

2018 Commercial Manure Applicator Certification Evaluation

Iowa State University Extension and Outreach

Total Responses 1,035

| | Excellent | Good | Fair | Poor | No Response | Total Responses |
|---|------------------|------------------|-----------------|-----------------------|--------------------|------------------------|
| 1. DNR Rules Percentage | 395 38% | 589 57% | 47 5% | 2 0% | 2 0% | 1,035 |
| | Excellent | Good | Fair | Poor | No Response | Total Responses |
| 2. Hydrogen Sulfide and Safety Percentage | 432 42% | 549 53% | 44 4% | 2 0% | 8 1% | 1,035 |
| | Excellent | Good | Fair | Poor | No Response | Total Responses |
| 3. Land Application and Separation Distances Percentage | 405 39% | 575 56% | 48 5% | 3 0% | 4 0% | 1,035 |
| | Excellent | Good | Fair | Poor | No Response | Total Responses |
| 4. Soil Compaction Percentage | 260 25% | 452 44% | 196 19% | 115 11% | 12 1% | 1,035 |
| | Excellent | Good | Fair | Poor | No Response | Total Responses |
| 5. Snow Covered/Frozen Ground Regulations Percentage | 350 34% | 579 56% | 84 8% | 2 0% | 20 2% | 1,035 |
| | Excellent | Good | Fair | Poor | No Response | Total Responses |
| 6. When it happens: Responding to a Spill Percentage | 380 37% | 570 55% | 61 6% | 8 1% | 16 2% | 1,035 |
| | Excellent | Good | Fair | Poor | No Response | Total Responses |
| 7. Manure Application Uniformity Update Percentage | 330 32% | 555 54% | 111 11% | 18 2% | 21 2% | 1,035 |
| | Excellent | Good | Fair | Poor | No Response | Total Responses |
| 8. Team Communication Percentage | 309 30% | 566 55% | 97 9% | 30 3% | 33 3% | 1,035 |
| | Excellent | Good | Fair | Poor | No Response | Total Responses |
| 9. Biosecurity Percentage | 322 31% | 565 55% | 77 7% | 14 1% | 57 6% | 1,035 |
| | Agree | Undecided | Disagree | Does Not Apply | No Response | Total Responses |
| 10. The information presented today was useful to me as a commercial manure service employee? Percentage | 826 80% | 159 15% | 25 2% | 11 1% | 14 1% | 1,035 |
| | Agree | Undecided | Disagree | Does Not Apply | No Response | Total Responses |
| 11. The presenters were prepared and knowledgeable. Percentage | 890 86% | 118 11% | 8 1% | 3 0% | 16 2% | 1,035 |

Section 3- Safety & Equipment

| | | | | | | |
|--|-------------|--|--|--|--|--|
| 12. What safety issues do you think are the most dangerous? | See tab 12. | | | | | |
| 13. What is the most important item in your spill kit? | See tab 13. | | | | | |
| 14. Is there a topic you would like to hear about during next year's training? | See tab 14. | | | | | |

