GLOBAL GAP

Tips and Tricks

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Other Protech Services

- IPM
- Integrated Productions
- Records
- Plant NutrientMonitoring
- Plant DiseaseIdentification
- Plant, Soil, Water Analysis

- Environmental Impact Assessment
- Contract Research
- Assist in Records Setup
- Pest Identification
- Varietal Selections
- Internal Auditing
- Soil Fertility
- GPS Mapping

Responsibilities

- Internal Audit
- To assist the grower in record keeping/gathering
- To be a mediator between grower and auditor
- Write Risk Assessments, Management Plans and Policies tailored to your farm

Global Gap Break-down

Fruit & Vegetables Flowers & Ornamentals Combinable Crops **Green Coffee** CROPS BASE Tea INTEGRATED FARM ASSURANCE STANDARD Cotton* Others Cattle & Sheep ALL FARM Dairy BASE LIVESTOCK BASE Pigs Poultry Others Salmon & Trout Pangasius* AQUACULTURE Shrimp* BASE Tilapia* Others

Global Gap Break-down

- Three Checklists for Crop Growers
 - All Farms
 - Crops Base
 - Fruits and Vegetables
- Questions Separated Into Three Categories:
 - Major Must-0
 - Minor Must-4
 - Recommended-19
 - 28 Days to rectify non-compliances
- Country of export

Online Documents

- http://www.globalgap.org/cms/front_content.p hp?idcat=3
 - Click on



- Choose Fruits and Vegetables
- Choose the drop down list you want

Control Point Compliance Criteria

N°	Control Point	Compliance Criteria	Level
AF	ALL FARM BASE Control points in this module are applicable to all producers seeking certification as it covers issues relevant to all farming businesses.		
AF . 1	RECORD KEEPING AND INTERNAL SELF-ASSESSMENT/INTERNAL INSPECTION		
	Important details of farming practices should be recorded and records kept.		
AF . 1 . 1	Are all records requested during the external inspection accessible and kept for a minimum period of time of two years, unless a longer requirement is stated in specific control points?	Producers keep up to date records for a minimum of two years from the date of first inspection, unless legally required to do so for a longer period. No N/A. (For Livestock certification, cross check with LB.3.2, PG.1.3 and PG.4.3 where documents are required for 3 years)	Minor Must
AF. 1 . 2	Does the producer or producer group take responsibility to undertake a minimum of one internal self-assessment or producer group internal inspection, respectively, per year against the GLOBALGAP (EUREPGAP) Standard?	There is documentary evidence that the GLOBALGAP (EUREPGAP) or benchmarked standard internal self-assessment/internal producer group inspections under responsibility of the producer/producer group ha(s)/ve been carried out and are recorded annually. No N/A.	Major Must
AF. 1.3	Are effective corrective actions taken as a result of non-conformances detected during the internal self-assessment or internal producer group inspections?	Effective corrective actions are documented and have been implemented. No N/A	Major Must
AF . 2	SITE HISTORY AND SITE MANAGEMENT		
	One of the key features of sustainable farming is the continuous integration of site specific knowledge and practical experiences into future management planning and practices. This section is intended to ensure that the land, buildings and other facilities, which constitute the fabric of the farm, are properly managed to ensure the safe production of food and protection of the environment.		

AF 1.1

- Are all records requested during the **external** inspection accessible and kept for a minimum period of time of two years, unless a longer requirement is stated in specific control points?
 - This is only audit records. Once an audit is performed, you must keep the records for 2 years

AF 1.2

 Does the producer or producer group take responsibility to undertake a minimum of one internal self-assessment or producer group internal inspection, respectively, per year against the GLOBALGAP standard

■ You will need a <u>dated</u> document that says when you went through the checklist.

AF 1.3

• Are effective corrective actions taken as a result of nonconformances detected during the internal self-assessment or internal producer group inspections?

- A <u>dated</u> document that specifies nonconformances, and what was done to fix them.
- You will not be penalized for this list in any way.

