

# Livestock Confinement Assessment for Water Resource Protection



For use with animals confined to buildings, lots, and yards, including beef cattle, dairy, horses, poultry, sheep, & swine.



## INDIANA FARMSTEAD ASSESSMENT PROGRAM

Determining water quality on your farm with this assessment takes just two steps: first, use the **Quick Check** on pages 2-3 to help identify areas of risk to your water quality; second, follow up the **Quick Check** by using the **Action Plan** that begins on page 4. For additional help in your area contact the local support organizations listed on the back page. Related Web sites and publications are shown on page 11.

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# QUICK CHECK

Identify any potential risks to water resources in your operation by answering these basic questions. Your answers will help identify the need for further action. This risk assessment covers well protection, facilities for liquid and solid manure storage, and nutrient management & land application for existing confined livestock operations.

**If you answer “No” to any questions in one or more sections please refer to the Action Plan starting on page 4 for information on how to reduce risk to your water quality.**

Indiana Farmstead Assessment packet (WQ-22) also includes assessments for 10 additional farmstead areas, including fuel, fertilizer, and pesticides. This packet is available from your local Extension office.

## Well Protection

Yes No

- ☐ ☐ 1. Have you checked your well water for nitrate and bacteria within the last three years?
- ☐ ☐ 2. Are water wells cased to a minimum depth of 25 feet below the ground, or have you had the well inspected by a licensed well driller or plumber?
- ☐ ☐ 3. Are all potential sources of contamination (such as pesticides, fuel, and livestock) located at least 100 feet away and downhill from your well?
- ☐ ☐ 4. Have abandoned wells on your property been properly sealed?
- ☐ ☐ 5. Are dead animals composted or incinerated at least 100 feet away and downhill from wells?

## Facilities Management

Yes No

- ☐ ☐ 1. Do you have a map of your facility showing drainage patterns, tile inlets, and bodies of water?
- ☐ ☐ 2. Are all animal buildings, manure storages, runoff holding ponds and feed lots at least 300 feet from surface waters, including drainage ditches?
- ☐ ☐ 3. Are manure storage facilities designed and managed to prevent overflowing (Indiana is a no-discharge state)?

## Facilities Management-continued

Yes No

- ☐ ☐ 4. Do you conduct monthly inspections on all manure storage & handling facilities and equipment?
- ☐ ☐ 5. Do you maintain records of self-inspections for your own benefit?
- ☐ ☐ 6. Do you have an operating permit, if required?
- ☐ ☐ 7. Is upslope storm water and roof drainage diverted around lots, yards, and manure storage areas?

## Liquid Manure Storage

*If you do not store liquid manure go to the next section*

Yes No

- ☐ ☐ 1. Are earthen storage, holding ponds, and lagoons located in impermeable soils?
- ☐ ☐ 2. Are all storage structures free of noticeable leaks or erosion?
- ☐ ☐ 3. Do you have enough storage to avoid spreading manure on frozen ground?
- ☐ ☐ 4. Do you have an emergency action plan for spills or overflow control of manure?
- ☐ ☐ 5. Are berms around earthen manure storage free of tall weeds/grasses and trees?
- ☐ ☐ 6. Are berms around earthen manure storage free of animal burrows?
- ☐ ☐ 7. Have earthen storages, ponds, and lagoons you no longer use been properly closed?

## Solid Manure Storage

If you do not store solid manure go to the next section.

Yes No

- ☐ ☐ 1. Is the manure stored on concrete or other impervious material?
- ☐ ☐ 2. Do you collect and store the runoff from lots, yards, and solid manure storage areas?
- ☐ ☐ 3. Have lots or yards you no longer use been properly closed?

## Nutrient Management & Land Application

Yes No

- ☐ ☐ 1. Do you have a specific plan for the utilization of manure produced on your farm?
- ☐ ☐ 2. Are feeds formulated for optimum nutrient utilization and minimal nutrient excretion by the animals?
- ☐ ☐ 3. Do you test representative samples of manure from each storage for available nutrients at least every three years?
- ☐ ☐ 4. Are application rates of manure based on agronomic needs of the crop to be grown on the land?
- ☐ ☐ 5. Do you avoid applying manure on highly erodible land?
- ☐ ☐ 6. If you surface apply manure do you stay at least 100 feet from ditches and water ways when surface applying manure?
- ☐ ☐ 7. If you surface apply manure, do you stay at least 100 feet from tile inlets?
- ☐ ☐ 8. Do you use vegetative buffer strips in areas where runoff is likely to occur?
- ☐ ☐ 9. Do you avoid applying manure on snow covered or frozen ground?

