



Management Solutions

Agronomic Solutions, LLC

Winter 2013 Issue



Introducing

the newest member of the Agronomic Solutions family

Tiffany Rolin

We are happy to announce that Tiffany Rolin joined our little group of “Manure Ladies” the day after Christmas. Let me introduce her to you.

Tiffany married Keith Rolin 13 years ago. They have two daughters, Amber and Kaylie. She comes to us after five years as a para-pro at Westview High School.



She has a life long background in farming, and was a 10 year member of 4-H in St. Joe County, Michigan. She has continued her 4-H involvement working with her daughters primarily in dairy. Her daughters have also shown poultry and hogs.

Tiffany’s responsibilities will include IDEM Permitting and heading up the new IDEM Compliance Program. In addition she is taking over some of the soil sampling. In her short time with us she has already experienced the joy of pulling soil samples in freezing weather. I think she is ready for spring.

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

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Winter To Do Checklist

Winter is a time to step back and catch your breath from the busy cropping seasons. But to keep your competitive edge you must keep organized and educate yourself.

- Research & choose the best hybrids for your farm.
- Update IDEM/ DEQ operating records binder.
- Attend Farm Shows and meetings to see new ideas and equipment.
- Complete annual NDPES report. Call and make an appointment if you want help or to review.
- Visit your NRCS DC to learn about cost- share programs and opportunities.
- Analyze yield maps with a professional, if available.
- Update manure spreading and distribution records.

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	\$375.00/ ton	\$0.669/ # N
18-46-0	920# P ₂ O ₅ /ton	\$625.00 / ton	\$ 0.679/ # P ₂ O ₅
0-0-60 Semi	1200# K ₂ O/ton	\$547.00 / ton	\$0.455/ # K ₂ O

Swine Grower Pit			Dairy Lagoon		
N	33	\$22.07	N	2.1	\$1.40
P	33	\$22.41	P	9	\$6.11
K	27	\$12.29	K	9.3	\$4.23
	Per 1000 gal	\$56.77		Per 1000 gal	\$11.74

4000 gal/A = \$227.08/acre

12,000 gal/ A = \$140.88/acre

Beef – Manure Pack			Litter - Broilers		
N	5.3	\$3.55	N	23.4	\$15.65
P	5.0	\$3.40	P	30.9	\$20.98
K	7.6	\$3.46	K	24.3	\$11.56
	Per ton	\$10.41		Per ton	\$48.19

25 ton/A = \$260.25 acre

5.0 ton/A = \$240.95/acre

...now worth an average \$217/ acre

Predetermine Manure Spreading Rates

As rules and regulations get stricter, producers need to be aware of the importance of keeping records and not over applying their manure. Manure is a valuable commodity with the increasing fertilizer prices. There are two key components in determining the proper spread rate of manure: soil test phosphorus level; manure analysis.

For IDEM permitted operations, a manure sample is required to be pulled each year from each manure storage where manure is taken to be spread. Soil samples should be pulled based on university standards at least once every 4 years. University standards state that one sample should not represent more than 20 acres.

When planning manure applications, carefully examine your location choices. Fields with the lowest phosphorus levels should be the starting point for manure applications. In Indiana, fields with soil test phosphorus levels greater than 200 ppm (in Michigan, 150 ppm) should not have manure applied to them. The ideal spreading ground are fields that have phosphorus levels of 50 ppm or less.

New District Conservationists ...



LaGrange Co.
Kevin Shide
(260) 463-3166
ext. 104



DeKalb Co.
Derek Thompson
(260) 925-3710
ext. 119



Elkhart Co.
Amanda Kautz
(574) 533-4383
ext. 105



Steuben Co.
Brian Musser
(260) 665-3211
ext. 111

The following counties in Northern Indiana have changed District Conservationists: LaGrange, Elkhart, Steuben, DeKalb and Kosciusko.

NRCS is reporting that they have more money than normal this year. You need to know who your new DC is so you can call for an appointment to go in to sign up for your EQIP Cost Share. Call soon to get everything in order before the deadline on March 15, 2013.