Example:

Fullerton Farming Corrective Actions for Non-Compliance with Global Gap Standards AF 1.3

- AF 2.2.1 and 2.2.2 Risk Assessment and management plan for new agricultural sites written
- AF 3.1.1 and 3.1.2 and FV 4.1.1 risk assessment and policies for health, safety and hygiene written
- AF 3.2.8 Signs and log book for visitors made and posted
- AF 3.2.1 Training sign in sheet created for future used
- AF 3.3.1 and 3.3.2 more accident and emergency procedure signs displayed throughout farm.
- AF 4.1.1 Created a list of waste products and pollution sources
- AF 4.2.1 Waste management plan written
- AF 5.1.1 Conservation plan written
- AF 5.2.1 Unproductive Agricultural Sites conservation plan and procedures written
- AF 6.1 and 6.2 Complaint form and complaint procedures were created.
- AF 7.1 Recall Procedure written down
- CB 5.6.2 Risk assessment written for organic fertilizers
- CB 8.1.2 List of banned chemicals for imported countries found
- CB 8.8.2 Re-entry interval procedures created
- FV 4.1.5 and 4.1.9 wrote harvest cleaning procedures

AF 2.1.1

- Is a recording system established for each ...area/location to provide a permanent record of...agronomic activities undertaken at those locations? Are these records kept in an ordered and up-to-date fashion?
 - Crop plans/FSA-578 printout
 - Computer program printout with any information linking field to crop (ei. Farmworks, yadda)

AF 2.1.2

- Is a reference system for each field...used in production established and referenced on a farm plan or map?
 - FSA or GPSed map
 - Make sure you can tie all maps to a tract # and not just a name, since name change regularly.

AF 2.2.1

- Is there a risk assessment for new agricultural sites or existing sites only where risks have changed, which shows the site in question to be suitable for production with regards to food safety, operator health, the environment and animal health where applicable?
 - Risk Assessment: what COULD happen
 - Dated document that shows land "vetting" process.

AF 2.2.2

- Has a management plan been developed setting out strategies to minimize all identified risks, such as pollution or water table contamination? Are the results of this analysis recorded and used to justify that the site in question is suitable?
 - What is done to stop potential problems?
 - Examples of your management plan would be beneficial, although not necessary

Example:

Fullerton Farming
New Agricultural Sites
Standards and Procedure
AF 2.2.1 and 2.2.2

When a new farm is acquired by Fullerton Farming, it is generally not used for the production of edible produce. However, if the land is, it must pass certain criteria before being used for the production of edible produce. First, a declaration of previous use must be filled out by the owner. This document asks if the land has been used for anything that might make it unsuitable for agricultural use. This includes landfill, feedlot, industry or anything that may have polluted the soil. Soil and Nematode tests must be carried out on the land. This is performed on all land to analyze disease pressure among other specific issues that may affect the crop that will potentially be grown. Recently cleared land will never be used for produce. For the first few years it will be used for nonproduce crops like tobacco or cotton. Once it has been established, the land can be used for produce like sweet potatoes in the normal established crop rotations which are tailored for that type of soil. These procedures must be followed to minimize any type of risk for both the producer and consumer. If the soil is unfit for the production of any particular crop, there may be both yield issues along with the potential for health hazards. In any case, the soil must be analyzed to ensure the best and most healthy crop for everyone.

AF 3.1.1

- Does the farm have a written risk assessment for safe and healthy working conditions?
 - What COULD happen
 - Can be generic, but must logically be appropriate for farm
 - Document should be dated

AF 3.1.2

- Does the farm have a written health, safety and hygiene policy and procedures including issues of the risk assessment of AF 3.1.1
 - Must include the point from AF 3.1.1
 - Can include:
 - Hand washing
 - Accidents
 - Use of toilets
 - Illness
 - Machinery Safety

- Is there a record kept for training activities and attendees?
 - Doesn't have to be fancy, a sheet of notebook paper will do.
 - Ideally, the sheet should include
 - Date
 - Typed name of all who should be in attendance
 - Signed name of all who attended
 - Short description of what training included

Training Day

- Needs to include
 - Health
 - Safety
 - Machinery
 - Chemical
 - Emergency Procedures
 - Hygiene
 - Personal
 - Packing house
 - General Policies

■ Do all workers handling and/or administering...chemicals, disinfectants, PPP, biocides or other hazardous substances and all workers operating dangerous or complex equipment as defined in the risk assessment in AF 3.1.1 have certificates of competence, and/or details of other such qualifications?

