



Missouri Produce Growers Bulletin

A Joint Publication of the University of Missouri and Lincoln University

A Grower's GAPs Certification Story from 4 County Produce Auction by Travis Harper and James Quinn

While many growers are GAPs certified around Rich Hill, and several are around Stanberry, very few are located in communities around the produce auctions in Missouri. One grower nearby the 4 County Produce Auction obtained GAPs certification for his farm over the last 2 years, and agreed to share his story.

He started in the 2014 growing season, at the request of one buyer. It was only for a few specific crops: cabbage, cauliflower, and broccoli. There was a field available across the road from his farm, and it seemed simpler and faster to just certify that field, rather than the whole farm. Equicert was the company that was used because they were in the area. The cost was \$500 and they conducted a Harmonized GAPs audit. To avoid having to certify the packing house, he harvested and packed the crops in the field. While keeping records for a field was far less than keeping them for a whole farm or when buildings are involved, it was a very good first step to learn with. The arrangement was beneficial for both the customer and his farm, as the certification opened a larger market for the farm's products.

For 2015 he needed to rotate those crops to the side of the road with the farm buildings, so decided to GAP certify the entire farm. This would allow all the crops to be marketed as GAP certified. The inspection was set for the latter half of May, so he decided to try out an offer made in an article of Extension's IPM Bulletin in

Sept. Of 2012 "GAPs and How Extension Can Assist You". The co-authors of this article went to the farm on May 12th to conduct a 'mock inspection', basically reviewing all the records and walking the farm, much as a real GAPs inspector would. We then provided our comments on what might be potential problems. In general the record book was in good order; it was obvious that having done this the previous year was helpful. There were numerous clipboards or similar in the strategic places where notes would be required, e.g. cleaning/sanitizing of the sorting table, or cleaning and stocking of the employee bathroom. Nonetheless, several concerns were identified:

- A pond that was used for irrigation was not fenced to keep livestock out.
- Runoff from a livestock lot appeared it had the potential to intrude into a high tunnel if a heavy enough rain event occurred.
- Some suggestions were made to provide more details about how produce would be washed. Where and how field harvest containers would be handled and sanitized. Some suggestions were given about the packing area, to have all areas more open (nothing shoved up against any wall) and everything up on pallets; this to facilitate the inspector looking around and for rodent control.
- For recordkeeping, it was suggested that he keep sections clear and specific,

A Note from the Editor

This edition of MPG Bulletin is dedicated to the subject of food safety.

We hope to have another regular issue out in a month or two focused on our more traditional topics related to IPM.

- making sure not to run them together. These records would be handwritten and would occasionally need to be revised. Keep processes separate. Describe washing of produce on one page and how it would be unloaded and sorted on another.
- Concern was expressed about the wash water. It was from a well and was put into an elevated tank. Because no electricity is used, this was the only option for this farm.
- There were no water sample results from any recent lab tests at the time of the visit.

For 2015 they used the USDA GAPs audit. First the good news, the GAPs inspection was passed, but required a corrective action. That is an important issue, you may have a problem, but you get a chance to fix it. The 'automatic fail' in this instance, was the well water being used to wash the produce, as well as for pesticide applications. This water

(continued on pg. 2)

In This Issue

A Grower's GAPs Certification Story from 4 County Produce Auction	1
Complying with the Food Safety Modernization Act- use GAPs or not?	3
Produce auction facilities shouldn't be affected by FSMA compliance	4



is required to have no detectable E. Coli and the same for Total Coliform. While the water test had no E. Coli, Total Coliform was 30.

To remedy it, the well water was spiked with 1 gallon of household, chlorine bleach. It was then pumped out until the bleach smell dissipated. The water was tested the next day and one month later. These samples passed and the GAPs certification was granted.

What about the other concerns from the mock inspection? Did they help or were they raised by the GAPs inspector?

