Davis Fresh
AN NSF INTERNATIONAL COMPANY

Farm Food Safety Expectations

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Farm/Ranch Audit

- NSF-Davis Fresh audits focus on the implementation and documentation of Good Agricultural Practices especially as they relate to food safety.
- The audit evaluates the adequacy of documentation, compliance to documented policies, effectiveness of procedures to control risk factors and the ability to implement corrective and preventative action plans.

Evaluation Areas

- Specifically, the base audit evaluates 7 key areas:
  - Ranch Documents
  - Water Sources
  - Employee Documents
  - Chemicals
  - Ranch Observations
  - Employee Habits
  - Harvest Operations

Manual Guidance

- The NSF-Davis Fresh manual is generic for all types of growing operations.
- Some specific criteria may not be applicable. It is the responsibility of the grower to justify that a specific criteria is not applicable.
- Criteria may be added based on changing regulatory requirements, specific client needs or the ever-changing food safety environment.

Expectations and Criteria for Farm/Ranch Operations

- Ranch Documents
  - Ranch History
  - Inspections and Logs
  - Plant Source Material
- Water Sources
  - Well
  - Surface
    - Reservoir
    - River
    - Canal
    - Pond

Expectations and Criteria for Farm/Ranch Operations

- Employee Documents
- Company Policies
  - Toilet and Hand Washing Facilities
  - Company Policies
  - Illness and Injury
  - Company Policies – Restricted Behavior
  - Employee Training
  - Supervisor Training

Expectations and Criteria for Farm/Ranch Operations

- **Chemicals**
  - **Fertilizer Usage (Includes all soil amendments)**
  - **Pesticide Application**
  - **Pesticide Regulation**

Expectations and Criteria for Farm/Ranch Operations

- Ranch Observations
  - Adjacent Land
  - General Field Disposition
  - Water Distribution System
  - Animal Activity
- Employee Habits and Conditions
  - Toilet and Hand Washing Facilities
  - Employee Behavior

Expectations and Criteria for Farm/Ranch Operations

- **Harvest Operation SSOPs**
  - **Harvest Cleaning Logs**
  - **Harvest Tools**
  - **Containers and Packaging**
  - **Food Contact Surfaces and Equipment**
  - **Transportation**
  - **Post Harvest Water**

Section Evaluation

- Evaluations will be based on 5 levels of adherence:
  - Acceptable (A)
  - Needs Improvement (NI)
  - Needs Correction (NC)
  - Unacceptable (U)
  - Critical (C)

Expectations and Criteria for Farm/Ranch Operations

- The following requirements outline the policy, program and performance criteria expected of a farming/ranching operation in order to meet the food safety needs of the food buying community.

Ranch History

- Expectation:
  - Title search
  - Signed affidavit
    - Shows a clean history including the approximate date the land was first used for crop production.
- Acceptable:
  - In order to be considered clean the land can not have a history of being used as, or be, a:
    - Landfill
    - Toxic Waste or Incinerator Waste Disposal Site
    - Site for Animal Husbandry in the last 12 months
    - Flood zone within the last year.
    - Have any evidence that the land is unfit for agricultural crop production or use.

Adjacent Land

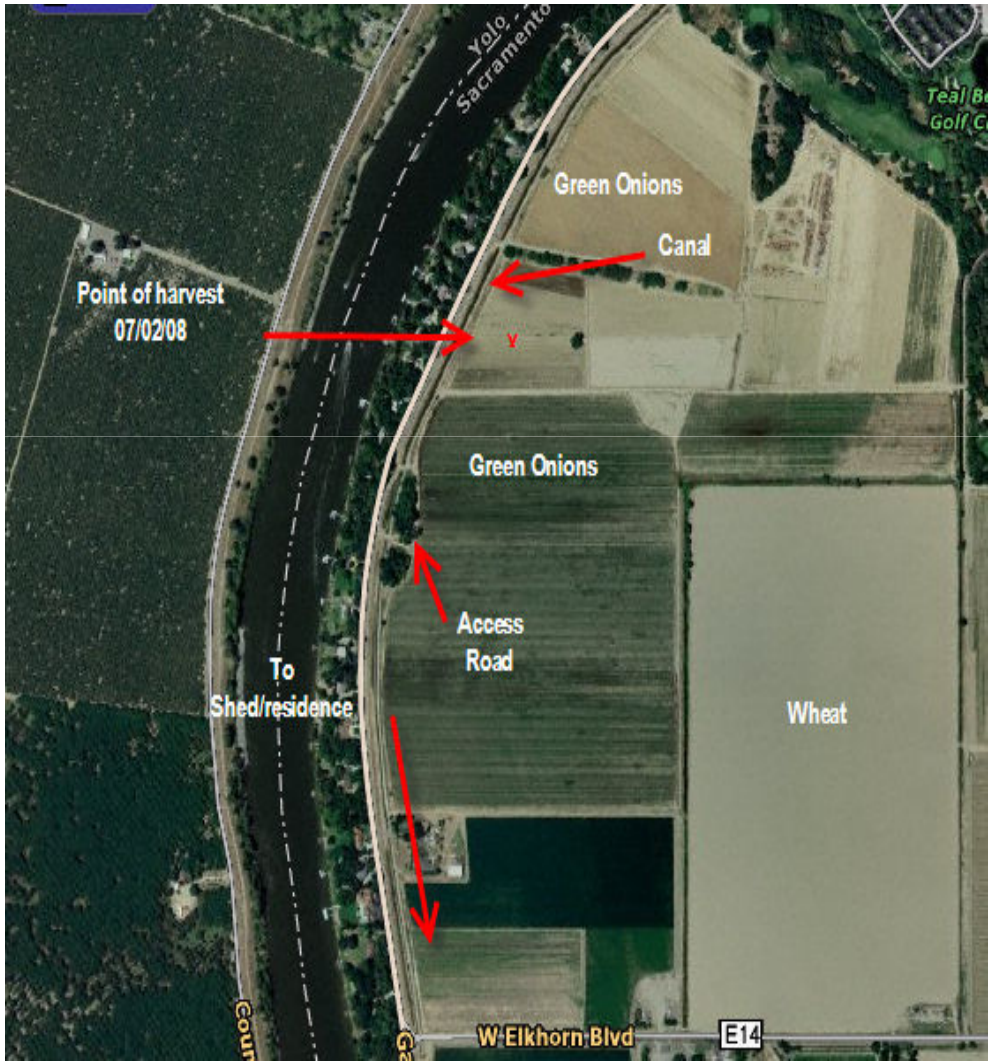
- The farming operation should not be next to, or should be isolated and/or protected from, the following potential adjacent land hazards:
  - Mining Operations
  - Industrial Sites
  - Municipal Waste Storage
  - Animal Husbandry Sites
  - Animal Manure Storage
  - Open Wilderness Areas
  - Urbanized and/or Residential Areas including structures with and without leach fields.