Applicators License

■ Is there always an appropriate number of persons (at least one person) trained in first aid present on each farm whenever on-farm activities are being carried out?

Your local American Red Cross will do on site training for little or no fee.

- \$30 per person for larger group—which is the same as if you would go into the office
- \$35 per person for smaller group
- Classes size must be under 15, but they will have two sessions if needed.
- These prices are from Fayetteville Red Cross from October, they are only written here to give you an idea of possible fee's

Does the farm have documented hygiene instructions?

Must be visibly displayed and either bi-lingual or with pictures. Instructions must include:

- The need for hand cleaning
- The covering of skin cuts
- Limitation on smoking, eating and drinking to certain areas
- Notification of any relevant infections or conditions
- The use of suitable protective clothing

- Are all subcontractors and visitors aware of the relevant procedures on personal safety and hygiene?
 - Document of health, safety and hygiene procedures being officially communicated to visitors
 - This includes signage
 - Example

Example

Visitor Sign in Sheet

It is the policy of Fullerton Farming that all visitors are made aware of the potential hazards around the farm along with the policies that have been created to off-set these risks.

- We are a hard working farm and therefore employ the use of large farm equipment. Drivers of these machines may not see you. Please use common sense and steer clear of the paths of these machines. I have never met a person who won an argument with a tractor.
- All workers must maintain a reasonable baseline of cleanliness to ensure everyone's health and welfare. Please do the same.
- Subcontractors must keep their work areas reasonably clean in order to minimize the amount of rodents. The cats can only do so much.

Please sign below to show that you have read and understand the above policies.

Name Organization Date

AF 3.3.1

- Do accident and emergency procedures exist, are they visually displayed and communicated to all persons associated with the farm activities?
 - Permanent/visible/accessible
 - Bilingual
 - Farms address
 - Contact Person(s)
 - Location of the nearest phone/radio

AF 3.3.1 (cont)

- Up-to-date list of relevant phone numbers
- Location of extinguisher
- Emergency exits
- Emergency electricity, gas and water shut-offs
- Accident reporting procedures

Example

EMERGENCY PROCEDURES

- All employees must be aware of emergency procedures and indicate that they have read theses procedures by signing the appropriate forms.
- In case of an accident or injury you are to report immediately to your supervisor. All supervisors must then report immediately to <u>MacKenzie</u>, Noelani, or Evelyn Fullerton.
- There is poison control information posted in the chemical storage areas as well as in the main office. First aid kits are available on the job sites and in the main office there are additional eye wash and decontamination facilities
- Do not attempt to administer medical aid unless you have the appropriate training and/or credentials.

Procediemientos de emergencia

- Favor de reportar todo accidente, her ida, o contacto con pesticidas immediatamente a su supervisor.
- Todo supersvisor debe reportar immediatamente el accidente a MacKenzie, Noelani, ó Evelyn Fuller ton.
- Pue de encontrar equipo de primeros auxilios en el área de trabajo así como en la oficina central.
- No administre primeros auxilios a menos que haya recibido el entrenamiento necesario.

Emergency Phone Numbers

Important Emergency Telephone Number's

Fullerton Farming #1 Herby St Huskerland, NE 68000 Office: (402) 555-1111

EMERGENCY

911

Sampson Regional Medical	Carolina's Poison Control	
Center	Center-AAPCC Certified	
607. Beaman St.	5000 Airport Center Parkway,	
Clinton, NC 28328	Suite B Charlotte, NC 28208	
(910)592-8511	(800)222-1222	
Sampson County Health	Sampson County	
Department	Cooperative Extension	
360 County Complex Rd.	55 Agriculture Pl. Clinton, NC.	
Clinton, NC 28328	28328	
(910)592-1131	(910)592-7161	

AF 3.3.3

- Is safety advice available/accessible for substances hazardous to worker health, when required?
 - Keep chemical labels of what is in the chemical shed accessible. Preferably in the shed.