If you have been turned down in the past, try again!

IDEM Record Keeping Changes...

The IDEM rule change went into effect on July 1, 2012. Included in this rule were changes to the record keeping requirements.

The first change is that all farms, CFOs & CAFOs, are to do **weekly** self-inspections, instead of monthly or daily. Additional information required when keeping manure spreading records includes:

- precipitation events 24 hours prior until 24 hours after the application of manure
- a narrative explaining the basis for determining the manure application rates
- a written conservation plan for the application of manure to highly erodible land.

If a producer plans to land apply liquid manure via an irrigation system the farm must have a written spray irrigation plan in their operating records.

Remember: IDEM requires a manure sample pulled each year if you spread manure.

Kosciusko Co. Acting DC: Deb Knepp, (574) 267-7445 ext. 117

Category 14: Agricultural Fertilizer Applicator Certification

Office of the Indiana State Chemist & Seed Commissioner

(765) 494-1492

Who needs the Category 14: Agricultural Fertilizer Applicator Certification?

- ANY person applying manure from a Confined Feeding Operation (CFO) on property they own or manage.
 - This includes manure from a CFO-sized facility from out-of-state.
- Need the commercial Category 14 Commercial license if you spread manure for hire. This requires the same test as private manure haulers.

Category 14 Distributors License:

- Required for those to sell or distribute any manure from a CFO or CAFO to another farm or producer.
- Application can be found at http://www.isco.purdue.edu/pesticide/fertilizer_distributor_license.html

2013 Regional Exam Schedule

Date	Location	Time
February 11	Monroe, Adams County 4-H Dining Hall	Anytime between 4:00-7:00 p.m.
February 18	Wanatah, Pinney Purdue Ag Center	Anytime between 4:00-7:00 p.m. CDT
February 25	Kendallville, Log Building Noble County Fairgrounds	Anytime between 4:00-7:00 p.m.
March 25	Brazil, Clay County 4-H Bldg.	Anytime between 4:00-7:00 p.m.

At the Regional exam sites, the Pesticide Core, Pesticide Fumigation exam, and/or the Category 14 Fertilizer Certification exams for private applicators can be taken. Training is not offered at these locations. Advance registration is strongly encouraged, call 765-496-7499.

Requirements for maintaining Category 14: Agriculture Fertilizer Applicator Certification

- 3 Continuing Credit Hours (CCH's) over a 5 year period.
- A certified applicator may obtain no more than half the number of required CCH's at any single program

Future Conference Dates with available qualifying CCH's

- January 31, 2013: Category 14 Ag Fertilizer Applicator Regional Meeting
 - North Manchester, IN: Starting at 9a
 - Sponsor: Curt Campbell (260) 563-0661
- February 6, 2013: What it means to be a livestock producer in 2013
 - Warsaw, IN: Starting at 9:30a
 - Sponsor: Kelly Heckaman (574) 372-2340
- February 14, 2013: Northern Indiana Soil Management Seminar
 - Goshen, IN: Starting at 12:45p
 - Sponsor: Jeff Burbrink (574) 533-0554
- February 18, 2013: Wabash Co. Adult Farm Program
 - Wabash, IN: Starting at 7p
 - Sponsor: Curt Campbell (260) 563-0661

IDEM Winter Spread Update

We have turned in many winter time spread applications for our customers and have not heard when a decision will be made on those. We have spoken with many IDEM officials and feel that the applications for winter time spreading will not be granted this year. We have been advised to inform you that if you absolutely need to spread we need to use the emergency provision for this. If you want to enact this provision you need to call us so we can let IDEM know and follow the proper channels prior to the spreading of manure. An easier option is to distribute the manure off the farm to someone with a Category 14 License, which is acceptable by IDEM's rules. We have also been advised to inform you that if you do not have enough storage to make it through the winter months without spreading then you need to create a plan for adding manure storage. Remember, that NRCS has money available for cost share on manure storages. We highly recommend that you call your State Legislator to complain and help get this rule changed!