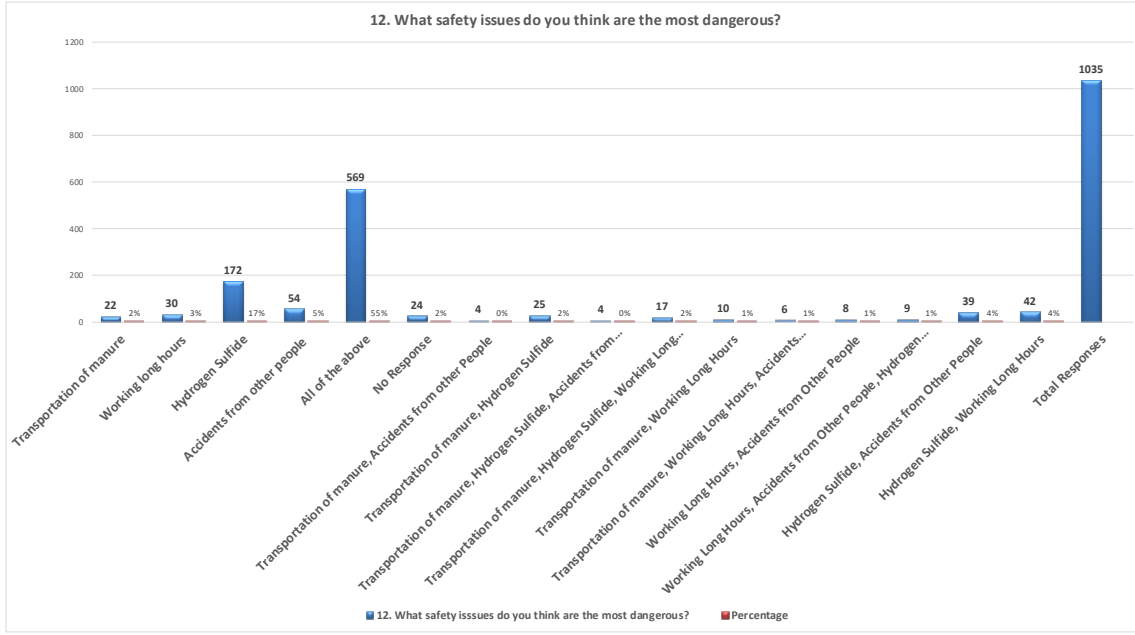
Managers Only from this Point Down

| | Yes | No | | | No Response | Total Responses |
|--|---|------------------------------------|----------------------------|--------------|--------------------|------------------------|
| 15. Are you a manager? Percentage | 285 28% | 226 22% | | | 524 51% | 1,035 |
| | Yes | No | | | No Response | Total Responses |
| 16. If you are working with dairy farms, do you have injector capacity issues? That is, are the higher applications rates limiting successful injection of manure? Percentage | 33 3% | 174 17% | | | 828 80% | 1,035 |
| | Sweeps | Vertical Till | Disc Covering Units | Other | No Response | Total Responses |
| 17. What type of injector do you use? Percentage | 37 13% | 121 43% | 41 15% | 55 20% | 27 10% | 281 |
| | Shorter season, focus on higher flow rates transport rates | Side-dressing in the spring | Both | NA | No Response | Total Responses |
| 18. If early fall (pre-October 15) was restricted, how would your business respond? Percentage | 143 14% | 35 3% | 12 1% | 6 1% | 839 81% | 1,035 |
| 19. General Comments | See tab 19. | | | | | |

Section 3 - Safety & Equipment

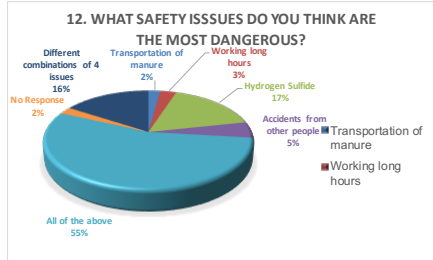
| | Transportation of manure | Working long hours | Hydrogen Sulfide | Accidents from other people | All of the above | No Response | Transportation of manure, Accidents from other People | Transportation of manure, Hydrogen Sulfide | Transportation of manure, Hydrogen Sulfide, Accidents from other people | Transportation of manure, Hydrogen Sulfide, Working Long Hours | Transportation of manure, Working Long Hours | Transportation of manure, Working Long Hours, Accidents from other People | Working Long Hours, Accidents from Other People | Working Long Hours, Accidents from Other People, Hydrogen Sulfide | Hydrogen Sulfide, Accidents from Other People | Hydrogen Sulfide, Working Long Hours | Total Responses |
|---|--------------------------|--------------------|------------------|-----------------------------|------------------|-------------|---|--|---|--|--|---|---|---|---|--------------------------------------|-----------------|
| 12. What safety issues do you think are the most dangerous? | 22 | 30 | 172 | 54 | 569 | 24 | 4 | 25 | 4 | 17 | 10 | 6 | 8 | 9 | 39 | 42 | 1035 |
| Percentage | 2% | 3% | 17% | 5% | 55% | 2% | 0% | 2% | 0% | 2% | 1% | 1% | 1% | 1% | 4% | 4% | |