AF 3.4.1

- Are workers (including subcontractors) equipped with suitable protective clothing in accordance with legal requirements and/or label instructions or as authorized by a competent authority?
 - Keep a full/clean set of PPE for auditor to see
 - Explain that those who work with chemicals have applicators license and have plenty of training

■ Is a member of management clearly identifiable as responsible for workers health, safety and welfare?

Usually written on emergency procedures

- Is there information available that provide an accurate overview over all workers of the farm
 - Some kind of employee list.
 - Needs to include full time workers and subcontractors

- Do workers have access to clean food storage areas, designated dining areas, hand washing facilities and drinking water.
 - On farm fridge/break room
 - In field coolers brought by workers
 - Water coolers for drinking and hand washing

- Are on site living quarters habitable and have the basic services and facilities
 - H2A housing inspection sheet

AF 3.6.1

- When the producer makes use of subcontractors, is all the relevant information available on farm?
 - If you contract out any part of the growing process (this does not include packing) you need to check to make sure they are compliant to the GlobalGAP standard

AF 4.1.1

- Have all possible waste products and sources of pollution been identified in all areas of the business?
 - Make a list of waste products and pollution sources. Including but not limited to:
 - Paper
 - Oil
 - Excess Chemicals
 - Fuel
 - Smoke
 - Chemical/Fertilizer run-off

AF 5.1.1

- Does each producer have a management of wildlife and conservation plan for the enterprise that acknowledges the impact of farming activities on the environment?
 - Dated, written document that explains what the grower does to enhance habitats and increase biodiversity on the farm
 - Can include IPM
 - AF 5.1.2-5.2.1 are items that are recommended to be included in the plan

AF 5.1.2-AF 5.2.1

- Tangible actions that will enhance quality and quantity of wild habitats
- Compatibility with sustainable agriculture
- Reduction of environmental impact
- Audit to see what kind of animal and plant diversity is on the farm
- Actions to avoid or rectify damage and deterioration of habitats

AF 5.1.2-AF 5.2.1 (cont)

- Plan to enhance habitats and increase biodiversity
- Conversion of unproductive sites into habitats

Example

Conservation Policies Fullerton Farming AF 5.1.1

Fullerton Farming uses Total Crop Management schemes to provide the highest possible returns from farming and the surrounding environment. This includes the use of professional soil assay services, Integrated Pest Management, and Comprehensive Nutrient Management Planning. Nutrient and crop protection chemistries are only utilized after all cultural, natural, and mechanical controls have been employed to remedy the problems.

Wildlife and aquatic habitats are protected around the surrounding and adjoining the fields we tend.

Fullerton Farming does everything within its power to sustain and create habitats for Native flora and fauna to enhance North Carolina's natural diversity and sustain that diversity for generations to come.

Fullerton Farming complies with and exceeds all state and federal laws regarding use of the environment and utilizes farming techniques that protect the soil, air and water that we depend on for our livelihood.

Example Unproductive Sites

Fullerton Farming
Unproductive Agricultural Sites
Procedures and Handling
AF 5.2.1

There are times when an agricultural site needs to remain unused for a season or so.

There are multiple ways the land can be ecologically productive without being agriculturally productive. First, the land can be used for livestock. It is important to not overgraze a piece of land. Therefore, if the need arises, the land can be turned into pasture. However, this can pose a problem if the land must return to crop use. Planting native grasses can alleviate this problem. The grasses will provide a habitat for wild animals and leave flexibility to reemploy the land for the future use of crops. Thirdly, there may be times when a piece of land is either entirely unsuitable for cropland or is for one reason or another not needed or should not be used for crop production. In this case native trees will be planted on the lot to create a habitat for wild animals

AF 6.1

- Is there a complaint procedure available relating to issues covered by the GLOBALGAP standard?
 - There needs to be a complaint form for people to fill out and a procedure that will be followed when one is. This can be on the same paper or be separate.