## Recommended Minimum Separation Distances for Indiana Livestock Operations.

This table gives separation distances for manure storage structures, transfer systems, treatment systems, livestock lots, and confinement buildings.

Separation From:	Distance (in feet)
Public Water Supply	1,000
On-site Water Wells	100
Off-site Water Wells	300
Surface Waters	300
Drainage Inlets	300
Property Lines/Public Roads	100

Source: Based on IDEM Confined Feeding Control Rule Draft  
Indiana Farmstead Assessment  
Nebraska Farm\*A\*Syst

## Recommended Minimum Manure Application Setback Distances (in feet).

Known Feature	Liquid Injected	Liquid Incorporated Solid or Composted	Land Slope Less Than 6%, or Crop Residue	Land Slope Greater Than 6%
Public Water Supply	500	500	500	500
Surface Waters, including WASCBS	25	50	100	200
Sinkholes	25	50	100	200
Wells	50	50	100	200
Drainage Inlets	5	50	100	200
Property Lines and Public Roads	0	10	50	50

Source: Based on IDEM Confined Feeding Control Rule Draft.

# ACTION PLAN

Location of Property \_\_\_\_\_

Date of Plan \_\_\_\_\_

**Directions:** Based on your Confined Livestock Quick Check assessment, mark your Areas of Concern below and follow through with the recommended steps to address your concerns. Area of Concern categories and numbers correspond with categories and numbers from the Quick Check Assessment. Publications are listed on page 11 with statewide contacts on the back page. Recording your actions provides a written record of your efforts to protect water quality.

Area of Concern	What You Can Do	Where to Get More Information	Record Your Actions
<b>Well Protection:</b>  <input type="checkbox"/> 1. Well water has not been tested in last three years for bacteria and nitrate.	a. Get well water tested for bacteria and nitrate. Check with local Health Department. b. Use a home testing kit to provide a screening for these contaminants.	WQ-1 Water Test Laboratories.  Look in local hardware stores for simple test kits. If the test is positive re-test with certified lab.	
<input type="checkbox"/> 2. Well casing does not extend 25 feet below ground.	a. Have the well inspected by a licensed well driller. b. Have proper casing installed c. Drill a new well. d. Discontinue using the well and have it sealed by a licensed well driller.	WQ-22 Indiana Farmstead Assessment  Contact IDNR for well guidelines and a list of licensed well drillers.	
<input type="checkbox"/> 3. Potential sources of contamination are within 100 feet from the well.	a. Assess the risk level of these sources, including whether the source is uphill or downhill from the well. b. Remove or contain the potential source(s) if possible.	WQ-22 Indiana Farmstead Assessment	
<input type="checkbox"/> 4. Abandoned well has not been sealed.	a. Properly seal the well. b. Contact a local well driller.	WQ-21 Plugging Abandoned Wells. A list of well drillers is available from IDNR, Division of Water.	
<input type="checkbox"/> 5. Dead animal disposal may contaminate water.	a. Incinerate or compost dead animals away from ditches, streams, and wells. b. Burial is an option, especially for a single animal or for very small animals, but burial can pose greater risks to groundwater. Animal must be at least 4 feet below ground and covered with 4 feet of soil. c. For rendering service pick-up, place dead animals away from ditches, streams, and wells.	NCR-530 Composting Poultry Carcasses, and PIH-133 Disposing of Dead Swine, NRAES-54 On-Farm Composting, and NRCS-FOTG-IN Composting Facilities 317.  Contact the State Board of Animal Health for more information on dead animal disposal.	