12. What safety issues do you think are the most dangerous?



Section 3 - Safety & Equipment

| | Transportation of manure | Working long hours | Hydrogen Sulfide | Accidents from other people | All of the above | No Response | Different combinations of 4 issues | Total Responses |
|---|--------------------------|--------------------|------------------|-----------------------------|------------------|-------------|------------------------------------|-----------------|
| 12. What safety issues do you think are the most dangerous? | 22 | 30 | 172 | 54 | 569 | 24 | 164 | 1035 |
| Percentage | 2% | 3% | 17% | 5% | 55% | 2% | 16% | |



| |
|-------------|
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| cell phones |
| Cell phones |
| cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| cell phones |
| cell phones |
| cell phones |
| Cell phones |
| Cell phones |

| |
|---|
| cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| Cell phones |
| cell phones |
| Cell phones |
| cell phones |
| cell phones |
| cell phones |
| cell phones |
| Cell phones and equipment |
| Cell phones and spill number |
| Cell phones and spill number |
| Cell phones to call for help, DNR, etc.. |
| Cell phones, list of equipment contractors |
| Cell phones, round bales, loader |
| Cell phones/communication |
| Cell phones/communication |
| Check employee safety |
| Check employee safety |
| check on workers |
| Clamps |
| Clamps |
| Clean up |
| Clean up crew |
| Clean up materials |
| Clean up materials |
| Common sense |
| common sense |
| Common sense |
| Common sense |
| common sense |
| Communication |
| Communication |
| communication |
| communication |
| communication |
| communication |
| communication |
| Communication |
| Communication/education for all employees so they know what to do in case of spill. |
| computers |
| Contact info |
| Contact info |
| Contact info of people with equipment to help handle it. |
| Contact info, equipment for clean up |
| Contacts and spill plan |
| Contain |
| Containment |
| Containment |
| Containment |
| Containment Equipment |

| |
|---|
| emergency action plan |
| emergency action plan |
| emergency action plan |
| emergency action plan |
| emergency action plan |
| emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency action plan |
| Emergency contact info |
| Emergency numbers |
| Emergency numbers |
| Employee health |
| Employees |
| End loader |
| End loader |
| Endloader |
| Endloader |
| Endloader |
| Equipment |
| Equipment |
| Equipment |
| Equipment |
| Equipment |
| Equipment |
| Equipment |
| Equipment |
| Equipment |
| Everthing |
| Everything in it |
| Everything in it |
| Everything in it |
| everything in it |
| Everything in it |
| Everything in it |
| Everything in it |
| Everything in it |
| Everything in it |
| Everything is the most important to have with you |
| extra help |
| First aid kit |
| First aid kit |
| First aid kit for human safety |

| |
|---|
| first aid kit, Gorrilla tape |
| Flashers, hazards |
| Flashers, hazards |
| Flashers, hazards |
| Floor dry |
| Floor dry |
| Floor dry |
| Floor dry for small spills |
| Front wheel drive loader to dig dirt anywhere if needed |
| Gas mask duct tape |
| Get-away driver |
| Gloves |
| Gloves |
| Good pump operator |
| have a plan |
| Have a plan ready for action |
| Have a plan ready for action |
| Haven't gone through it. |
| Hay or straw |
| Health |
| Health and safety of employees |
| hose clamps |
| Hose clamps |
| Hose clamps |
| Hose clamps |
| Hose clamps |
| Hose clamps/pincher |
| Hose clamps/shutoff valves |
| Hose clamps/stop more manure from going |
| Hose jack |
| hose pinchers |
| hose pinchers |
| hose pinchers |
| hose pinchers, having a plan ready in place if a spill happens. |
| hose pinchers, menders, spill plan binder in all trucks |
| Human Health |
| human safety |
| Hydrogen Sulfide monitoring equipment |
| Information |
| Information |
| information |
| Intake covers |
| Intake covers |
| Intake covers |
| intake covers |
| Intake covers |
| Intake covers |
| Intake covers, containment equipment and material |
| Intake plugs |
| Intake tubes |
| Internet based pump controls |
| Internet controls |
| Internet pump controls |
| Intlet cover, DNR number |
| Kind of like "stop the bleed" but "stop the flow" --skid loader payloader |
| Kitty litter |
| Knowledge |
| Knowledge |
| Knowledge |
| Knowledge |
| Knowledge |
| Knowledge and communication |
| Knowledge people working/phone numbers of people with equipment |
| Knowledge, communication |
| Light speed internet pump controls |
| Light speed internet pump controls |
| Light speed pro |

