



Management Solutions

Agronomic Solutions, LLC

Fall 2012 Issue



Call today to schedule an appointment for us to come out and go over the new IDEM rules and requirements with you in detail.

See the insert for details on enrolling in our new **Compliance Program**.

New IDEM CFO Rules for 2012

All IDEM CAFO general permits have expired. Your farm should have been rolled into the new CFO Rule program on July 1st of 2012. Major Provisions of the new rule:

- Only actual discharges require an individual NPDES permit. General permits will no longer be available.
- Nutrient management plan of all nutrients must be developed and approved.
- No application to frozen or snow-covered ground will be allowed. There may be provision in emergencies.
- Steps must be taken to prevent contamination to storm water. Storm water Certification is required.
- Manure Application will be based upon both phosphorus (NRCS 590 Standard) and nitrogen limits.
- New Operating Records requirements — Weekly manure storage inspections.
- Mandatory annual manure testing
- Construction must be done in accordance with CFO Rule provisions.
- A professional engineer must certify the construction of all liquid manure storages.
- Construction standards and technical resources are contained in the rule.
- A design or compliance approach which varies from those in the rule may be granted by the commissioner of IDEM.

We are planning to schedule some informational meetings this winter and will keep you posted on the dates and locations.

This is a seasonal publication produced by Agronomic Solutions, LLC for the confined feeding operators. Issues and information addressed in the newsletter will be geared towards animal feeding operation owners and managers. Hopefully you will find its contents useful in your operations. (260) 593-2092

Fall To Do Checklist ...

Fall is a busy time of year with a lot of work to get done. Here is a quick reminder checklist to make sure everything gets done.

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| <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Safely harvest crops <input checked="" type="checkbox"/> Clean out and inspect manure storages <input checked="" type="checkbox"/> Collect manure samples for analysis <input checked="" type="checkbox"/> Spread manure at agronomic rates | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Calibrate manure spreaders <input checked="" type="checkbox"/> Soil sample land application fields <input checked="" type="checkbox"/> Spread cover crops on liquid surface applied fields <input checked="" type="checkbox"/> Update manure spreading & operating records <input checked="" type="checkbox"/> Sign up for NRCS EQIP contracts |
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Value of Manure Current Book Values ...

The charts below show the average manure value per acre.

Current Fertilizer Prices

28% Semi- prepay	560# N/ton	\$360.00/ ton	\$0.643/ # N
11-52-0	1040# P ₂ O ₅ /ton	\$675.00 / ton	\$ 0.649/ # P ₂ O ₅
0-0-60 Semi	1200# K ₂ O/ton	\$570.00 / ton	\$0.475/ # K ₂ O

Swine Grower Pit			Dairy Lagoon		
N	33	\$21.22	N	2.1	\$1.35
P	33	\$21.40	P	9	\$5.84
K	27	\$12.83	K	9.3	\$5.42
	Per 1000 gal	\$55.46		Per 1000 gal	\$11.61

4000 gal/A = \$221.84/acre

12,000 gal/ A = \$139.31/acre

Beef – Manure Pack			Litter - Broilers		
N	5.3	\$3.41	N	23.4	\$15.05
P	5.0	\$3.25	P	30.9	\$20.05
K	7.6	\$3.61	K	24.3	\$11.54
	Per ton	\$10.26		Per ton	\$46.64

25 ton/A = \$256.57acre

5.0 ton/A = \$233.21/acre

Manure is often an under-valued resource - if well managed and properly applied, it reaps many benefits.

Please note that the money amounts in the chart are just a general guideline to give you an idea of what your manure could be worth. You will not be able to sell the manure for the prices listed. There are many other considerations such as transportation and spreading costs and the fact that not all the nutrients will ever be plant available that must be taken into account when setting a price.

The purpose of this chart is to show you that your manure does have value and should not be wasted or over applied to the fields.

It's important to know what rates you are actually spreading so make sure you calibrate your spreading equipment for the proper rate. Taking credit for nutrients that you apply adds up to big savings on your fertilizer bill.

...now worth an average \$213/ acre.

Category 14 Reminder ...

If you have an IDEM permit and come under one of these three groups, you need to make sure you have the **Category 14 License**.

1. You spread manure commercially, either from your operation or from some other permitted operation
2. You spread manure from your own permitted operation on your own fields
3. You buy or receive manure from another CFO or CAFO to spread on your fields

If you sell or give away manure from your IDEM permitted farm, you must get a **Distributors License**. This License must be applied for annually at a cost of \$45 per year.

Distribution renewals will be due at the end of the year. The State Chemist should send you the renewal information. Let me know if you do not receive this info from the State Chemist.

It is important that you contact us if you have not gotten your license so we can get a class for you. If you are not sure, give me a call so we can help you figure it out.

FYI: More rules in the pipeline effective February 2013 for Fertilizer and Manure use. Be watching! We will do our best to keep you updated.

Indiana Board of Animal Health Premise ID

Do you have your premise id? Did you know that you need one?

As stated in the Rule Summary from the Indiana State Board of Animal Health "A premise registration will be required for each person that buys, sells or exhibits livestock. These individuals must obtain a premise identification number for each of their Indiana premises."

If you have not yet registered your farm please contact us as soon as possible so that we can get the proper paperwork filled out to do so.

There is no cost for the Premise ID. It is necessary to help with animal disease control.

Manure Sampling ...

Are you staying on top of the manure sampling that is required for the various plans? I find that this is an area where the majority of the producers I work with are lacking.

