



University *of* Idaho

Good Agricultural Practices (GAP)

Potato USDA GAP Audit Organizational Material

www.uidaho.edu/cals/potatoes/food-and-farm-safety

University of Idaho

Table of Contents of Potato USDA GAP Audit Organizational Material

Introduction	4
Reference Materials	5
Helpful Hints	6
Farm Operation Information	10
Overall Farm Standard Operating Procedures (SOP)	11
Farm Review (Part 1)	13
Field Harvest and Field Packing Activities (Part 2)	15
Storage and Transportation (Part 4)	17
Records	19
Traceability Program	20
Employee Drinking Water	22
Worker Training Log	23
Employee Health and Hygiene Policies (English and Spanish)	24
Field Sanitation Unit Service Log	28
Field and Post-Harvest Pesticide Treatment Report Form	29
Irrigation and Water Application Log	30
Animal Presence or Non-Presence Log	31
Raw Manure Application Log	32
Composted/Treated Manure Log	33
Land Use History	34
Pre-Harvest Assessment	35
Harvesting Container/Bulk Harvesting Vehicle Log	36
Traceability Checklist Log (Field and Storage)	37
Storage Facility and Equipment Cleanliness	39
Pest/Rodent Control Log	40
Storage Temperature and Refrigeration Equipment Log	41

Ice Sanitation Log	43
Additional Documents (optional)	44
Illness/Injury Reporting Log	45
First Aid Kit Monitoring Log	46
Sanitation Unit Spill or Leak Log	47
Contamination During Harvest Log	48
Employee Signed Policy Form	49
SOP Appendixes	50
Composting Practices	51
Storage Pest Management Program	53
Thermometer Calibration	54
Storage and Equipment Cleaning Procedures	55
Maps	56
Current USDA Audit Checklist	58

Compiled by:

- Nora Olsen, Extension Potato Specialist, Kimberly, ID, 208-423-6634,
norao@uidaho.edu
- Lynn Woodell, Support Scientist, Kimberly, ID, 208-423-6622,
lwoodell@uidaho.edu
- Steve Hines, Extension Educator, Jerome County, ID, 208-324-7578,
shines@uidaho.edu
- Mireille Chahine, Extension Dairy Specialist, Twin Falls, ID, 208-736-3609,
mchahine@uidaho.edu

INTRODUCTION:

HOW TO USE THIS MANUAL

To navigate through this manual effectively it is important to have access to the current version of the USDA GAP Audit checklist.

(Available @ <https://www.ams.usda.gov/services/auditing/gap-ghp/audit>)

This manual was designed to simplify the necessary requirements to successfully pass the USDA GAP Audit. It was developed to coordinate your farming operation's standard operating procedures (SOP) of Good Agricultural Practices (GAP) for food and farm safety with the requirements of the USDA GAP Audit Checklist (September 17, 2019 version). It is designed to provide a detailed template for any potato farm's SOP.

Take this manual, tailor it to your specific farming operation, and provide the required documentation to complete the USDA Audit Checklist with ease.

Each bullet point under the Farm SOP section is referenced to the Audit Checklist requirement (e.g. G-3, 1-1, 2-1, 4-1) and a document letter (e.g. P, R or D), if a policy, record or documentation is required.

A typical potato grower GAP audit will include General Questions (G), Farm Review (Part 1), Field Harvest and Field Packing Activities (Part 2), and Storage and Transportation (Part 4).

This manual and additional information can be found at <https://www.uidaho.edu/cals/potatoes/food-and-farm-safety>.

Please note:

The Farm SOP template included in this manual needs to be tailored to your specific farming operation since some points may not be applicable. Within this manual there are sections that include pre-formatted documents, areas to insert maps, and the current USDA Audit Checklist.

Please check for current versions of the USDA Audit Checklist frequently at <https://www.ams.usda.gov/services/auditing/gap-ghp/audit>.

LIST OF WEBSITES AND EDUCATIONAL REFERENCE MATERIALS

- U.S. Department of Agriculture (USDA): Good Agricultural Practices (GAP) & Good Handling Practices (GHP) <https://www.ams.usda.gov/services/auditing/gap-ghp>
 - Download the current USDA GAP&GHP Audit Checklist
 - Also see U.S. Food and Drug Administration (FDA): View the 'Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables (The Guide)' - <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-guide-minimize-microbial-food-safety-hazards-fresh-fruits-and-vegetables> (English and Spanish) for additional information.