| |
|--|
| Lime |
| Loader |
| Loader |
| Loader |
| Loader |
| loader |
| Loader |
| Loader |
| Loader |
| Loader |
| Loader |
| Loader |
| Loader |
| loader |
| Loader |
| Loader bucket |
| Loader bucket |
| Loader bucket |
| loader or shovels |
| Loader to contain spill |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor |
| Loader tractor/humper tractor |
| Loader tractor/humper tractor |
| make sure you have a spill kit |
| me |
| me |
| Me and the shovel |
| MMP |
| Moble stop to cut pumps off to stop leakage then loader to contain spill |
| Monitors |
| My head |
| My phone |
| Myself and loader tractor |
| Number to DNR |
| Oil dry/cell phone |
| Oil dry/cell phone |
| Operator |
| Our payloader. We spread dry manure and that's the only way to clean a mess up |
| Our safety items |
| Overshoes |
| Paying attention |
| Payloader |
| payloader |
| PCE equipment |
| PCE light speed controls/vac truck |
| People |
| People |
| People |
| People |
| People |
| People |
| People |
| People |
| People and tools |
| Personal safety gear |

| |
|---|
| Phone and numbers |
| Phone and numbers |
| Phone communication |
| Phone communication |
| Phone number to DNR |
| Phone numbers |
| Phone numbers |
| Phone numbers |
| Phone numbers |
| Phone numbers |
| Phone numbers |
| Phone numbers |
| phone numbers |
| phone numbers |
| phone numbers |
| phone numbers |
| phone numbers |
| phone numbers |
| phone numbers |
| phone numbers |
| phone numbers |
| Phone numbers and written plan of action |
| Phone numbers of contractors, DNR, Iowa one call, emergency |
| phone numbers to contact and Plan of Action |
| Phone, pipe to cover intake |
| phone, shovel, pinch off jacks, radio |
| phone/communication |
| phone/communication |
| phone/radio |
| phone/radio |
| Piece of tile to cover inlets, cell phone |
| pinchers |
| Pinches |
| PPE |
| PPE |
| Protect water |
| Pump |
| Pump |
| pump |
| Purified water |
| Purified water |
| PVC/hay bales |
| Radio and/or phone |
| Radio and/or phone |
| Radio to call for help |
| radio/cell phone |
| radio/cell phone |
| Rags |
| Reaction time |
| Response time order |
| Retainers |
| Safety |
| Safety |
| Safety of co-workers |
| Safety of employees and stop leaks |
| Sand bags |
| Sand bags |
| Sand socks to dam |
| Sand socks to dam |
| Sand to help contain the spill |
| Sawdust |
| Sawdust and tractor with loader |
| Shop towels |
| Shovel |
| Shovel |