- The pond was fenced before the GAPs inspection, so it never came up.
- The potential runoff from the livestock lot getting into a downstream high tunnel was raised as an area of concern, but was allowed to stay that way for 2015, with a promise to do some grading work before the growing season 2016.
- More detail was added in the sorting/packing/washing sections. Some things in the packing area were moved around a bit. Control or exclusion of rodents and birds was described a bit more.
- The way the descriptions of the different packing processes was sufficient, but the grower recognized the logic in separating the tasks when possible, to ease changes.
- The elevated wash water tank was acceptable.

The GAPs inspector also required one additional action be taken: the dip tank in front of the washer was not to be used for any GAPs certified produce.

About how much did this cost you ask? The first inspection was just under \$650. A follow up 'site visit' was required and cost \$175. Additionally you have to factor in your time because time equals money. We didn't get a time estimate for going through the process, but ongoing during the season they set up their

records on a weekly basis and was done on Saturdays. They also had to update the harvest records on any packing day. Some growers who have become GAPs certified have said the process helped them become a better, maybe even more efficient grower? Was that true in this instance? Maybe, with the comment: "we used FSA (Farm Service Agency) maps for our field records and it is nice to have those for next years planning."

You might be wondering how water sampling was handled? (This was reviewed in a past article, May 2014 "Water Testing and GAPs") Midwest Labs of Omaha, NE sent kits (containers, forms and a shipping box) for water sampling. The grower also used them for both soil and foliar analysis. The samples were sent USPS Priority Mail. Contrary to statements about water samples needing to be there 'the day following sampling', it appears there is a bit more leeway here. If a sample took two days, it was acceptable, as long as it was kept cool with the use of an ice pack and outside temperatures were mild.

The buyer that spurred this certification in 2014 was pleased with the expansion of certification to the whole farm, as it indicated they were serious about food safety. The only other vegetable that was marketed as GAPs certified was cucumbers. Ironically it did not result in a noticeable price increase over other growers, nor did it seem that other buyers were very interested in GAPs certified fresh produce.

A few last comments were provided. The mock inspection seemed to be a worthwhile use of time. They will get the farm GAPs certified again for 2016 and it will likely take less time and have fewer overall costs. The inspector advised they get a copy of the audit checklist and do a self-audit to help aid in the inspection process .

WHO'S WHO

MU Extension

James Quinn
Editor
573-634-2824
quinnja@missouri.edu

Dave Trinklein
State Floriculture Specialist
573-882-9631
trinkleind@missouri.edu

Amy Hess
MU IPM Program
Media Specialist
573-884-6361
hessa@missouri.edu

LU Extension

Touria Eaton
State Floriculture Specialist
573-681-5174
eatont@lincolnu.edu

Jaime Pinero
State IPM Specialist
573-681-5522
pineroj@lincolnu.edu

Zelalem Mersha
Plant Pathologist
573-681-5522
mershaz@lincolnu.edu

MU Extension County Specialists

Adair: Jennifer Schutter
660-665-9866

Daviess: Tim Baker
660-663-3232

Greene: Pat Byers
417-881-8909

Harrison: H. Benedict
660-425-6463

Henry: Travis Harper
660-885-5556

Morgan: Joni Harper
573-378-5358

Vernon: Pat Miller
417-448-2560

Webster: Bob Schultheis
417-859-2044

Complying with the Food Safety Modernization Act- use GAPs or not?

By James Quinn and Londa Vanderwal Nwadike*

The Food Safety Modernization Act (FSMA) finally published its Produce Safety Rule in November last year (2015). It has defined that produce growers that are not exempted (see exemption section below) from the produce safety rule will need to comply with FSMA by keeping appropriate records, meeting the regulation requirements and attending a certified FSMA training; this will NOT require an annual fee or an audit. However, if farmers are GAP certified, they will be meeting the requirements of FSMA, but will still need to take the certified FSMA training course.