**Indiana State Chemist & Seed Commissioner
NEW Fertilizer Material Use, Distribution, and Record Keeping Rule-Effective Feb 16, 2013**

<p><u>Staging Restrictions: Manure</u></p> <ul style="list-style-type: none"> ➤ Stage 300 ft away from surface water, water well, drainage inlets (risers in field) ➤ Cannot stage in a waterway, floodway or standing water ➤ Cover, or berm, pile after 72 hours ➤ Stage 100 feet from property line or public road ➤ Stage 400 feet from residential buildings ➤ Do not stage on an area of greater than 6% slope ➤ Do not stage on the side of a hill ➤ Apply to field within 90 days 	<p align="center"><u>Manure Application Restriction to Highly Erodible Land</u></p> <p>Manure cannot be applied to HEL land UNLESS there is:</p> <ul style="list-style-type: none"> ➤ At least 40% crop residue; or ➤ A vegetative cover crop
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Manure Application Restrictions: Setback distances apply to anyone applying manure

	Liquid injection or Single-pass Incorporation Liquid or Solid	Liquid incorporation (within 24 hrs.) or Surface-application solid	Liquid-surface application (no injection or incorporation)	
			Less than 6% slope or residue cover	Greater than 6% slope
Public Water Supply	500 ft	500 ft	500 ft	500 ft
Surface Waters	25 ft	50 ft	100 ft	200 ft
Sinkholes	25 ft	50 ft	100 ft	200 ft
Water Wells	50 ft	50 ft	100 ft	200 ft
Drainage Inlets	5 ft	50 ft	100 ft	200 ft
Property Lines	0 ft	10 ft	50 ft	50 ft
Public Roads	0 ft	10 ft	50 ft	50 ft

Manure Application Restrictions to Frozen or Snow-covered Ground

1. CFO/CAFO (IDEM-Permitted) CANNOT apply manure to frozen ground, unless special permission granted by IDEM.
2. Manure from all other sources CAN apply manure to frozen ground in the following circumstances.
 - Application allowed if equipment can inject or incorporate in that same day when the crop is not in the field. Application can be at full recommended rate.
 - If the equipment can only apply the manure to the surface without incorporation, then the following rules cover those surface-only applications:
 - Cannot apply within 200 ft of surface water
 - Cannot apply in floodway
 - Can apply up to 50% of next crop's need
 - Cannot apply to greater than 2% slope UNLESS 40% residue or crop cover
 - Surface application (no injection or incorporation) must follow setback distances

Manure

Application Monitoring

1. Monitor soil conditions and weather forecast for the 24 hours before the application
2. Monitor surface water and field tile for change in color, flow or volume
3. If there is a change:
 - Report it as a spill to IDEM: (888) 233-7745
 - Stop the application immediately;
 - Stop or capture the effluent; and
 - Land apply or store the effluent.

Required CRO Manure Sales Records: Application Name and Certification Number

Required Application Records: *(Only Category 14 Certified Applicators)*

- Location, Certified Applicator Name & Number, Fertilizer, Nutrient Value, Rate/acre, Method
- No specific form
- Kept for 2 years

Attention: Michigan DEQ CAFOs ...

Your annual reports are due on April 1st. We would like to get them done as soon as possible to avoid the "office chaos" of trying to meet the deadlines in the last week.

Michigan CAFO operators, please contact us to set up an appointment for us to come see you or for you to come to our office. We would like to collect all of your information before March. You will be receiving a letter from us in the next week or two outlining all of the information we need to file the new report. Be watching for it and call us at your earliest convenience.

IDEM Compliance Program ...

Have you joined our new IDEM Compliance Program?



Call us today!

EQIP 2013 funds available ...

We've been told that NRCS has extra funds this year for the EQIP Cost Share Program.

The deadline date to sign up

March 15

Are you thinking of having a CNMP written for your farm, looking into having increased manure storage built, wanting to utilize nutrient management, take advantage of waste utilization, use cover crops...or wanting to use any new environmentally friendly practices? Here is your chance to get financial assistance to make that possible.