| |
|---|
| Spade |
| spade |
| Spill plan |
| Spill plan |
| Spill plan |
| Spill plan book and number to DNR |
| Stand pipe covers |
| Stop the flows and call it in |
| Stopping the manure and put berms up to block manure |
| Straw Bales |
| Team work |
| Team work |
| Team work and common sense |
| Telephone |
| Telephone |
| Telephone |
| Tester |
| The Action Plan |
| the boss |
| The mop |
| The person |
| The plan |
| The right people. Loader to build berm/dam. |
| The Vac truck |
| they are all important |
| Things to cover tile intakes |
| Tile Plugs |
| Tile Plugs |
| Tile Sleeve |
| Tiles |
| Time and Identification |
| Time--getting it cleaned up quick enough |
| Tool to block tile inlet |
| Tools |
| Towel |
| Tractor Blade |
| Tractor |
| Tractor |
| Tractor |
| tractor |
| tractor |
| Tractor and loader |
| Tractor and loader |
| Tractor and loader |
| Tractor and loader and pump |
| Tractor loader |
| Tractor loader-scraper |
| Tractor loader-scraper |
| Tractor loader, hose clamps |
| Tractor with blade |
| Tractor, loader, shovel |
| Trained personnel |
| Trained personnel |
| Trash pump |
| Trent |
| Vac pump |
| Vac pump |
| Vac pump |
| Vac pump |
| Vacuum truck, speed and team Response, Get spill under control if needed. |
| We don't have a spill kit |
| We haul dry manure |
| wood chips |
| yourself |
| yourself |

| |
|--|
| 14. Is there a topic you would like to hear about next year? |
| 1.5 hour long (shorter time) |
| 90% of this is useless or has been gone over every year. Have Jeff Prier come with a short presentation and then have a Q & A at time. Everyone would get to much more out of this. |
| A 1 hour class on just manure handling rules and safety. not tractor tire compaction for you? Some topics are over talked for hours. |
| Acquiring and hiring quality both full-time and part-time/seasonal labor. |
| All areas were covered |
| All of them |
| All topics are good |
| All topics are good |
| All was covered |
| all was covered |
| anything informative |
| Anything informative |
| Application rates |
| Application spec |
| Application techniques |
| Being overworked |
| Biosecurity |
| Case Studies |
| Cattle and chicken manure regs if any |
| Chicken litter |
| Chicken litter 200A |
| Compaction |
| Compaction difference between tracks and tires. |
| Compare agitators. Lagoon boats - different brands, stick agitators, deep pit agitators, compare performance, ease of use, safety. Also to prevent barn explosions - what are all the things we should have barn owners do to set up barn? |
| compare compaction on hose vs tank, New equipment |
| Comparing different injectors |
| Cost of manure application acrossed Iowa |
| Coulter injection vs knife injection |
| County Engineers - What is their opinion on secondary roads? IE: equipment is getting larger and sometimes when they perform maintenance they decrease the width of the road bed and shoulder - this is very dangerous in my opinion. |
| Covered everything |
| covered well |
| Cut 3/4 of soil compaction section |
| Different aggitation strategies |
| different incorporators, technology |
| Different injection and sweeps with higher ga./acre rates, Have DNR explain the purpose for the nitrogen and P Index related to the application.50 applicators understand the importance of the application rate. |
| Different types of building for ventilation |
| Doing manifold test with manure that has solids don't over explain everything. |
| Don't run long on the session. Expectation is 9-12 with 1 break. |
| DOT |
| DOT, anything we can inform other drivers around us. Our lights work and are clean but still have people passing when turning or no passing zone. Are we allowed to use signs on side of road for equipment turning areas? |
| Drag hose, tank ect. |
| Drag line |
| Dragline topics |
| drop soil compation section |
| Dry litter applications |
| Dry Manure |
| Dry Manure |
| Dry Manure |
| Dry manure |
| Dry manure |
| Dry manure -- chicken litter transportation |
| Dry manure spreading |
| Dry manure transportation and application |
| Equipment |
| Equipment |