The first question many produce auction growers will have is 'will I have to comply with the FSMA produce safety rule?' The answer is 'maybe', it depends upon your annual sales. The FSMA requires any farm or business that sells more than \$25,000 annually to a 3rd party or broker (meaning NOT directly to the consumer, or directly to a retailer or restaurant), then that entity needs to comply. So many smaller growers selling at auctions won't have to comply, but we know larger or main growers supplying auctions will easily exceed that annual sales amount of \$25,000 and eventually have to comply. Also, produce not normally eaten as raw (like potatoes and pumpkins) and not included in these sales, thus can be subtracted out of the annual sales total. (For complete information on FSMA for produce growers, including those selling direct to consumers or restaurants & retailers, see the inserted MU/ Kansas State University fact sheet)

So has the FSMA Produce Safety Rule affected the GAPs process in any way? Not really, although we understand that USDA will update GAPs to match the FSMA requirements, so there may be some slight changes to GAPs in the future. If one is GAPs certified, one can carry on renewing GAPs certification annually (see the article in this issue about a Four County Produce Auction Grower's experience in getting GAPs certified- cost, effort, reasons, etc.).

However, even if you are GAPs certified, if you are covered by FSMA (not exempt), you will still need to attend a certified FSMA training course.

We will have more complete details on the certified FSMA produce safety training during the offseason, late this year and next. The lead organization developing the FSMA certified produce safety training is a coalition headed by Cornell University called the Produce Safety Alliance. It will start regional training around the country for educators, who will later provide training to growers. Originally these trainings were to occur early this year, but were cancelled as FDA had not yet approved the training materials, and are now expected in Sept. & Oct 2016. Thus by this coming offseason, they should be ready to present to growers.

Once those trainings are being offered, will growers (needing FSMA produce safety training) be required to attend immediately? No, as compliance is being phased in. Farms with annual produce sales between \$25,000 and \$250,000 will have until November 2019 to comply. Farms with \$250,000-\$500,000 in annual produce sales will be required to comply in November 2018. So growers can sit the training out for a year or two if they want, or they can get started as soon as we begin offering trainings.

So once a grower is 'trained', then what? Then they need to implement the FSMA-required food safety practices, keep the required records and have them available to be reviewed, if requested. There will be no 'audit' as part of FSMA compliance. Furthermore, the rather contentious and tricky issue of water testing is still being developed and will be phased in. Very small farms (with \$25,000- \$250,000 annual produce sales) will have until November 2021 to start compliance with the water provisions of the Produce Safety Rule. If there is no audit, then how will the regulatory agency verify that records are being kept properly, etc.? We don't know yet. It is

logical to expect that there will be some type of checking of farms, but would it be 'when a problem occurs', randomly, a certain % of farms, or some other rationale, and who exactly will be doing the inspection? This is totally unknown at this time.

* Londa serves as State Extension Food Safety Specialist for both University of Missouri and Kansas State University. She is based in Kansas City and can be reached at tel: 816-482-5860 & email: nwadikel@missouri.edu or tel: 913-307-7391 & email: lnwadike@ksu.edu.

GroupGAP offers an alternative to individual certification

GroupGAP is just a variation on GAPs certification. It is a process where a number of farms with similar production practices can get certified together. It substantially reduces the cost of certification and by requiring the growers to work together, provides a framework for them to learn from each other. The USDA ran this program as a pilot from 2013 to 2015 with the Wallace Center, which included some growers in the Rich Hill area. Beginning in April this year, the USDA has formally opened it up to growers across the US. It saves on the cost of certification, as only a subset of growers are visited by the GAPs inspector. The grower group works previous to this to establish that all of growers desiring certification are abiding by the practices. Look for more details on GroupGAP in a future bulletin edition, as produce auctions provide an excellent structure for growers to organize for this program. In the meantime, we welcome questions on this if needed.