Inspections and Logs

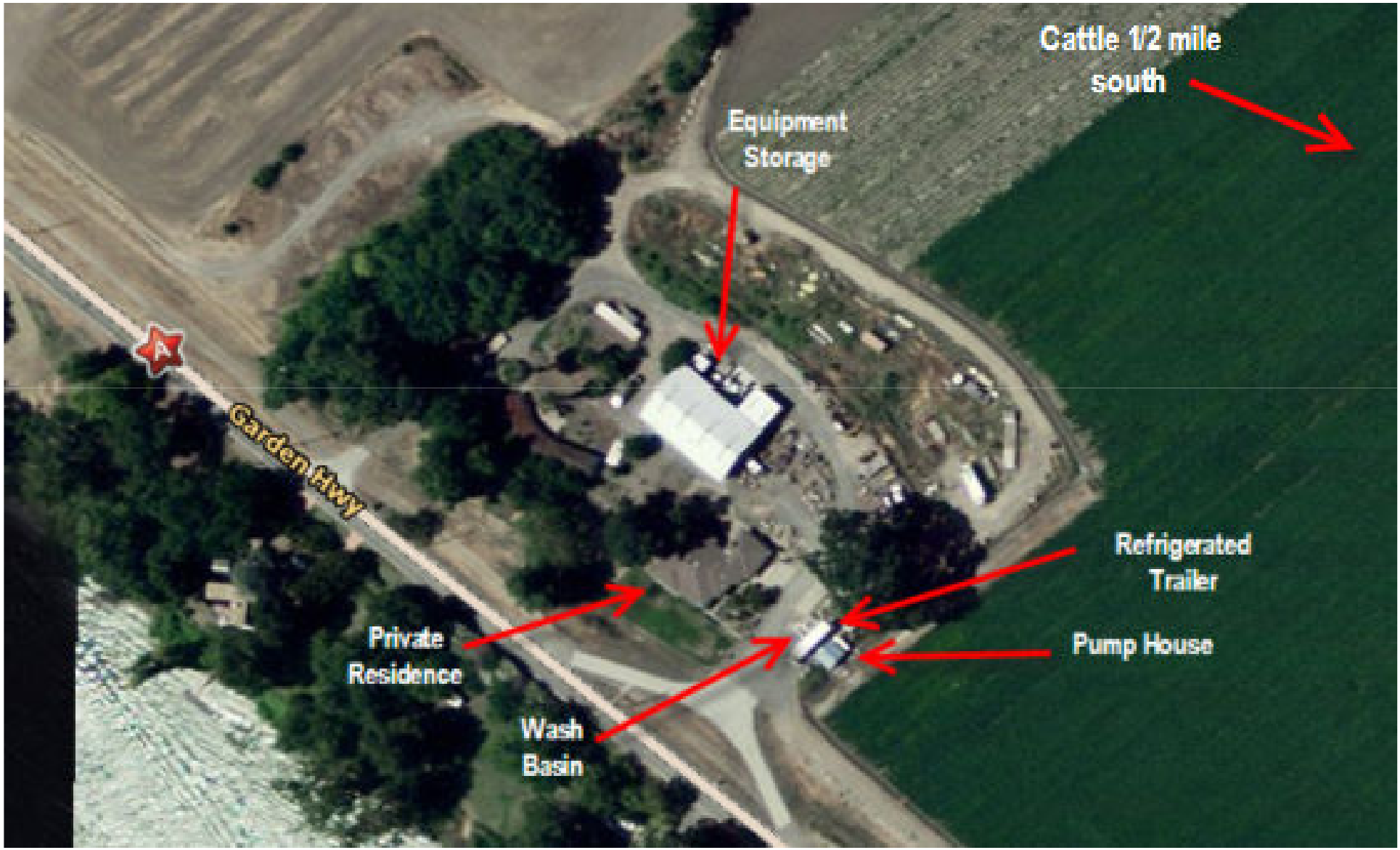
- Expectation:
  - Grower has appropriate inspection reports and inspection logs that document that the growing operation is following necessary practices.
- Acceptable:
  - Pre-season risk assessments will assess:
    - Adjacent Land Use
    - Flooding
    - Animal Activity
    - Ranch Security
    - Water Distribution System Functionality
    - Buffers, Ditches, and Berms
    - Access Road Quality