Area of Concern	What You Can Do	Where to Get More Information	Record Your Actions
<b>Facilities Management:</b>  <input type="checkbox"/> 1. Do not have a map showing facilities and nearby drainage inlets/outlets.	a. Draw a map using graph paper showing all facilities, drainage inlets and outlets, water ways, and surface drainage patterns. b. Use aerial photos, county soil survey, county drainage survey, etc. to help you.	Contact your local USDA Service Center for help with maps and surveys.	
<input type="checkbox"/> 2. Manure storage, livestock building or feed lot is closer than 300 feet to surface water or drainage ditch.	Complete a Farmstead risk assessment and install necessary runoff control and buffers.	WQ-22 Indiana Farmstead Assessment, ID-114 Runoff Control Systems, WQ-7 Pastures & Feedlots, and NRCS Ag Waste Management Field Handbook (AWMFH).	
<input type="checkbox"/> 3. Manure storage facility will not handle a big rainfall event given current manure inputs.	a. Improve the storage facility with help from a professional engineer or NRCS. b. Reduce the amount of manure in the storage facility to a level where enough freeboard is available to prevent overflow.	MWPS-18 Livestock Waste Facilities Handbook, NRCS-FOTG-IN Waste Storage Facility 313, Waste Treatment Lagoon 359, and AWMFH.	
<input type="checkbox"/> 4. Inspections are not conducted.	a. Conduct monthly inspections of your manure handling and storage facilities. b. In some cases specialists may help conduct inspections (see p.11).	WQ-22 Indiana Farmstead Assessment, NRCS AWMFH, see Contacts section on page 11 for specialists.	
<input type="checkbox"/> 5. Records are not kept on inspections or manure spills, overflows	Set up a record keeping system to document your inspections and efforts to contain spills.	See the Indiana Confined Feeding Rule for specific requirements and guidelines at < <a href="http://www.state.in.us/idem/olq">www.state.in.us/idem/olq</a> >	
<input type="checkbox"/> 6. Unsure if current with all necessary permits	Review the confined feeding control law (IC 13-18-10) for Indiana and ask your Extension Educator about local ordinances that may affect you.	IDEM confined feeding rule at < <a href="http://www.state.in.us/idem/olq">www.state.in.us/idem/olq</a> >	
<input type="checkbox"/> 7. Clean upslope and roof runoff water flows through facilities.	Install rain gutters on all buildings and construct swales, diversion ditches, or a collection area to divert and hold runoff.	ID-114 Runoff Control Systems, MWPS-18 Livestock Waste Facilities, PIH-21 Runoff Control for Swine, WQ-7 Pastures & Feedlots, NRCS-FOTG-IN Diversion 362, Roof Runoff Management 558, Filter Strips 393 and AWMFH.	

Area of Concern	What You Can Do	Where to Get More Information	Record Your Actions
<b>Liquid Manure Storage:</b>  <input type="checkbox"/> 1. Pit, lagoon, or holding pond is unlined and located in permeable soil.	a. If pit or lagoon is leaking discontinue use (see FF-29) b. Monitor ground water around storage area for nitrogen and <i>E. coli</i> . c. Remove the contents, allow to dry, and install a liner.	ID-120 Design & Operation of Livestock Lagoons, MWPS-18 Livestock Waste Facilities, WQ-8 Waste Storage, NRCS-FOTG-IN Waste Storage Facility 313, Waste Treatment Lagoon 359, and AWMFH.	
<input type="checkbox"/> 2. Storage facility may be leaking, or berms are eroded.	a. If possible, empty the storage facility to minimum design volume and inspect for cracks in the liner, especially the lower sidewalls. Consult with NRCS or a professional engineer to repair visible cracks in liner. b. Place monitoring wells around the storage structure. c. Keep detailed records of storage facility inputs/outputs to ascertain degree of leakage. Remember to account for rainfall and evaporation.	ID-120 Design & Operation of Livestock Lagoons, MWPS-18 Livestock Waste Facilities, PIH-62 Swine Lagoon Management, WQ-8 Waste Storage, NRCS-FOTG-IN, Waste Storage Facility 313, Waste Treatment Lagoon 359 and NRCS Ag Waste Management Field Handbook.	
<input type="checkbox"/> 3. Storage is inadequate to avoid spreading manure on frozen ground.	a. Make sure manure storage facilities have adequate capacity to store manure until favorable conditions exist for application. b. Construct additional storage facilities if necessary.	ID-120 Design & Operation of Livestock Lagoons, MWPS-18 Livestock Waste Facilities, PIH-62 Swine Lagoon Management, WQ-8 Waste Storage, NRCS-FOTG-IN, Waste Storage Facility 313, Waste Treatment Lagoon 359, and AWMFH.	
<input type="checkbox"/> 4. No emergency action plan is in place for dealing with spills or overflows.	a. Develop an emergency action plan. b. Train all employees in emergency actions. c. If manure storage or holding pond drains a sizable area, consult NRCS or a professional engineer about installing emergency overflow and secondary containment.	See the Confined Feeding Rule for specific requirements and guidelines at <a href="http://www.state.in.us/idem/olq">www.state.in.us/idem/olq</a>  See page 10, "What to Include in an Emergency Spill Response Plan."	