| |
|---|
| equipment repair |
| Equipment updates |
| Even distribution on low rate with a hose |
| Everthink was covered with good detail |
| Everything was covered |
| Everything was explained good |
| everything was good |
| Examples of previous year's spills |
| Examples of previous year's spills |
| Field compaction, road damage, in addition to this years info but why talk about grain carts. |
| first aid |
| Group stuff not for us, less breaks. Not 3 hours. Boring same thing every year. |
| H2S emission as pit level drops/time of asphyxiation increases during pit pumping |
| Handling residue left on roads from tank hauling |
| hauling out of lagoon |
| Having tow manifold? |
| Health issues with manure handling |
| Horsepower to tanker ratio |
| Hose pressures: focus on changes in pressure from pump to how much pressure is in hose 500; 1,000; 1,500; 2,000 away and how elevation changes that. |
| How fast can you pump |
| How manure sure costumers play their bills!!! |
| how SAFO's are now included in laws-manure is manure |
| How to deal with pig mats in pit etc. |
| How to deal with pig mats in pit etc. |
| How to determine how many gallons to put on per acre. |
| How to do a good job agitating deep pits |
| How to prevent killing pigs with gas |
| Hrs of working |
| Hydrogen Sulfide |
| I really think that you can get this information explained to us in two hours. Thank you. |
| If have a spill, where to stop it when in running down stream.? |
| Impact of frost on frozen ground to remove soil compaction |
| Info that actually applies to the crew pumping. |
| Its all covered pretty well |
| Less ground compaction and more about fittings & clamps for drag hose |
| Less on compaction |
| Less on soil compaction |
| Less on soil compaction |
| Lighting issues, transporting on the road, can we legally pull multiple trailers at once moving to new job sites, Fire safety-older pump tractors next to building catch fire. On average, would it take a natural vent barn to air out for chores--a ventilated barn--ex if I shut down at 9 pm is it safe after an hour to shut down the fans for the night and check on the animals? |
| Litter, more about litter |
| Local number to contact DNR office in case of emergency |
| Make it shorter |
| Manifolds on toolbars and the affect of chopper blades. |
| Manure treatments |
| More about dangerous gases |
| More about dangerous gases |
| more about dry manure |
| More about equipment & hoses and safety. There's a lot info covered about tanks. Need to cover more about drag hose systems as well. |
| More about hauling as an employee. A lot of this is not really important to me-my job is to haul and not worry about compacting ground. And I don't run a combine. Waste of time to me. |
| more about pumping with tanks |
| More about truck transportation of manure |
| More about truck transportation of manure |
| More compaction |
| More Dan Andersen!! And more group exercises and examples!! |
| More demonstration of real site facts and problems to address. More interesting. |
| More Dry Coverage |
| More dry manure |
| More examples of spill responses, ie techniques. |
| More excitement |
| More in field demonstrations |

| |
|---|
| More infield demonstrations |
| More on Confinement safety during agitation |
| More on dragline operation, not soil compaction |
| More on injection |
| More on killing/gassing animals |
| More on safety, less on compaction! More rules and regulations discussed |
| more on stockpiling |
| More on transportation |
| More pictures and make sur all speakers speak English. |
| More pictures of rigs |
| More real life experiences |
| More specific manure spills |
| More spill management |
| More videos relating to drag hose manure operations and safety issues traveling on public roads. |
| most on site videos and less charts |
| Moving manure in semi tanks to the manure applicator |
| New and modern equipment |
| New and modern equipment, no team communication |
| New equipment |
| New equipment |
| new equipment |
| new equipment |
| New equipment, Compaction of hose vs tank systems |
| New equipment, Compaction of hose vs tank systems |
| New equipment, Is there proof letting equipment site for 2 days between sites helps with biosecurity? I doubt it. What is the bwt way to take manure sample accurately? How does sampling prior to puming compare to samle after agitated pit? Our experiences is some of the interraters sampling pits before pumping are coming up with a hotter sample than it really is. Which really scres up your rate and if Nitrogen isn't there, then your crop suffers. |
| New style Zimmerman manifold, not VTI |
| New technology for equipment |
| New type of equipment that is being designed or tested. |
| No, I don't understand why ground compaction has anything to do with applying manure. Isn't that the farmers decision not the applicators? |
| No, it was good. |
| No, its fine the way it is. |
| No, make it more upbeat. |
| No, not off the top of my head. |
| No, nothing at all |
| No, should be required every year. |
| No, stick to the point of class DNR Rules-pushing it |
| Nope, covered everything, maybe talk more about toolbars/comparisons which ones work the best for application. |
| Not compaction |
| not compaction |
| Not compaction from the 2 guys on this year's!! Maybe make it 2 hrs instead of 3! They repeated things over and over! A waste of my time! #7 uniformity update also had way too much repeating information! |
| Not really |
| Not so much on soil compaction |
| not soil |
| Not soil compaction |
| not soil compaction |
| Not the team communication |
| Nothing |
| nothing |
| Nothing that I can think of |
| Only 3 hrs are required, why are we listening to unrelated stuff? |
| Operations |
| Pit foaming |
| Please do not exceed 3 hours |
| Please eliminate soil compaction |
| Please shorten up and take out the timed breaks |
| Preventative maintenance checklist with handouts |
| Preventing explosions in hog barns (heaters or agitation ect.) |
| Proper agitation |