Risk Assessment

- Any concerns that are found during the assessment must be controlled with a feasible mitigation plan that addresses all concerns using best practices available.
- An animal intrusion inspection log of appropriate frequency.
- An annual water distribution system evaluation.
- An open water source inspection log of appropriate frequency.
- A storage area inspection log to include pest control measures.



Risk Assessment Map



Risk Assessment Observations

- Grazing land uphill from growing field.
- Ditch is used to mitigate risk of runoff from horse grazing pasture.
- Open area is also used as a mitigation means to reduce potential of contamination.

Risk Assessment Observations

- Barb wire fence with sheep wool.
- Fence separates grazing land from vegetable field.
- Sheep were entering growing field under fence.

Risk Assessment

- Septic tank waste was being discharged into the growing field drainage tile.
- When pipe was unplugged gray particles and waste water was spilled onto growing field.

Growing Material Approved Suppliers

- Expectation:
  - Grower has an approved supplier program for all suppliers of growing materials such as:
    - soil amendments
    - plant source materials
    - fertilizers
    - plant protection materials
    - other materials that may be used to assist with the growing process.

Growing Material Approved Suppliers

- Acceptable:
  - All vendors and suppliers need to be approved and retain compliance to company requirements.
  - Vendors, or suppliers, who do not meet the minimum requirements of the Approved Supplier Program, will be put on probationary status until they meet all requirements.

Water Sources

- Expectation:
  - All water sources used for the growing process will be tested for microbiological contamination.

Water Sources

- Acceptable:
  - A water source must be free of pathogens or other contaminants.
  - Water samples must be taken at the point closest to use.
  - Water samplers must be trained appropriately by the testing laboratory or other approved training provider.
  - Water samples must be taken within 60 days of the first irrigation for the season. If more than one sample is taken, samples must be taken greater than 18 hours apart.
  - All water testing must be performed at a qualified, accredited lab that is accredited to ISO 17025 standards and must use tests that are AOAC approved or approved by other appropriate certifying agencies such as the FDA or EPA.
  - Lab results should include the date of sample collection, the location of the sample collection, the result, the test method, and a signature from the lab.

Water Microbiological Level

- For crops not commonly eaten raw, irrigation water taken from stable or variable water sources is subject to an annual water test where results must be less than 235 MPN/100ml generic E.coli, regardless if the water comes in contact with the edible portion of the plant.
- For crops commonly eaten raw more frequent and closer to harvest tests would be required.

Toilet and Hand Washing Facilities

- The grower is required to have written policies that the organization will provide clean and stocked toilet facilities and hand washing stations. For contracted labor the grower will require appropriate facilities be present.
- The grower is required to have a policy mandating that employees wash their hands at the beginning of the work day, after using the toilet, after eating, after leaving the work area, after changing gloves, and any other time their hands may have become contaminated.

Toilet Facilities

- Toilet policies must state a maximum distance requirement and a maximum ratio of employees to toilet facilities. Typically this is 1 toilet for every 20 employees and a maximum distance of ¼ mile or 5 minutes. Toilet facilities must be clean and made of cleanable materials.
- Toilets must be appropriately located so they are not at risk of contaminating the growing locations.
- Toilet facilities must not be washed or drained in the growing location.
- Employee training and follow-up assure proper disposal of used toilet paper.
- A checklist in place to assure that the above policies are being followed.

Toilet and Hand Wash Contract

- Toilets are to be cleaned __ per week. The service includes replacing toilet paper, paper towels, hand soap and hand washing water as needed.
- The service and cleaning activities will be documented with date and signature of individual completing the service. The log is to be kept in the toilet.
- The following products (MSDS sheets provided) are used when servicing the toilets:
  - Toilet tank chemical/ deodorizer
  - Antibacterial hand soap
  - Cleaning detergents
  - Sanitizing agent
- Provide statement of health department code compliance. (If toilets are regulated)
- Provide statement regarding location of where the collected waste is disposed. Waste can not be disposed of on the farm.