## NOTES:

Area of Concern	What You Can Do	Where to Get More Information	Record Your Actions
<p><i>Liquid Manure Storage-Continued</i></p> <p><input type="checkbox"/> 5. Storage berms have tall weeds or trees growing on them.</p>	<ul style="list-style-type: none"> <li>a. Make sure berms are seeded with low growing, spreading grasses.</li> <li>b. Maintain berms by mowing and removing any trees that sprout. Make sure you use safety measures when working on berms.</li> <li>c. Small grazing animals such as sheep can be used to maintain grasses if banks are too steep to mow. Additional feed and fresh water should be supplied.</li> </ul>	<p>ID-120 Design &amp; Operation of Livestock Lagoons, NRCS Agricultural Waste Management Field Handbook NRCS-FOTG-IN Waste Storage Facility 313, Waste Treatment Lagoon 359.</p>	
<p><input type="checkbox"/> 6. Animal burrows are present in berms.</p>	<ul style="list-style-type: none"> <li>a. Remove burrowing animals and repair places where animals have burrowed.</li> <li>b. Discourage burrowing animals and prevent damage by keeping vegetation trimmed and fencing around the storage facility.</li> </ul>	<p>ID-120 Design &amp; Operation of Livestock Lagoons, NRCS Agricultural Waste Management Field Handbook, NRCS-FOTG-IN Waste Storage Facility 313, Waste Treatment Lagoon 359.</p>	
<p><input type="checkbox"/> 7. Unused earthen storage, pond, or lagoon has not been properly closed.</p>	<ul style="list-style-type: none"> <li>a. Close the storage facility by removing all liquids and sludge, divert runoff, fill facility with soil and grade to shed water, and establish a growing crop or sod to prevent erosion.</li> <li>b. Remove storage contents including any settled solids and convert the facility to a farm pond (see FF-29).</li> </ul>	<p>FF-29 Closure of Earthen Manure Storages (Including Holding Ponds and Anaerobic Lagoons), and NRCS-FOTG-IN Closure of Waste Impoundments 360.</p>	

## NOTES:

Area of Concern	What You Can Do	Where to Get More Information	Record Your Actions
<b>Solid Manure Storage:</b>  <input type="checkbox"/> 1. Manure is stored directly on ground for long periods.	a. Investigate the use of a liner or constructing a better facility. b. Composting manure may reduce time that manure is stored on the ground. Composted manure is also at less risk of leaching nutrients to groundwater.	ID-122 Solid Waste Handling for Dairy, MWPS-18 Livestock Waste Facilities, PIH-67 Swine Waste Alternatives, WQ-7 Pastures & Feedlots, WQ-8 Waste Storage, and NRAES-54 On-Farm Composting.	
<input type="checkbox"/> 2. Runoff from feed lots, yards, or manure storages is not contained.	a. Construct runoff control facilities with help from a professional engineer or NRCS. b. Clean feedlot weekly to minimize nutrients in the runoff. c. Adjust animal densities to decrease rate of manure buildup.	ID-114 Runoff Control Systems, MWPS-18 Livestock Waste Facilities, PIH-21 Runoff Control for Swine, WQ-7 Pastures & Feedlots, NRCS-FOTG-IN Diversion 362, Roof Runoff Management 558, Filter Strips 393, and AWMFH.	
<input type="checkbox"/> 3. Unused earthen lots or yards have not been properly closed.	a. Remove first 6-12 inches of soil and spread it on fields at appropriate agronomic rates. Fill former lot/yard with other material. b. Till and plant lot/yard to a high-nitrogen using crop.	WQ-22 Indiana Farmstead Assessment, NRCS-FOTG-IN Cover or Green Manure Crop 340.	
<b>Nutrient Management &amp; Land Application:</b>  <input type="checkbox"/> 1. No plan is followed for managing manure.	Develop a manure management plan together with help from your local Extension Educator, SWCD/NRCS office, or consultant, and implement it.	AI-9 Manure Treatment, AI-10 Manure Utilization, ID-101 Manure as Plant Nutrient Resource, ID-205, 206, 208 Swine, Poultry, Dairy Manure Management Planning, NRCS-FOTG-IN Nutrient Management 590, Waste Utilization 633, and AWMFH.	
<input type="checkbox"/> 2. Unsure if using optimum feed rations for minimum nutrient excretion.	Consult with a livestock specialist and Extension Educator.	Visit the Purdue Animal Science Species Web Sites for information on nutrition (see page 11).	
<input type="checkbox"/> 3. Manure is not tested for nutrients before being land applied.	Get samples tested for N,P,K and use the results to calculate necessary application rates based on soil tests and crops grown.	AY-277 Calculating Manure and Nutrient Applications, ID-101 Animal Manure as a Plant Nutrient Resource, NRCS-FOTG-IN Nutrient Management 590, Waste Utilization 633, and AWMFH.	