For those not familiar with EQIP, it is money allocated to help farmers initiate conservation practices. A set amount of money is allocated each year by the NRCS. The farmer must use the services of a TSP to have a plan drawn up of how they will implement a practice. If the plan is approved, a contract between NRCS and the farmer is established and he receives a set amount of money in each of 3 years in order to accomplish his



plan. *Practices do have to be completed if you sign up.*

The payouts are all higher this year. The 590 plan (Nutrient Management) has now been divided into 5 categories. Depending on the one you choose, it pays anywhere from \$11/A to \$41/A. The 595 plan (Pest Management) \$7/A.

If you have been considering adding a manure storage this may be the year for that. *Give us a call or go see your DC to find out what is available for you.*

Congratulations!

Lana Zumbrun

Columbia City

Winner of our drawing
for \$300 of Soil Sampling
at Ft. Wayne Farm Show

Dates to Remember ...

April 1: Michigan Annual Report is due

Category 14 Regional Exam

Feb. 11: Monroe, Adams County
4-H Dining Hall

Feb. 18: Wanatah,
Pinney Purdue Ag Center

Feb. 25: Kendallville, Log Building
Noble Co. Fairgrounds

Upcoming Cat. 14 points meetings:

Jan. 31: Cat. 14 Ag Fert. Applicator Regional Meeting, Melissa is speaking North Manchester, 9 am at this one

Feb. 6: What it means to be a livestock producer in 2013
Warsaw, 9:30 am

Feb. 14: Northern IN Soil Mgmt Seminar
Goshen, 12:45 pm
Jeff Burbrink 574-533-0554

Feb. 18: Wabash Co. Adult Farm Program
Wabash, 7 pm

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Manure In The News ...

Remote-controlled manure boat rescues dairy farm from stinky lagoon scenario

Watertown Daily Times, Watertown, NY

About the size of a football field, a lagoon with room for 7 million gallons of manure and sand was filling up, creating a dilemma at Hy-Light Farms; over 10 years, a massive sand pile about 10 feet deep had accumulated in the center and could not be pumped out.

The farm's 870 cattle continued to use thousands of tons of sand as bedding each week. Work crews frequently had to dredge the perimeter using tractors and lagoon pumps. As a CAFO, the farm is required to store all of its manure during the winter.

Gerald Stockman had a decision to make last winter: Should he shell out over \$125,000 to have the pit excavated completely as a temporary fix? His son-in-law showed him an Internet video of a machine he'd never seen before: a manure agitator boat gliding across the lagoon, operated by remote control. Three high-powered jets suck up the surface water and blast it down to the bottom, mixing up the solids so the entire mass can be pumped out. Price tag? \$128,000. He made his choice. He bought a 275-

horsepower, 16-foot-long agitator boat in April from Puck Custom Enterprises in Manning, Iowa — the only company in the country now selling them.

The move paid off in the fall of 2012. There was just enough water on the lagoon's surface to run the boat. Once the lagoon was thoroughly mixed by



the machine, a work crew used a 30-foot pump powered by a tractor with 225 horsepower to vacuum out the liquid manure. Numerous truckloads of sludge were then spread over alfalfa fields. They took 6.5 million gallons out of the lagoon, practically emptying it.



Control Panel

The tractors that powered the pumps the "old way" consumed 200 to 300 gallons of diesel fuel a day. The manure boat uses only about 50 gallons, and makes far less work for the pumps. "We were doing a poor job because the pit is so big," Mr. Stockman said. "But now we don't have to remove the sand physically with excavators and trucks."

Last month, the boat helped dredge three additional lagoons, removing a collective 2.5 million gallons of liquid manure there. It will save the farm thousands in fuel costs each year and provide a sustainable way to remove sand from the lagoon.

Puck Custom Enterprises has sold 70 manure boats nationwide and overseas since introducing them two years ago, owner Benjamin Puck said. "Customers have mentioned they're saving between 300 and 800 gallons of diesel fuel per 1 million they're pumping," The boats mix up to 4,200 gallons per minute. Agitator boats ensure nutrients are evenly distributed in liquid manure. "Farmers can use it without using nearly as much commercial fertilizer," he said, "because the nutrients go into the soil."