Hand Washing Stations

- Hand washing facilities must be clean, stocked with dispenser soap and disposable towels and made of cleanable materials.
- Appropriate trash receptacles must be available and have weighted lids.
- Hand washing stations must be outside of the toilet facility so that hand washing can be verified.
- Hand washing facilities must be appropriately located so they are not at risk of contaminating the growing locations.
- All gray water must be captured and disposed of away from the growing area.
- Hand washing facilities must have signs, either pictorial or in the appropriate language, that mandate that employees must wash their hands.
- A checklist in place to assure that the above policies are being followed.

Toilet and Hand Wash Contract

- The water used for the hand wash tank shall be potable. The source and bacterial test results for the source of this water will be updated on a quarterly basis.
- Servicing the hand wash water supply tank:
  - Once per week the drain the potable water tank (this water may be drained onto the ground at the station area).
  - Wash out the tank with a 10% solution of bleach and water.
  - Fill the fresh water with the approved potable water.
  - Refill the paper towels and soap dispensers.
  - Inspect the pumps for proper working order

- Provide statement as to SOP of hand wash capture tank water and toilet tank waste collection.

Illness and Injury Policy

- Expectation:
  - Growers are expected to have documented blood contamination policies, injury policies, and illness policies.

Blood Policies

- Blood policies need to specify:
  - that all products exposed to blood, or bodily fluids, will be destroyed, that equipment exposed to blood, or bodily fluids, will be thoroughly cleaned and disinfected before being used.
- Injury policies need to specify:
  - that all employees with sores, cuts, boils, lesions, etc, on their hands must have the areas covered with first aid materials and use appropriate gloves while working with products. (*Due to allergy concerns latex gloves should not be used while working directly with product.)
- Illness policies need to specify:
  - that all employees who show signs of illness will not be permitted to perform job duties where they will come in to contact with product.
- There are procedures in place to verify that the above policies are being followed.

Restricted Behavior

- Growers are expected to have documented policies that restrict activities that may contribute to the contamination of product and should explain the consequences associated with such actions. .
  - The use of tobacco products and food products is not allowed in any production area.
  - Jewelry is not allowed in any production area.
  - Fake nails, eye lashes and other cosmetic apparel must not be used.
  - Hair must be restrained.
  - Employees must follow proper hygiene protocols and must come to work clean and wear clean clothing.
  - Employees must use appropriate protective equipment such as hair nets, beard nets, gloves, and aprons. (When applicable)
  - Children and domestic animals are not allowed in any production area.
- There are procedures in place to verify that the above policies are being followed.

Employee Training

- All employees must be trained in basic food safety and personal hygiene such as:
  - Basic Food Handling
  - Illness Recognition and Reporting
  - Toilet Facility Usage
  - Correct Hand Washing
  - Blood Contamination
  - Basics of Micro-Organisms.
- All employees must be able to demonstrate their knowledge.
- All training should be documented and sign-in sheets available for review.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Employee Documents

- A current employee roster must be made available to the auditor. Rosters should be updated every 2 weeks. Training documents, such as sign in sheets or training agendas.
- The sign in sheets must have the printed name of the employee and their signature.
- Third party and contractor labor companies should provide copies of training materials used for the same topics.

Basic Food Handling

- The microorganisms that cause illness are much too small to see.
- These tiny bacteria and parasites can be transferred to foods from dirty hands or blood, especially from people who did not wash his/her hands after using the toilet.
- We all eat fruits and vegetables, and we can all be made sick if our food has been touched by somebody else who is sick or does not have clean hands.
- Don’t eat food or chew tobacco or gum while working with fruits or vegetables. Food from our mouths can transfer bacteria or parasites to food and make others sick.
- These microorganisms may also be in the soil, so any product that is dropped on the ground should be discarded.

Illness Recognition and Reporting

- Report any active cases of illness to your supervisor before beginning work. This includes diarrhea, vomiting, fever, or nausea. Seek medical attention and do not handle fruits or vegetables!
- Report lesions on your body such as infected wounds, draining wounds, boils or wounds seeping pus that might come in contact with produce. Obtain gloves to cover the wound or do NOT handle produce!
- Be familiar with symptoms of infectious diseases so that if symptoms are evident the supervisor can take appropriate steps.
- Symptoms include nausea, diarrhea, vomiting, runny nose, yellow skin or eyes, cough or fever.

What does Illness Look Like?

Toilet Facility Usage

- All employees must use the toilet facilities provided that they are connected to a sewage disposal system or are a self-contained field toilet.
- Failure to use provided toilet facilities may be grounds for dismissal.

Correct Hand Washing

- All employees must wash their hands with soap and water at the beginning of the workday, after using the toilet, after eating, after leaving the work area and any other time that their hands may have become contaminated. Failure to do so may be grounds for disciplinary actions and eventual dismissal.
- If reusable gloves are used to handle produce, then gloves must be washed with soap and water at the beginning of the workday, after using the toilet, after eating, after leaving the work area and any other time that the gloves may have become contaminated..

Blood Contamination

- Any cuts or scrapes that cause the loss of blood must be reported to the supervisor immediately.
- All product that may has come in contact with blood during an incident must be destroyed.
- All equipment that has come in contact with blood during this incident must be cleaned and sanitized.