Area of Concern	What You Can Do	Where to Get More Information	Record Your Actions
<i>Nutrient Management &amp; Land Application-Continued</i>  <input type="checkbox"/> 4. Manure application rates are unknown.	Get help with calculating manure nutrient values and matching application rates for the crop grown and available soil nutrients.	AY-277 Calculating Manure and Nutrient Applications, AY-281 Soil Sampling for NPK, ID-101 Animal Manure as a Plant Nutrient Resource, WQ-16 Land Application of Manure, NRCS-FOTG-IN Nutrient Management 590, Waste Utilization 633, and AWMFH.	
<input type="checkbox"/> 5. Manure is applied to highly erodible land.	Discontinue this high-risk practice unless the land has sufficient residue protection, crop cover or is in accordance with a conservation plan.	WQ-16 Land Application of Manure, IDEM Confined Feeding Rule, NRCS-FOTG-IN Nutrient Management 590, and Waste Utilization 633.	
<input type="checkbox"/> 6. Manure is surface applied within 100 feet of water ways.	Install buffer strips along water ways to catch nutrient runoff, inject manure rather than surface apply, and/or maintain at least a 100 foot distance from water ways.	AY-285 Vegetative Filter Strips, NRCS-FOTG-IN Nutrient Management 590, Waste Utilization 633, and Buffer Strip 741.	
<input type="checkbox"/> 7. Manure is surface applied within 100 feet of tile inlets.	Adjust spreading procedures to stay at least a 100 foot distance from all tile inlets.	WQ-16 Land Application of Manure, NRCS-FOTG-IN Nutrient Management 590, and Waste Utilization 633.	
<input type="checkbox"/> 8. No buffer strips or control measures are in place where runoff occurs.	Consider installing buffer strips and swales along water ways or other areas as needed to prevent runoff from polluting water. Contact NRCS for help.	AY-285 Vegetative Filter Strips, NRCS-FOTG-IN Nutrient Management 590, Waste Utilization 633, and Buffer Strip 741.	
<input type="checkbox"/> 9. Manure is applied to snow covered or frozen ground.	Make sure manure storage facilities have adequate capacity to store manure until favorable conditions exist for application.	See IDEM Confined Feeding Rule and Technical Guidance Document, AW-1. NRCS-FOTG-IN Nutrient Management 590, and Waste Utilization 633.	

## NOTES:

# WHAT TO INCLUDE IN AN EMERGENCY SPILL RESPONSE PLAN

In the event of a manure spill, being prepared to take appropriate action can mean the difference between protecting and contaminating water resources. In the case of animal manure, “spill” is defined (327 IAC 16-2-36) as “any unexpected, unintended, abnormal, or unapproved dumping, leakage, drainage, seepage, discharge or other loss of [manure].” Get started on your emergency response plan by completing the following:

- ☐ 1. Have a farmstead map indicating where spills can occur and their accompanying drainage points. If a spill occurs indicate the spill location and drainage of the spill on the farmstead map.
- ☐ 2. Persons identified by the owner/operator as responsible for implementing the emergency spill response plan:

**Name**

**Phone**

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- ☐ 3. Identify actions and equipment necessary to contain, manage, and clean-up a manure spill.

**Action**

**Equipment**

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- ☐ 4. All persons working at the site should be familiar with the emergency action plan and location of equipment.