AF 6.2

■ Does the complaints procedure ensure that complaints are adequately recorded, studied and followed up including a record of actions taken?

Complaint Procedures

Fullerton Farming Complaint Form Procedures and Policies AF 6.1

Fullerton Farming management does everything within its power to maintain a quality, healthy, and prosperous work environment that meets if not exceeds all of the standards set by Global GAP, USDA, NCDA, DOL, FDA, EPA, OSHA and any other governmental regulatory agency. An excellent way to allow workers to anonymously voice their complaints concerning any of these standards is through a paper complaint form. The following procedures will be followed after a complaint has been filed.

- 1. Complaint forms should be readily available in the office
- 2. Forms should be completed by worker filing the complaint
- 3. Forms need to be turned into Evelyn.
- 4. Evelyn will review the information to ensure the form is complete and the complaint stated is clear. If either of these has not happened, the form will be returned to the filer for clarification.
- 5. Once the form has been deemed completed. The form will be given to Troy, Cody, or Andy who will give the complaint its due consideration and time.
- 6. Once the issue has been corrected, the rest of the form will be filled out and the entire form will be filed away in its proper place.

Complaint Form

Fullerton Farming Complaint Form for Global GAP Compliance 10/29/08

Full stor! Farming conduct and annual solf-audit as well as an annual audit from an independent source to insure the compliance with Global GAP standards. This form is used for complaint concerning compliance with these standards along with USDA, OSHA, NCDA, DOL, FDA or any other governmental regulatory agency.

Description of Compleint:	
Filed By (this may remains nonymous):	Data Filed:
Abbress:	
Phone Numbers:	
Global GAP Amitt Reference Number:	
Actions Talen to Cornect Issue:	
Corrected By:	Date Commeted:

AF 7.1

 Do all producers have a documented recall procedure to manage the withdrawal of registered products from the market

■ Dated written recall procedures.

Example

and must be recalled, we will do everything within our power to pull every potato from the market and contact all proper authorities. Responsibility and transparency is the key to good agricultural business.

If the contamination is due to field conditions:

- The field will be abandoned. No more harvesting will be done on that field.
- Similar fields will be tested for the contamination in question and will be dealt with as needed.
- All potatoes still in storage from the field in question will be destroyed accordingly.
- If some bins have been sold to a packer, the packer will immediately be told of the issue and informed to destroy all bins from the field in question.
- Steps will be taken to ensure that whatever happened to contaminate the crop in that field will not occur again. The proper treatment and crop, if any, will be planned for the next few years. The field will be closely monitored and analyzed before another produce-type crop is planted there.

If the contamination is due to human illness:

- The ill person/people will be put on sick leave, quarantined, and given proper medical treatment as necessary. The crew minus the ill members will be given a new name so as to distinguish between the old contaminated crew and the new one in which ill crew members have been removed. The rest of the crew will be closely monitored to ensure their health.
- Any field harvested by that crew as notated on the bin card during the time of the contagious illness will be destroyed accordingly.
- The packer will be informed of the contamination along with any other pertinent information.
- Local and National Authorities will be informed of the contamination as needed.

If additional logical steps need to be taken for a particular situation, Fullerton Farming Partnership has the responsibility to themselves, their clients, the environment and the community to implement whatever procedures and policies are needed. The entire recall process must be notated including specific dates,

CB 1.1

■ Is GLOBALGAP registered product traceable back to and track able from the registered farm (and other relevant registered areas) where it has been grown?

- This is related to the last question. Explain how you track your crop
- Field to Fork

CB 2.1.2

• Are quality guarantees or certified production guarantees documented for purchased propagation material?