First Aid Kits

First aid kit should contain:

- ***Antiseptics*** (something to kill germs to prevent infection)
- ***Injury treatment*** (items to deal with injuries such as butterfly closures and cold compresses
- ***Bandages*** (a variety of bandages to dress and cover a variety of wounds)
- ***Instruments*** (tweezers, barrier gloves)
- ***Medicines*** (analgesics at a minimum).

Basics of Micro-Organisms.

- Pathogens have a high infectivity, which is the ability to invade and multiply in the body, and virulence, which is the ability to produce severe disease.
  - *Salmonella typhi*,
  - *Shigella* species
  - *E. coli* O157:H7
  - hepatitis A virus
- Any worker showing symptoms of an active case of illness that may be caused by any of these pathogens should be excluded from work assignments that involve direct or indirect contact with fresh produce.
- Workers with diarrhea or vomiting and symptoms of other infectious diseases should not work with fresh produce or the sorting and packing equipment in the packing facility.

Food Borne Illness Training for Supervisors

- Supervisors will receive the same training as all employees but because of their responsibility they must be trained:
  - in how to recognize the symptoms of illness
  - how to manage ill employees.
  - how to manage employees who have injuries that may cause contamination.
- Operators should instruct employees to report any active case of illness to their supervisor before beginning work.

Pictorial Training Aids

- Cultural differences exist and that can be observed in hygienic practices. Food safety standards need to be clearly stated. If workers do not all speak one language then pictorials are appropriate to use.

Worker Training Aids

Worker Training Aids

Discard used toilet paper in the toilet!


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Fertilizers

- **Expectation:**
  - All fertilizers should be approved for use on the current crop.
  - For non-synthetic fertilizers the grower will supply the following information regarding crop being fertilized:
    - Date of Application
    - Amount
    - Fertilizer Name and Application Method
    - Growers will provide information regarding the sources of all fertilizers and they need to supply letters of guarantee that the fertilizers being applied are free of pathogens, toxins, or other contaminants that may cause illness or injury.
  - When animal manure, or other types of manure, is used the grower will supply documentation that the manure has been properly composted, or treated to kill pathogens, and that the application intervals, before planting, meet all necessary requirements.

Fertilizer

- Expectation:
  - Grower will provide documentation that they can perform a trace back that shows fertilizer application history for all products.
  - Non-synthetic fertilizers will be stored properly, and secured, when not in use as to prevent possible contamination.
  - For synthetic fertilizers the grower will supply the following information regarding crop being fertilized:
    - Date of application
    - Amount used
    - Fertilizer name and application method
  - Growers will supply letters of guarantee that the fertilizers are free of toxins or other contaminants.
  - When not in use all fertilizers will be stored, and secure, to prevent any possible contamination.
  - Grower will provide documentation that they can perform a trace back that shows fertilizer application history for all products.
  - Growers will not use bio-solids.

Non-synthetic Fertilizers

- Acceptable:
  - All records are current and complete.
  - Non-synthetic fertilizer application records must include a statement that the fertilizer is approved for use on the current crop.
  - Records must indicate what material was applied using the materials common name and the chemical name or scientific name (if applicable).
  - Documentation must be available to show what quantity was applied. Unit of measure will be dependent on fertilizer type, manufactures recommendations, and/or method of application.
  - Documentation must be available to show where the product originated.

Non-Synthetic Fertilizer

- Acceptable:
  - Grower should be able to provide documentation that the sources of the fertilizers are approved suppliers.
  - The grower should be able to provide clear documentation regarding who applies fertilizers and by what method. Methodology should include such information as:
    - Growth stage of product
    - Means for application such as through a spreader, spray rig, back pack sprayer, irrigation, side dress, or other means of application.
  - There must be documentation available that shows that the fertilizer is free of pathogens or other toxins. Lab results need to be provided.
  - All labs should be accredited.
  - Grower will provide documentation that they can perform a trace back that shows fertilizer application history for all products.
  - Bio-solids should not be used.

Synthetic Fertilizers

- **Acceptable:**
  - All records are current and complete.
  - Fertilizer application records must include a statement that the fertilizer is approved for use on the current crop.
  - Records must indicate what material was applied using the materials common name and the chemical name or scientific name (if applicable).
  - Documentation must be available to show what quantity was applied. Unit of measure will be dependent on fertilizer type, manufactures recommendations, and/or method of application.
  - Documentation must be available to show where the product originated.
  - Grower should be able to provide documentation that the sources of the fertilizers are approved suppliers.
  - The grower should be able to provide clear documentation regarding who applies fertilizers and by what method. Methodology should include such information as:
    - Growth stage of product
    - Means for application such as through a spreader, spray rig, back pack sprayer, irrigation, side dress, or other means of application.
  - There must be documentation available that shows that the fertilizer is free of toxins.
  - Grower will provide documentation that they can perform a trace back that shows fertilizer application history for all products.