## If a manure spill occurs:

A. Contain the spill, if possible, and prevent additional spilled material from entering the waters of the state.

B. Then You **MUST** Call...

**As soon as possible, but within two hours of discovery of the spill:**

Indiana Department of Environmental Management **1-888-233-7745** (Emergency Response Line).

C. You **MAY** need to Call...

1. Local Health Department (if potential for human exposure exists) phone: \_\_\_\_\_.

2. Indiana Department of Natural Resources (if potential for fish/wildlife exposure exists) 1-800-847-4367.

# WHERE TO GET MORE INFORMATION

## Purdue Extension Specialist Assistance:

Dr. Don Jones, Professional Engineer/Manure Management  
1146 Agricultural and Biological Engineering  
Purdue University  
West Lafayette, IN 47907-1146  
Phone: 765/494-1178 E-mail: [jonesd@purdue.edu](mailto:jonesd@purdue.edu)

Dr. Alan Sutton, Manure Management  
Department of Animal Sciences  
1026 Poultry Bldg.  
Purdue University  
West Lafayette, IN 47907-1026  
Phone: 765/494-8012 E-mail: [asutton@purdue.edu](mailto:asutton@purdue.edu)

Dr. Brad Joern, Manure Management  
Department of Agronomy  
1050 Lilly Hall  
Purdue University  
West Lafayette, IN 47907-1050  
Phone: 765/494-9767 E-mail: [bjoern@purdue.edu](mailto:bjoern@purdue.edu)

## Purdue Extension Publications:

Contact your county Extension office or Media Distribution Center (1-888-398-4636) for the following:

***For additional assessment topics ask for WQ-22 Indiana Farmstead Assessment***

AI-1 E.coli in Surface and Ground Water  
AI-10 Total Farm Nutrient Management-Manure Utilization  
AI-9 Total Farm Nutrient Management-Manure Treatment  
AY-277 Calculating Manure and Nutrient Applications  
AY-281 Soil Sampling for NPK  
AY-285 Vegetative Filter Strips  
FF-2 Livestock Manure Can Reduce Fertilizer Costs  
FF-29 Closure of Earthen Manure Storages  
FF-33 Total Farm Nutrient Management-Swine  
FF-34 Best Management Practices for Swine Manure  
FNR-171 Wetlands, Regulations, and You  
ID-101 Animal Manure as a Plant Nutrient Resource  
ID-114 Runoff Control Systems for Open Feedlots  
ID-120 Design and Operation of Livestock Lagoons  
ID-122 Solid Waste Handling for Dairy Operations  
ID-205 Swine Manure Management Planning  
ID-206 Poultry Manure Management Planning  
ID-208 Dairy Manure Management Planning  
NCR-530 Composting Poultry Carcasses  
PIH-133 Disposing of Dead Swine  
PIH-21 Systems of Runoff Control for Swine  
PIH-35 Legal Guidelines for Swine Waste Management  
PIH-62 Swine Lagoon Management  
PIH-67 Swine Waste Management Alternatives  
WQ-1 Water Testing Laboratories  
WQ-4 Why & How To Test Your Water  
WQ-7 Pastures & Feedlots  
WQ-8 Waste Storage  
WQ-9 Water Quality for Animals  
WQ-15 Bacterial Contamination of Household Water  
WQ-16 Land Application of Manure

WQ-17 Agriculture's Effect on Environmental Quality  
WQ-21 Plugging Abandoned Wells  
WQ-22 Indiana Farmstead Assessment System  
WQ-27 Nitrate and Indiana's Groundwater

## Publications & Resources available from Purdue Farm Building Plan Service

1146 Agricultural and Biological Engineering  
West Lafayette, IN 47907-1146  
Phone: 765/494-1174  
Web: <http://www.ecn.purdue.edu/ABE/Extension>  
*MWPS-18 Livestock Waste Facilities Handbook*  
*NRAES-54 On-Farm Composting Handbook*  
*AMANURE & MBUDGET computer programs*

## Purdue University Web Sites:

Beef: <http://www.ansc.purdue.edu/beef>  
Dairy: <http://www.anr.ces.purdue.edu/anr/anr/dairy/frame.htm>  
Manure Management: <http://www.agry.purdue.edu/mmp>  
Poultry: <http://ag.ansc.purdue.edu/poultry>  
Sheep: <http://ag.ansc.purdue.edu/sheep>  
Swine: <http://www.ansc.purdue.edu/swine>  
Water Quality: <http://www.ecn.purdue.edu/Safewater>

