other common causes of manure releases include rainfall, saturated fields that readily run off, accidents and overflows from pits or basins.

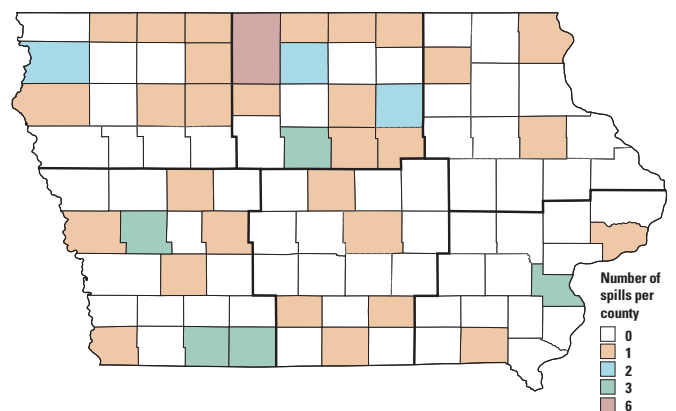
The fall of 2007 was particularly challenging because of heavy rainfall in parts of the state. Fields were too wet to harvest or too wet to apply manure. Producers had to deal with manure storage structures that were close to overflowing. Still, when the structure fills up, producers should call the DNR field office to discuss alternatives to an overflow.

Not all releases are reported, but all releases are required to be reported to the DNR, regardless of the type or size of livestock operation or the size of the release. In some cases, releases that first appeared to be minor were observed and reported by a neighbor or caused a fish kill. In many cases, DNR specialists have experienced a similar situation and can offer ideas or suggest resources to minimize damage to the environment. Producers and applicators should remember they are required by Iowa law to call the 24-hour spill line, (515) 281-8694, within six hours of the onset or discovery of the spill. The sooner you call, the more likely downstream water quality problems can be avoided or reduced.

## Location of Manure Spills

As expected, the location of manure releases parallels the location of the majority of manure applicators and the concentration of livestock and poultry operations. Map 1 shows the number of reported releases by Iowa county.

**Map 1. Documented Manure Spills in 2007**



However, location does not seem to be a factor for the amount of manure released. (See Map 2) Reported releases ranged from 5 to 40,000 gallons. Four releases in 2007 were for amounts of 10,000 gallons or more. The causes included: a broken manure transfer pipe, a plug lost when draining nursery building flush pits and a possible plumbing problem (all 10,000 gallons).

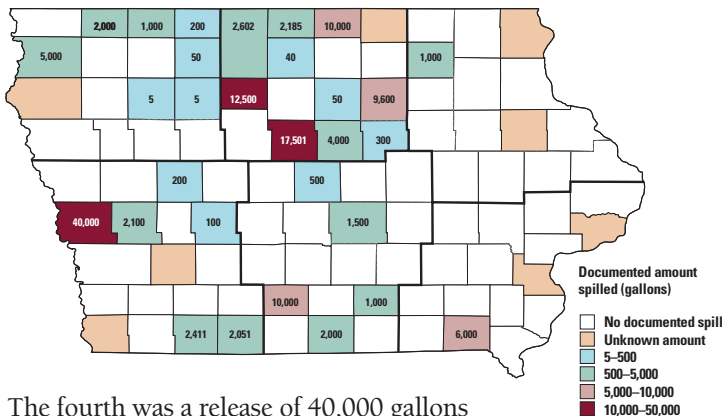
(continued on page 8)

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(Manure applicators continued from page 5)

**Map 2. Documented Gallons of Manure Spilled in 2007**



The fourth was a release of 40,000 gallons which occurred when an automatic high pressure line broke. The line was used to wash hog buildings with effluent from a lagoon.

1. Source of information – IMMAG FAQs. Includes liquid and dry manure.

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**... and justice for all**

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