Pesticide Application

- **Expectation:**
  - All pesticide use recommendations should be made by a state licensed or trained person.
  - Pesticide application records must include a statement that the pesticide is approved for use on the current crop or the grower can supply a list of approved pesticides to the auditor.
  - All applications should be made by a trained and/or certified applicator.
  - All application records are current and complete.
  - Procedures should be available for the calibration of spray equipment
  - Records verifying calibrations have been completed in required intervals.
  - There should be a designated individual who is responsible for inspecting spray equipment and verifying that the equipment is functioning adequately.

Pesticide Application

- **Acceptable:**
  - All of the established expectations are completely met.
  - The grower should have a copy of the license issued to their **PCA** and should be able to verify work performed by the **PCA**. Such verification could include recommendation documentation with the **PCA**'s name and/or signature.
  - If the grower acts as the **PCA** then the grower should provide appropriate supporting documentation that they are the only one who makes recommendations.
  - Applications need to be made by trained and/or certified applicators. Proper certification documents or training documents need to be available in order to show proper training has been performed.

Pesticide Application

- Acceptable
  - All application records should be available and records should include:
    - Date of Application
    - Re-Entry Intervals
    - Type of Pesticide Used
    - Crop Being Grown
    - Quantity Used
    - Purpose for the Application.
  - If a third party performs the application then a copy of all necessary records should be on file with the grower.
  - Spray equipment should be calibrated regularly and the calibration should be documented.
  - **SOP**s should be on file showing the process for calibration
  - A designated person should be available to review the equipment and to verify that it is working properly.
  - If this is performed by a third party then copies of these records should be on file with the grower.


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Pesticide Regulation

- **Expectation:**
  - Pesticides should be authorized for use on the current crop by the US EPA or other appropriate authority
  - There should be procedures in place to verify compliance with the pesticide regulations in the country of origin and in the destination countries.
  - All pesticide pre-harvest intervals are being documented and observed.
  - All pesticide analysis, if performed, is performed by an accredited lab.
  - The grower will provide documentation that they can perform a trace back that shows pesticide application history for all products.
  - Have grower perform a trace back exercise.

Pesticide Regulation

- Acceptable:
  - The grower should have records verifying that pesticide use is authorized for the crops being grown.
  - If pesticide application is performed by a third party applicator then copies of these records should be on file with the grower.
  - The grower should have a mechanism or process for verifying that the pesticides being applied will be accepted, and are authorized, by the destination countries of the crop being grown. This is also the case for the country of origin.
  - If a third party is used for applications then copies of this information should be on file with the grower.
  - A policy and program should be in place that clearly documents that pre-harvest intervals are being adhered to and followed.
  - The grower should be able to clearly trace when a product was harvested against the last pesticide application.
  - If products are being analyzed for pesticide residue the analysis needs to be performed by an accredited laboratory.

General Field Observations

- **Expectation:**
  - The fields should be free of garbage, trash, and other high risk contaminants such as biological waste.
  - All equipment, owned or not owned, in the field should be in good condition, operational, and not used or stored in a manner that may lead to a contamination issue.
  - All fencing and/or barriers should be in good condition and be of a type that is appropriate for its intended use.
  - All chemicals are stored in a secured and locked location.
  - All notifications, such as signage used for pesticide usage, are appropriate and are located in appropriate areas for viewing.
  - Main roadways are maintained in good condition and are easy to navigate.
  - No other conditions exist that might cause a potential hazard.


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General Field Observations

- **Acceptable:**
  - Garbage and trash is lo kept in appropriate receptacles and is not in the field. This includes wind blown garbage from adjacent areas, employee refuse such as food wrappers, food refuse and food waste, soda cans, harvest company waste, and visitor refuse.
  - No biological waste, such as animal or human feces, is present.
  - All ditch or canal materials, used to assist irrigation practices, are removed in an appropriate time frame.
  - Equipment is maintained in a manner so that it appears clean and is not leaking oil, excessively rusting or flaking paint, releasing grease in an mount that may cause contamination, or any other condition in which the equipment may cause a possible food safety risk.
  - Equipment is operational and not in a state of disrepair in the field.

General Field Operations

- Acceptable
  - Fencing is whole, not broken, and has not fallen over. The fence is also of a type that will prevent the intended risk for which it was installed.
  - Barriers, such as berms, ditches, or other structures, used to prevent runoff contamination should be whole, not broken, and of sufficient depth, or height, in order to prevent the intended hazard.
  - Chemicals, such as the type used for agricultural purposes like fertilizers and pesticides, should be stored appropriately and locked or secured when not in use. Empty containers also need to be stored appropriately.
  - All field signs such as ranch identification signs, pesticide re-entry signs, or other notifications should be in appropriate locations that are easy to see, are in appropriate languages, and are large enough to see.
  - Field roads should be maintained in good condition and should be easy to navigate. Roads should not have large potholes, should not be obstructed with items that will cause drivers to possibly need to drive in to the growing areas, and should be wide enough to allow for reasonable amounts of traffic.

Water Distribution System

- **Expectation:**
  - The water distribution system, on the ranch, is in good condition.
  - Water source canals, ditches, and reservoirs should be free of debris.
  - High risk animals and humans should not be present in the water or distribution
  - Adequate buffers and pollution control measures should be in place to prevent contamination of the water system by chemicals or other possible contaminants being stored in the area.
  - Unauthorized equipment should not be in the distribution system. No other contamination source or issue is evident in the distribution system.