## NRCS Field Office Technical Guide (FOTG)

has standards for many conservation practices including the following for livestock facilities:

*313 Waste Storage Facility*  
*317 Composting Facilities*  
*340 Cover or Green Manure Crop*  
*359 Waste Treatment Lagoon*  
*360 Closure of Waste Impoundments*  
*362 Diversion*  
*393 Filter Strips*  
*558 Roof Runoff Management*  
*590 Nutrient Management*  
*633 Waste Utilization*  
*741 Buffer Strip*

The above NRCS standards can be accessed through the local Conservation Partnership field offices and/or this web site: <http://www.in.nrcs.usda.gov>. The NRCS Ag Waste Management Field Handbook is also available. Ask about cost-share opportunities for practice changes on your farm.

## Sustainable Livestock Production Guides:

Appropriate Technology Transfer for Rural Areas  
PO Box 3657  
Fayetteville, AR 72702  
1-800-346-9140  
Web: <http://www.attra.org>

## Poultry Water Quality Handbook:

U.S. Poultry & Egg Association  
1530 Cooledge Road  
Tucker, Georgia 30084-7303  
Phone: 770/493-9401  
Web: <http://www.poultryegg.org>

# LOCAL & STATEWIDE CONTACTS

Abbreviation	Contact Information	Phone
Purdue Extension	<b>Purdue University Cooperative Extension Service</b> Call your local county office listed under County Government Offices in the phone book or call 1-888-EXT-INFO for on-campus assistance. Web: < <a href="http://www.ces.purdue.edu/">http://www.ces.purdue.edu/</a> >  Publications are also available by calling the Media Distribution Center at 1-888-398-4636. Many publications are online at < <a href="http://www.agcom.purdue.edu/">http://www.agcom.purdue.edu/</a> >.	1-888-398-4636 (toll free)  Local Extension Office Phone: _____
NRCS SWCD IDNR	<b>USDA Natural Resources Conservation Service</b> <b>IN Dept. of Natural Resources, Division of Soil Conservation</b> <b>County Soil and Water Conservation District</b> Web (NRCS): < <a href="http://www.in.nrcs.usda.gov/">http://www.in.nrcs.usda.gov/</a> > Web (SWCD): < <a href="http://www.iaswcd.org/index.htm">http://www.iaswcd.org/index.htm</a> > Web (IDNR-Soil Conservation): < <a href="http://www.ai.org/dnr/soilcons">http://www.ai.org/dnr/soilcons</a> > Each county in Indiana has a Soil & Water Conservation Office. Phone numbers are usually listed under the County Government Offices in the phone book.	Local SWCD Office Phone: _____
IDEM	<b>Indiana Department of Environmental Management</b> Confidential Assistance, Ag Relations Office 317/232-8587 Emergency Response for spills 1-888-233-7745 Web: < <a href="http://www.state.in.us/idem/olq">http://www.state.in.us/idem/olq</a> >	317/232-8587
IDNR	<b>Indiana Department of Natural Resources</b> Division of Water, Well Water Information 1-877-928-3755 Web: < <a href="http://www.state.in.us/dnr/water">http://www.state.in.us/dnr/water</a> >	1-877-928-3755
Farm*A*Syst	<b>Indiana Farm*A*Syst Coordinator</b> 1146 Agricultural and Biological Engineering Purdue University West Lafayette, IN 47907-1146 765/496-6331 Web: < <a href="http://www.ecn.purdue.edu/SafeWater">http://www.ecn.purdue.edu/SafeWater</a> >	765/496-6331
BOAH	<b>Indiana State Board of Animal Health</b> (Dead Animal Disposal Information) 805 Beachway Drive, Suite 50 Indianapolis, IN 46224-7785 765/227-0300 Web: < <a href="http://state.in.us/boah">http://state.in.us/boah</a> >	765/227-0300  Your Veterinarian: _____
ISDH	<b>Indiana State Department of Health</b> 635 North Barnhill Drive Indianapolis, IN 46202-5120 317/233-1325 Web: < <a href="http://www.state.in.us/isdh">http://www.state.in.us/isdh</a> > Local health departments are listed under County Government Offices in the phone book.	317/233-1325  Local Health Department Phone: _____

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