- Seed certificate
- Some kind of proof of planting material quality

CB 2.1.4

- Are plant health quality control systems operational for inhouse nursery propagation?
- What is done in the nursery to ensure that the plants are quality?
- N/A if you don't grow your own seedlings

CB 2.2.1

Does the producer consider pest and disease resistance/tolerance characteristics during variety selection?

- Do some kind of research and write up a document concerning the varieties you chose and why.
 - Resistance to Nematodes
 - Good Yield
 - Quality potato

CB 2.3.1

- Is the use of seed/annual rootstocks treatments recorded?
- N/A if none are used
- Otherwise include:
 - Product name
 - Target pest/disease

CB 2.3.2

- Are plant protection product treatments on in-house nursery propagation material applied during the plant propagation period recorded?
- N/A if none used or if you don't have a nursery for sweet potatoes.
- Must show records of applications.
- Must prove that chemicals used are allowed both in the US and in the country of export

CB 2.4.1

Does the producer keep records on sowing/planting methods, see/planting rate, sowing/planting date?

Planting records

			Plant		Crop		
Tract	FSN	Farm Name	Date	spacing	Acres	Seed	Variety
5477	11487	Ann Thornton	5/19	15	8.70	WF	Covington
5477	11487	Ann Thornton	5/19	15	8.90	WF	Covington
5477	11487	Ann Thornton	5/20	15	21.6	WF	Covington
5477	11487	Ann Thornton-grain bin	5/20	15	12.2	WF	Covington
5477	11487	Ann Thornton-cows	5/20	15-12	23.8	WF	Covington
5711		Lois Flowers	5/21	15	12.3	WF	Covington
5710		Clarence Jordan	5/22	15	37.5	WF	Covington
4627	16348	George	5/22	12	20.6	Bat	Covington
5693	16348	Wendell	5/23	12	5	Bat	Covington
4627/5693	16348	Wendell	5/23	12	7.1	Bat	Covington
4827		David Jordan	5/23	12	16.1	Bat	Covington
4845		Tyndall	5/24	12	13.5	Bat	Covington
4845		Tyndall	5/24	12	19.7	Bat	Covington

CB 2.5 GMO's

CB 5.1.1

Is the application of all fertilizer and manure timed to maximize the efficacy and/or uptake by target crops?

- Crop Profile NCDA
 - http://www.ipmcenters.org/cropprofiles/docs/ncsw eetpotatoes.pdf
 - http://www.ncsu.edu/sustainable/profiles/c18swpot
 .html
- Extension information
- NC Ag Chem Manual

CB 5.2.1

Are recommendations for application of fertilizers (organic or inorganic) given by competent, qualified advisers holding a recognized national certificate or similar? Do producers who use outside professional help (advisers and consultants) regarding the use of fertilizers satisfy themselves that the people on whom they rely are competent to provide that advice?

- Extension Agency
- Consultants

CB 5.2.2

Where such advisors are not used, are producers able to demonstrate their competence and knowledge?

- Training
- Experience
- Anything measurable

CB 5.3 Fertilizer Application Records

- 5.3.1 Have all applications of soil and foliar fertilizers, both organic and inorganic been recorded including field,
 orchard or greenhouse reference?
- 5.3.2 Have all application **dates** of soil and foliar fertilizers, both organic and inorganic, been recorded?
- 5.3.3 Have all applications of soil and foliar fertilizers, both organic and inorganic, been recorded including **applied fertilizer types**?

CB 5.3 Fertilizer Application Records

- 5.3.4 Have all **applied quantities** of soil and foliar fertilizers, both organic and inorganic, been recorded
- 5.3.5 Have all applications of soil and foliar fertilizers, both organic and inorganic, been recorded including the **method** of application?
- 5.3.6 Have all applications of soil and foliar fertilizers, both organic and inorganic, been recorded including the operator details?

CB 5.4.1

Is fertilizer application machinery kept in good condition and verified annually to ensure accurate fertilizer application?