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Water Distribution System

- **Acceptable:**
  - The water distribution system is in good condition and there are no obvious contamination concerns.
  - Wells and well casings should be intact and free of leaks.
  - Canals should not have any significant structural issues such as damaged cement.
  - All open water sources, including canals, ditches, and reservoirs should be free of debris. This includes garbage, irrigation accessories, broken or abandoned equipment, dead animals, green waste or yard waste, or other items that might present an animal harborage or food safety risk.
  - High risk animal and human activity must not be permitted in the water system
  - Chemicals should not be stored next to, mixed next to, or other wise manipulated near the water system.
  - If there is any potential that a water system could be subjected to high risk animal or human activity, or that chemicals will be stored near the water system, then adequate measures need to be taken in order to prevent the contamination of the water system. This includes the use of buffer zones and other barriers.

Animal Activity

- **Expectation:**
  - There should be no evidence of high risk animal activity in the field.
- Acceptable:
  - High risk animals are not present in the field this includes, but is not limited to, cows, horses, goats, sheep, pigs and wild pigs, deer, or other high risk animals.
  - Large quantities of low risk animals are not in the field such as migratory birds or rodent infestations.
  - Animal activity is not observed such as feeding, tracks, or other signs.
  - When animal activity is imminent then the grower must have the necessary mitigation plans in place to prevent the harvest of contaminated products.


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Toilet and Hand Washing Facilities

- Expectation:
  - Adequate toilets and hand washing facilities should be provided and maintained for employee use.

Toilet and Hand Washing Facilities

- Acceptable:
  - Toilet and hand washing facilities must be made available to employees who are working in the field. A minimum of 1 toilet for every 20 employees and all toilets should be within 5 minutes, or a ¼ mile, from the work area.
  - All toilet facilities must be maintained so that they are clean and have all supporting equipment such as toilet paper.
  - All toilet facilities must be monitored daily by a responsible individual and a checklist must be available for review. Toilets must have signs, in the appropriate language, that hand washing is mandatory after use.
  - Toilets must be made of cleanable materials such as stainless steel or plastic and must use hands free technology when available.
  - Toilets should not be serviced in the field, or near the field, to avoid any potential spills in the field.
  - SSOPs should be available that outline the cleaning and maintenance procedures for the toilet facilities.

Employee Behavior

- **Expectation:**
  - Employees should always follow GAPs and food safety protocols while working in production locations such as in the field, in post-harvest facilities, or in storage areas.

Employee Behavior

- **Acceptable:**
  - Employees are following recognized GAPs and food safety protocols while working in production locations such as in the field, in post-harvest facilities, or in storage areas.
  - Employees can not work while they are ill.
  - Employees should always follow good hygiene practices and come to work clean and come to work in clean clothes.
  - Employees must always wash their hands before they start working, after breaks, after bathroom use, and whenever their hands may have become contaminated.
  - Employees should not use tobacco products, drink, eat food or candy, or chew gum while in production locations. Drinking water is acceptable in these areas.
  - Employees should not be wearing jewelry, or other loose items, and should always wear appropriate personal protective equipment such as gloves and hairnets, when appropriate.
  - Gloves, when used, should not be excessively dirty or torn or damaged.

Harvest Operation SSOPs

- Expectation:
  - Harvest companies should have documented SSOPs in appropriate languages, which are legible and relevant, to the equipment being used.

Harvest Operation SSOPs

- **Acceptable:**
  - The harvest company must have **SSOP**s that outline how all food contact and nonfood contact surfaces are cleaned.
  - **SSOP**s must have information regarding:
    - Equipment Name
    - Frequency of Cleaning
    - Chemicals Used and Dilutions
    - Applicable Verification Procedures
    - Forms Used to Verify Cleaning.
  - All *chemicals* must be approved for use by the US EPA and/or FDA.
  - All **SSOP**s must be in appropriate languages and must be legible.
  - **SSOP**s must describe an appropriate cleaning procedure.

Harvest Cleaning Logs

- Expectation:
  - All necessary cleaning logs, and/or checklists, are available for review and are up to date.
  - All logs are legible and in appropriate languages.

Harvest Cleaning Logs

- Acceptable:
  - The harvesting company has cleaning and sanitizing records for food contact and non-food contact areas of all harvesting implements.
  - Cleaning records are available on the day of the audit and must be current and legible.
  - The harvesting company has signed documents that the product containers were cleaned prior to receipt.
  - The cleaning process for the containers must be available.
  - There is an inspection log for all incoming packaging materials to prevent adulterated or contaminated packaging from being used.
  - Water used to rinse product or equipment must also be documented.
  - All test strips must be used within their expiration dates and they must be appropriate for the concentrations being used. Other testing methods, (colorimetric, ORP, digital) must be appropriate and used appropriately.

Harvest Tools

- Expectation:
  - All harvest tools that contact the edible portion of the product should be clean, made of cleanable materials, and should be stored properly when not in use.