| |
|---|
| Proper road travel techniques for safety of public transportations and machinery transportation |
| Pump out, Compaction 3 axle 7300 gal verses 4 axle 9500 gal tank |
| Response plan for hydrogen sulfide exposure. |
| Roadway transport of manure |
| Rules DOT |
| Safety |
| shorter |
| Shorter time of video |
| side dressing manure with dragline system |
| Soil compaction |
| Soil fertility of manure after applied |
| Something more to do with drag hose. |
| something new |
| Something that pertains to trucking the manure |
| Some things that isn't common sense. If we have to site here for 3 hours at least teach us something. |
| Specific techniques for containing manure spills and clean-up in various situations |
| Spill clean up |
| Spill stories |
| Spillage amounts |
| Splash pens |
| Stuff about grain |
| Survey of how millennials feel about manure application |
| Take out the breaks |
| Take out the breaks |
| Taking manure samples--what is the best way prior to pumping or during pumping |
| Team |
| Team communication |
| Technology in industry |
| Technology in manure industry/Operating systems, mapping, vary rate applications |
| Technology in manure industry/vary rate application |
| The flaw of the manifolds |
| The loss of animals and Potentially human is the most thing you can address. |
| The lost value of nutrients on early applied manure of fertilizers. |
| the meeting with rules and separation distances was good, the compaction was way too long - the drivers really don't care. |
| The safety of pigs |
| There is rarely anything on record-keeping |
| There was nothing on dry manure |
| Tired of hearing about distributor manifolds and hoses, also hydrogen sulfide. |
| toolbars |
| Tools/compaction |
| Track tractor for compaction on soil |
| Tracks |
| Tracks vs tires on compaction |
| Transportation of dry manure |
| Transportation safety and efficiency |
| Trasnporting manure with semi trailers |
| Truck hauler |
| truck hauler |
| Types of maure spreaders most beneficial to spreading practices |
| undecided |
| undecided |
| Use of semi manure tankers |
| Way too long |
| We transport cattle manure only |
| Weight and regulations on manure equipment. Grain farmers can haul 90,000 lbs of grain. I cannot haul 90,000 lbs of manure. |
| Weight on roads/DOT |
| Well covered |
| What are the symptoms of hydrogen sulfide poisoning |
| Work team |
| worm holes |
| Yes, manure application not compaction |
| Yield data or advantages to grower. New or possible upcoming restrictions or regulatory action tha may hinder us. |

General Comments

*12 Qt. Work longer hrs and push harder to get better flow to get everything done. Normal every day drivers especially around bridges and mailboxes that tractors need to get around

16. Works--good to pre-rip arounds the edgeo field for safety. 18. This would be a disaster!!

3 hrs is requirement. There was really no breaks-attention span is lost!

A shorter season would force us to buy more equipment or work more house which causes fatigue, and that causes more accidents and spills.

Bad idea! Season is too short already. I would have to quit!!!

Be more efficient

Bigger tanks and longer hours. And a big thank you oh mighty gubment.