- Maintenance records or invoices of spare parts
- Documented records of calibration by a technically responsible person within 12 months

CB 5.5 Fertilizer Stock

- 5.5.1 Is there an inorganic fertilizer stock inventory or record of use up to date and available on the farm?
- 5.5.2 Are inorganic fertilizers **stored separately** from plant protection products?
- 5.5.3 Are inorganic fertilizers stored in a **covered area**?
- 5.5.4 Are inorganic fertilizers stored in a **clean area**?

CB 5.5 Fertilizer Stock

- 5.5.5 Are inorganic fertilizers stored in a **dry** area?
- 5.5.6 Are inorganic fertilizers stored in an appropriate manner, which reduces the risk of **contamination** of water sources
- 5.5.7 Are **organic** fertilizers stored in an appropriate manner, which reduces the risk of **contamination** of the environment?
- 5.5.8 Are inorganic and organic fertilizers stored separate from fresh produce/tea/coffee/cherries?

CB 5.7.1

- Are purchased inorganic fertilizers accompanied by documentary evidence of nutrient content (N-P-K)?
- Invoices
- Straight from dealership/distributor

CB 6.2.1

Can the producer justify the method of irrigation used in light of water conservation?

- What kind of irrigation do you use
- How does that type conserve water while keeping within GAP

- Can the producer show evidence of implementation of at least one activity that falls in the category of "Prevention"?
- Cultivation methods
- Variety choice
- Crop rotation
- Prefer no chemicals

Can the producer show evidence of implementation of at least one activity that falls in the category of "Observation and Monitoring"?

- Scouting
- Insect traps

Can the producer show evidence of implementation of at least one activity that falls in the category of "intervention"?

Prefer non-chemical

Where plant protection products have been used, has protection been achieved with the appropriate minimum input?

 All plant protection product inputs are documented and include written justifications.

• Have anti-resistance label recommendations been followed to maintain the effectiveness of available plant protection products?

- Chemical rotation
- IPM
- Labels and NC Ag Chem Manual

CB 8.1.2

- Do producers only use plant protection products that are registered in the country of use for the target crop where such official registration scheme exists?
- NC Ag Chem Manual
- Chemical Labels

CB 8.1.4

Is a current list kept of plant protection products that are used and approved for use on crops being grown?

NC Ag Chem Manual

CB 8.1.5

■ Is there a process that prevents chemicals that are banned in the EU from being used on crops destined for sale in the EU?

- Online reports
- http://www.pesticideinfo.org/Search_Countriesisp
- Create a written plan

CB 8.2 Records of Applications

- 8.2.1 Have all the plant protection product applications been recorded including the crop name and/or variety?
- 8.2.2 Have all the plant protection product applications been recorded including the application **location**?
- 8.2.3 Have all the PPP applications been recorded including application date?
- 8.2.4 Have all the plant protection product applications been recorded including the **product trade name**?

CB 8.2 Records of Applications

- 8.2.5 Has the **operator** been identified for plant protection product applications?
- 8.2.6 Have all the PPP applications been recorded including justification for application?
- 8.2.7 Have all the PPP applications been recorded including the **technical authorization** for application?

CB 8.2 Records of Applications

- 8.2.8 Have all the PPP applications been recorded including appropriate information to identify the product quantity applied?
- 8.2.9 Have all the PPP applications been recorded including the **application machinery** used?
- 8.2.10 Have all the plant PPP applications been recorded including the **pre-harvest interval**?

PPP Records

6 Gal

Telone

PPI Broadcast

			Crop	Fumigant				Earliest
Tract	FSN	Farm Name	Acres	Date	PPI	10 oz Capture 2EC	PHI	Dig Dates
5477	11487	Ann Thornton	8.70	5/5	14	6/18	65	8/22
5477	11487	Ann Thornton	8.90	5/5	14	6/18	65	8/22
4651	19048	Rob Warren	31.8	5/31	14	6/29	107	10/14
4408	18557	Keith Thornton	24.5	6/4	14	6/29	115	10/22
6652	839	Bradshaw	26.2	6/4	15	6/29	103	10/10
4799	19048	Shelton Wilson	14.6	6/5	15	6/29	116	10/23
12850		Annie Warren	7	6/5	15	6/29	116	10/23
4631		Doris Jones	3.3	6/5	15	6/29	116	10/23
4631		Doris Jones	7.2	6/5	15	6/29	116	10/23