Harvest Tools

- **Acceptable:**
  - All harvest tools must be made of cleanable materials such as stainless steel and plastic.
  - Tools must be free of rust and damage.
  - All tools must be clean when in use and must be routinely checked and cleaned by personnel when necessary.
  - Tools must be in control of the grower or harvesting company and there must be records that prove harvest tools are being managed appropriately.
  - All tools must be stored properly when not in use. Knife sheaths made of porous materials can not be used for storage.
  - Tools should be stored in a sanitizer solution when employees are on breaks.
  - Sanitizer solution containers should be adequate in size and should have enough solution to properly cover all tools when they are not being used.
  - Tools, that could pose a contamination risk, for any reason, should not be used until they have been properly inspected or properly cleaned and have been approved for use by the harvesting supervisor.

Not Acceptable

Acceptable

Containers and Packaging

- **Expectation:**
  - Containers and packaging should be free of contamination and should be clean and in operational condition.
  - All packaging should be stored so that it excludes birds and other animals.
  - Packaging should only be used for its intended purpose.
  - Packaging should not be stored for long periods of time in the field.
  - Cardboard should not be re-used unless with a single use liner and the container is clean and in good condition.

Containers and Packaging

- Acceptable:
  - All packaging must be free of contamination. This includes evidence of bird, rodent, or insect adulteration or infestation.
  - All packaging must be clean and must be in good condition.
  - Packaging, used for products not grown in soil, should not touch the ground.
  - Packaging should only be used for product storage. Packaging should never be used to store garbage, tools, or employee articles.
  - All cardboard should be used only once. If used more the once then a one time use liner must be used.


4:03AM


TEXAS

Food Contact Surfaces and Equipment

- Expectation:
  - Food contact surfaces must be clean.
  - Food contact surfaces must be free of rust or corrosion.
  - Food contact surfaces must be made of cleanable, non-porous materials.
  - Food contact zones must have controls in place to prevent unnecessary contamination.

Food Contact Surfaces and Equipment

- Acceptable:
  - 1. All food contact surfaces must be cleaned regularly and must appear clean.
  - 2. Food contact surfaces must be free of rust or corrosion.
  - 3. All seams must be smooth and must have complete access for cleaning.
  - 4. All materials, used for food contact, must be made of cleanable materials such as stainless steel, UHMW, plastic, or other similar, non-porous material.
  - 5. All areas near food contact zones must be designed to prevent contamination. This includes, but is not limited to, shatter resistant lights and light covers, drip pan design for motors or other bearings, and kick plates to prevent shoe drip in walk over areas.

Transportation

- Expectation:
  - All vehicles, used to transport product, should be clean and functional.

Transportation

- Acceptable:
  - All vehicles need to be clean and functional.
  - Transportation vehicles need to be dedicated and can not be used for the transportation of animals, or other items, that might cause a contamination issue.
  - All trucks must have a pre-load checklist that verifies that the trucks are clean, that refrigeration units are clean and working properly, that no animals or animal products were transported, and that trucks are locked.

Post Harvest Water

- Expectation:
  - Post harvest water is free of generic E. coli.
  - Testing methods, with detection limits no greater then 2.2 MPN or CFU per 100 ml, must be used or presence/absence testing must be used.
  - Wash water is sanitized and the sanitizer must be maintained within an effective concentration range and within allowable limits.
  - Re-circulated water must be changed at least daily and logs should include sanitizer concentration, pH if sanitizer is pH dependent, and/or ORP records.

Post Harvest Water

- Acceptable:
  - Water used for the rinsing or cleaning of harvested products must be clean and free of generic E. coli.
  - Testing methods used for generic E. coli should be for absence/presence or not have a detection limit greater then 2.2 MPN or CFU per 100 ml of sample.
  - All wash water should include an US EPA or FDA approved sanitizer and all sanitizers must be maintained in their effective concentration ranges.
  - Re-circulated water must be changed at least daily and logs should include sanitizer concentration, pH, and/or ORP records.
  - Water is not otherwise contaminated.

General Requirements

- Expectation and Acceptable:
  - Growers, who are handlers, need an up to date growers list with contact and location information available for review.
  - Grower needs to have a designated individual who is responsible for the food safety program and their 24 hour contact info is available.
  - Grower must have a complete compliance plan for review.

U-Pick Customer Hygiene

- In U-Pick operations the personal hygiene of customers is just as important as that of field workers.
  - Provide convenient, well-maintained, and serviced toilet facilities for customers near the field.
  - Supply liquid soap in dispensers, potable water, and single-use paper towels for hand washing near the restrooms.
  - Invite customers to wash their hands before entering the picking field.
  - Use large posters and other devices to emphasize the importance of washing hands before picking crops.
  - Hand washing posters are often available from local health departments.

Risk Assessment Observations

Risk Assessment Observations

- Edge of irrigation ditch.

Risk Assessment Observations

Risk Assessment Observations

- Residential area next to growing field.

Risk Assessment Observations

- Working housing next to growing field.

Risk Assessment Observations

- Pig pen located at workers housing on ranch.

Risk Assessment Observations

- House and buildings near growing field.

Risk Assessment Observations

- Small ranch next to growing field.