Bio security is beat down our throats all the time. We don't need to relearn it here.

Both are poor options at best.

Both options are going to cause increased application costs. The use of N-Stabilizers prior to Oct 15th might be a better option since in our area most years our best applicaton dates are prior to Oct 15th.

By applying on frozen ground more than likely

Depends on fall weather

Depends on fall weather

Don't wait to mention clean boot to just before starting. Sign at door??

Downsize operation or use nitrogen stabilizers

Dumb idea, be screwed, would have to buy more equipment, make less and go out of business.

No reason to be restricted, especially dairy manure.

Expand equipment line and raise hauling rates substantially to cover less efficient equipment costs.

Have to drop small manure sites, focus on big gallon site "dairy" would create longer work hrs/wk more stress. Weather declines later in season, relationships between landowner would decrease, what idiot sitting behind a desk thinks this a good idea! Fire him/her. Your class better be shorter-like season.

How can you monitor your pump nozzles if you have a curtain over them pump out?

I don't apply until last week of Oct

I don't apply until last week of Oct.

I don't fee that shortening the season would be a very good idea. We are pressed for time already so it would become a safety issue!

I don't start until end of October.

I think they need to back off and stop telling us when we can do our job

I would call 911--the season is already too Damn stort. Why wouldyou restrict early fall application? Let us get our job Done!!

I would have to get rid of some work. Also, I would have to run jobs around the clock - that is removing 45 days of manure application.

If this happens, NH3 better not be allowed in the fall.

If we think that our toolbar won't inject right, we have the farmer work the field ahead of us. Its all common sense. There not enough time now. / Don't concern you don't mess with. Reduce to 2 hours all things don't apply to us.

If winter comes early December, not all manure would get pumped.

Is this a farm training? This class only needs to be an hour long. Stop wasting our time!

Its already hard enough to get everhing done in the small window we have. Can't haul on frozen/snow covered ground. Can't afford more equipment to spead up process. This equipment is very expensive.

manure application uniformity update-presented better at Pork Congress--simplified.

More ??? And more hours/more risk

More application on frozen ground and more spring application

more spring application

more spring application

Move to another state with longer application window

Neither

No affect

No change, we don't start until after Oct 15th already. Usually Nov 1.

No changes

None, I don't haul until row crops are harvested. Single operator. Haul only my own manure--need CMS because I haul to neighbor.

Not an option!! #1 reason = SAFETY (Days are longer daylight earlier in the year the warmer, the longer days are the better.

Not an OPTION!!!!

Not an OPTION!!!!

Not going to work

Not going to work

Not good for business. Price of hauling will go up dramatically

Not pumping much at that time, we're busy picking corn.

Raise the application cost

Sell all equipment. Very dangerous--longer hours/person. Would finish in frozen and snow covered conditions. Very dangerous & can't incorporate.

Shorter season would me less work or \$ side-dressing maybe tub farmer would need to see advantaes first

Stop working in Iowa as much as possible. This wold really impact dairy work.

Stupid idea what would happen if early frost also. We would be down to 30 days to do all the work. Learn more from talking to other guys in the room about what happened to them the past year.

That is not practical. Great idea on paper not good in real life. Maybe use of N stabilizer in November the weather can turn quick. Overall, nice job on program!

The compaction was interesting but with the small window of opportunity to pump. It doesn't matter if they want their shit pumped there are only so many perfect days.

The industry is moving away from disc incorporators due to nutrient reduction strategy, efficiency, etc. Lets stop using disc incorporators in pictures/examples.

There should be on restriciton. Now wat to get everything hauled--wold be too many full pits.

This would be a disaster to shorten the season.

This would be a disaster to shorten the season.

too much time given for stockpiling activity

Try to add more equipment

We just relocate manure with trucks--we don't apply

Weather condititons, time restraints, higher stress = more accidents

Will have to just broadcast more over frozen ground

Would have to haul on frozen ground. Wouldn't get done in time.

Would not get done, would have to run on frozen ground.