Produce auction facilities shouldn't be affected by FSMA compliance

by James Quinn

One question foremost in mind for many growers involved with auctions, has been if the auctions themselves will have to change or do anything different, to comply with FSMA. The answer appears to be 'NO', the auction facilities won't have to do anything. Nonetheless, they may have the opportunity to be proactive on the subject, and the rest of this article will address how I arrived at an answer and how I received some helpful comments.

The FDA provided a way to submit questions about FSMA. I did so at the end of December and received a reply on Feb. 5th. This was the original question:

- This is about the how the final produce safety rule will apply to distribution facilities called 'produce auctions'. These are commonly used by Amish and Mennonite growers in eastern US. My understanding is that these facilities are exempted from the preventative controls human food rule. So, are these facilities then considered under the category of 'all other businesses' and thus need to comply within 2 years? And if so, will they have to get GAP certified, or will there be another option to comply?

The response came from "The Food and Drug Administration's (FDA) Food and Cosmetic Information Center (FCIC)/Technical Assistance Network (TAN) for case number 00065073". I have refined the answer to be clear. Which was:

- You are correct on the Preventatives Control (PC) interpretation of produce auctions. This rule does not apply to them because "these operations are simply a location for buyers and sellers to meet and to sell and transfer produce and the food is not stored, we do not consider such facilities to be holding food and would not expect them to register". (But this came with a warning)
- "However, if a produce auction house is more than simply a location for buyers and sellers to meet and to sell and transfer produce (e.g., if food is held or packed), then the produce auction house may be a food facility that must register with FDA, and the facility may be subject to the PC rule."
- Lastly, "GAP certification involves an audit. A produce auction house operation that does not manufacture/process or grow food is not subject to supplier verification activities in subpart G, such as audits."

The response went on to address the Produce Safety rule and its application to farms:

- GAPs are not required under the Produce Safety rule. The Produce Safety rule does not establish requirements for audits of covered farms, nor do we recognize any auditing body in that rule.

So unless a produce auction is managed in a way such that it is covered by the Preventative Controls Rule, then it is not impacted by the FSMA (including the Produce Safety Rule). I wanted to check my interpretation regarding this. The Produce Safety Alliance (see front page article) was a good place to check, and they now have a Midwest Regional Extension Associate to help with questions and outreach. That individual is Don Stoeckel who is based in Columbus, Ohio (but with Cornell University; Dept. of Food Science). Don's response was "I read the same thing into the FDA response as you, so long as auctions serve simply as a meeting place for buyers and growers, produce auctions are either not covered or are exempt from all provisions of the Preventive Control Rule and Produce Safety Rule. There would be no need for the auction to have a third-party audit under those rules." But he went on to suggest how auctions might be proactive on this issue.

Auctions can play a valuable role to have a role in produce safety, since they exert influence over growers. Because they are a meeting place, the Auction could implement rules or practices that represent the needs of the buyers with consistency (which helps the growers). For instance, some of Ohio's produce auctions have a consistent labeling system that helps growers advertise if they are GAPs certified or GAPs compliant, making this easier for the buyers to see if that is important to the buyer. Some of the auctions also provide sales records to the growers that are designed to help growers with traceability. Finally, I could imagine that the auction could serve to tie a group of growers together if they wanted to participate in GroupGAP. (see GroupGAP comments on page 3)

I know of several auctions in Missouri that are working with growers to make traceability practical. When we finally are able to start training, I anticipate the various auction communities will support our efforts, if not even help organize them, as MU Extension has been helped with past workshops and similar. Thanks to Don with this issue, and he can be reached at: Phone: (614) 634-0884 & E-mail: dstoeckel@cornell.edu.

The Missouri Produce Growers (MPG) bulletin is published by the University of Missouri and Lincoln University with federal funding support from the USDA NIFA (National Institute of Food and Agriculture) CPPM – Extension Implementation Program. Current and back issues are available at <http://ipm.missouri.edu/mpg>. Mention of trademarks, products, or vendors is included as a convenience to the reader, and does not imply endorsement or discrimination against similar products or services not mentioned.