If you have an EQIP 633, a CFO, or a CAFO **you are required to have an annual manure sample**.

According to the Indiana regulations for CFOs and for CAFOs you are required to have annual sampling in ALL storages. That means you must pull a sample from each storage EVERY year. This is definitely an area where we need to be more consistent.

STEPS TO TAKE WHEN PULLING MANURE SAMPLES

1. Pull the manure samples
2. Freeze the samples and keep frozen
3. Call me to get my lab ID so you can turn it in — or call me and I will stop by, pick them up, and get them to the lab for you.

However you choose to get the samples to the lab is OK — **JUST DO IT!**

And then ... make sure I get the results.

Cover Crops—Manure's Best Friend ...

After the fall harvest there is little crop residue and, regardless of soil type, machinery and rain pack the soil making the surface hard and impermeable. Much of the surface applied manure will be carried away by the next rain.

Consider the Cover Crop.

The roots of the cover crop make the soil surface more permeable so water and manure pollutants are less likely to move over the surface. The top growth reduces runoff. Manure nutrients are literally held hostage over the winter. The nitrogen is harnessed in the roots and green tissue ready to be released in the spring when the cover crop is killed off. Even if only 40 pounds per acre of nitrogen are retained, spring fertilizer costs can be reduced by \$30 per acre. The savings increase when phosphorus and potassium values are included.

Cover crops not only improve soil quality, add organic matter and reduce compaction, but a green cover crop in late winter and early spring makes a good impression on your neighbors.

Remember, the cover crop must be killed in the spring, not harvested, for the nutrients to be saved for the new crops. Cover crop seedings do not have to be perfect. The goal is not yield per acre but nutrient recovery and environmental protection per acre.

Foaming Manure Guidelines ...

Fall is a time to spread manure. With cooler temperatures and reduced ventilation rates in finishing facilities, there are increased risks associated with manure hauling; particularly when there is foam in manure pits. Severe burns, pig deaths and building fires have been reported in recent years on farms where foam and methane have accumulated in manure pits.

As foam forms on manure, surface gases are captured in the bubbles. They may contain 60 to 70 % methane. When the foam is undisturbed there is minimal risk. However, when the foam is disturbed through regular management activities such as manure agitation and/or pumping and power washing, large amounts of methane may be released into the air space above the slats. The released methane is easily ignited and may lead to barn explosions and flash fires. Minimum ventilation rates increase the risk.

Farmers with foaming manure pits need to take precautions.

- When hauling manure, do not enter and do not let employees enter the room being pumped. The risk is too great to allow for visual monitoring.
- Be extremely cautious when power washing rooms over foaming pits.
- Turn off heaters, pilot lights and non-ventilation electrical equipment in the room being pumped or power washed. Enforce no smoking rules.
- Open all air inlets slightly to reduce static pressure and prevent incoming ventilation air from short-circuiting through the pump out opening. Lowering static pressure also helps ensure the wall fans don't overpower the pit ventilation and draw pit gases up into the air space above the slats.
- Maximize ventilation during warmer weather.
- During cool weather, set the pit ventilation at its maximum level and run at least one wall fan (20 to 30 CFM per pig minimum).
- Continue to run pit ventilation while the room is empty between groups of pigs. Many of the flash fires reported happened while the barn was empty.
- If the pit is nearly full of manure or a combination of manure and foam, don't agitate until there is two to three feet of head space in the pit. Lack of head space reduces the effectiveness of the pit ventilation and allows gases to escape into the air space above the slats.
- Discharge all agitated manure under the manure surface. Do not shoot manure over the pit surface (rooster tail) and do not shoot manure against walls and pillars. As the pit empties shut down the agitation when the returning stream begins to disturb the manure surface.
- Allow the ventilation system to operate at increased levels for at least 30 minutes after disturbance to the foam has been complete.



Place
Stamp
Here

Melissa Lehman
7070 S 500 W
Topeka, IN 46571
Phone: 574-202-2608
Office/Fax: 260-593-2092
E-mail: melissa@agronomicsolutionsllc.com

Newsletter

website: agronomicsolutionsllc.com

Soil Sampling...

A good soil sampling program is the basic building block for your entire farming operation.

- ♦ Are your soil samples 2—3 years old?
- ♦ Do they represent areas greater than 20 A?

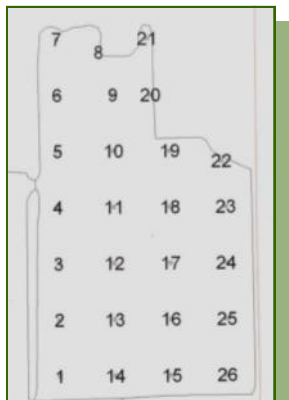
If you answered "yes" to either of these questions, you should have new samples pulled this fall!

Please contact us today to get on the fall sampling schedule.

Grid

Sample every 2.5 A grid on the field

Consider intensively sampling your fields.



Combat high fertilizer prices with a good soil sampling program with unbiased fertilizer recommendations.

Dates to Remember ...

We will exhibit at the following Farm Shows. Come and see us!

Dec. 6 - 8: 2012 Midwest Farm Expo & Auction
location: Michiana Event Center
Howe, IN

Jan. 15, 16, 17: 2013 Fort Wayne Farm Show
location: Allen Co. War Memorial Coliseum, Ft. Wayne, IN

Other Dates:

Dec. 15: Michigan CAFO deadline to prove 6 months storage

Sign up for NRCS's EQIP 590 High Management cost share to cover 100% of expenses plus leave \$\$ in your pocket.