Appilcator: Troy Fullerton

Equipment: CASE MX 130

PPI Broadcast

Justification Table

S	weet Potato	Protection Chemistry					
	Trade Name	Chemical Name	Rate per Acre	Pre-Planting Interval	Re-entry Interval	Justifica- tion	Pre-harvest Interval
ľ		1,3-					
	Telone	Dichloroprop ene	6 gal	7 days	5 days	Nematode Control	N/A
	Capture 2EC	Bifenthrin	10 oz.	N/A	24 hours	Insect Control	21 days

MRL's

- Maximum Residue Level test
- NCDA if randomly selected
- Private Lab

- Are the correct sampling procedures followed?
- Sampled by lab
- Official Sampling Procedures: 2002/63/EC
 - http://www.tarim.gov.tr/AB_Tarim/AB_mevzuat/gida/ab_mevzuat/2002_63.pdf

■ If the producer or producer's customer able to provide current evidence either of annual (or more frequent) residue testing or of participation in a third party plant protection product residue monitoring system, which is traceable to the production location and that covers the plant protection products applied to the crop/product?

- Pesticide residue test results
- Sampling paperwork

Is the producer (or the producer's customer) able to demonstrate information regarding the market where the producer is intending to trade produce, and the Maximum Residue Level (MRL) of that market?

- Online lists of MRL's
 - http://www.mrldatabase.com/
 - https://secure.pesticides.gov.uk/MRLs/

Has action been taken to meet the MRL's of the market the producer is intending to trade his produce in?

Dated written procedure

 Is an action plan in place in the event of an MRL being exceeded, either of the country of production or of the countries where produce is intended to be traded in

 Reference can be made to the recall procedures.

Is the laboratory used for residue testing accredited by a competent national authority to ISO 17025 or equivalent standard?

NCDA currently undergoing this certification

CB 8.7 PPP Storage

- 8.7.1 Are PPP's stored in accordance with local regulations?
- 8.7.2 Are PPP's stored in a location that is **sound**?
- 8.7.3 Are PPP's stored in a location that is **secure**?
- 8.7.4 Are PPP's stored in a location that is appropriate to the **temperature conditions**?
- 8.7.5 Are PPP's stored in a location that is **fire-resistant**?

CB 8.7 PPP Storage

- 8.7.6 Are PPP's stored in a location that is well ventilated (in case of walk-in storage)?
- 8.7.7 Are PPP's stored in a location that is **well lit**?
- 8.7.8 Are PPP's stored in a location that is located away from other materials?
- 8.7.10 Is the PPP store able to **retain spillage**?
- 8.7.12 Are there facilities to **deal with spillage**?

CB 8.7 PPP Storage

- 8.7.13 Are **keys** and **access** to the PPP store limited to workers with formal training in the handling of PPP's
- 8.7.14 Is the product **inventory** documented and readily available?
- 8.7.15 Are all PPP's stored in their **original package**?
- 8.7.17 Are liquids not stored on shelves **above powders**?

CB 8.7.11

- Are there facilities for measuring and mixing PPP's?
- Can be in field
- Accurate measuring equipment

CB 8.8.5

Are there facilities to deal with accidental operator contamination?

- Shower
- Eye-wash facility
- Hose

CB 8.9.4

Are official collection and disposal systems used when available?

- USAg Recycling
 - **1**-800-654-3145

CB 8.10.1

- Are obsolete PPP's securely maintained and identified and disposed of by authorized or approved channels?
- Dealer
- EPA
- Extension agency

FV 2.2 Substrates

FV 3 Irrigation

FV 5

PRODUCE HANDLING

FV 5.6.3

Are baits placed in such a manner that non-target species do not have access?