- Idaho State Department of Agriculture, Ag Inspections Division: <https://agri.idaho.gov/main/about/about-isda/ag-inspections/>
 - Audit scheduling
 - Contact information

- University of Idaho, Food & Farm Safety; Sustainability: <https://www.uidaho.edu/cals/potatoes/food-and-farm-safety>
 - UI GAP Audit Organizational Manual
 - PSI Sustainability Audit Information
 - Continuing to Manage Foreign Material for Quality Idaho Potatoes, Video (English/Spanish)
 - Remove Foreign Material poster (English/Spanish)

- Cornell University, National Good Agricultural Practices Program: <http://www.gaps.cornell.edu/>
 - GAP Online Produce Safety Course three-week web-based course
 - Order video tapes, guides, pamphlets, signs and other materials to help implement your farm and food safety program
 - Links to additional websites

- University of Maine Potato Program, GAP Self Audits and Documentation: <https://extension.umaine.edu/potatoes/gap-self-audits-and-documentation/>
 - Template for Standard Operating Procedure (SOP) for farm and food safety program
 - Utilize forms for a self-audit of the USDA Audit Checklist

HELPFUL HINTS

- This manual is intended to be used as a policy handbook for your farming operation.
- When the USDA GAP Audit Checklist requires a policy, you will meet the policy requirement if you have a copy of this manual with specifics related to your farming operation.

The following is a key to navigate the terminology in the audit checklist & manual:

P= Policy (Manual)

R= Records (record needs to be filled out and attached)

D= Documentation (both Policy & Record needed)

A= Appendix (provide additional resources/information that are not required)

➤ **SCHEDULING AN AUDIT**

- An Audit Request Form (SC-237A) must be filled out each time an audit is requested (one for the Farm Review and another for the Harvest Audit, if both requested). This request determines the scope of the audit to be performed.
- A signed audit agreement (Form SC-651) must be on file with ISDA prior to an auditor being sent out for an audit.
- This agreement stays in effect until the grower requests in writing to be released from the agreement.
- **Farm Review** audits
 - can be performed as soon as crops are visibly growing in the fields.
 - must occur while a crop is actively growing and cannot be done after the field has been harvested.
- **Field Harvest** audits must be done when the field is being actively harvested.
- **Storage and Transportation** audits can only be done when there is product going into storage or product already in storage. *These audits can be scheduled for the same visit if harvest and storage activities coincide.*
- The farming operation is responsible for making the audit appointment at least two weeks in advance of their anticipated audit date.
- Be prepared with a list of anticipated dates the operation is available; all services are on a first come, first served basis.
- To schedule an audit in Idaho or for more information please contact Sherri Horrocks at (208) 785-8017 or by email: Sherri.Horrocks@isda.idaho.gov
- An auditor will not be sent out until the grower or representative calls to set up an appointment.

➤ **AUDIT SCORING**

- Each question is given a score of 5, 10, or 15 points and is weighted depending on the relative risk associated with the question.
- There are no partial points given for any question: each question receives the total points assigned or zero points.
- It is not necessary to answer yes to every question to pass an audit.

- If the total points earned are equal to or greater than 80% of the adjusted total it is a “Passing Score”.
 - If there are any questions that receive NA (questions that do not pertain to the operation), the points given to the question are removed from the total points available. Fewer available points require a higher score to reach 80% of the total.
 - The Storage and Transportation audit has 250 total points possible but many of the questions are not applicable to potatoes and will not be counted in the total points.
 - Question Part 4-7 refers to a policy for handling of finished product that has touched the floor. Raw, bulk potatoes stored in cellars are not considered "finished product" resulting in an N/A answer and 15 less available points.
 - Questions Part 4-17 thru 4-23 and 4-26 may be answered N/A, further decreasing the points available.
- **FARM OPERATION INFORMATION**
- For the question “Company uses USDA GAP&GHP Logo on packaging or marketing materials?” and “Is this company currently subject to the Produce Safety Rule (21 CFR Part 112)?” answer **NO** if only growing and/or storing potatoes.
- **MOCK RECALLS and TRACEABILITY (G-2)**
- A mock recall explains what you would do if your potatoes were recalled. This establishes when and where they were grown, transported, and stored. You will need to establish a code or identification system for individual lots of your crop.
 - A mock recall is like a fire drill in the workplace. All steps are carried out as if there was a fire. The mock recall is a similar drill. The farming operation needs to create procedures, **perform the drill each year**, and provide documentation of procedures and actions taken.
 - Examples are provided in R#1 but note you must **perform a new mock recall every year**.
- **WASHING HANDS (G-7)**
- The intended employees for this question are the employees who physically handle potatoes at harvest, or at loading or unloading out of storage.
 - This question may be answered N/A where workers are not directly handling potatoes, such as during the Farm Review when the potatoes are still growing.
- **SMOKING AND EATING (G-11)**
- The designated areas must be identified in a policy (SOP).
 - The designated areas could be a vehicle or equipment cab, identified areas of sufficient distance away from the field, harvest, or potato handling/storage areas.
 - Be aware this question also refers to employees who are chewing gum and candy.

➤ **WATER QUALITY ASSESSMENT (Parts G and 1)**

- Water for drinking and hand washing must be tested annually unless using municipal water or bottled water. Tests for drinking water should show that the microbial contents are within the EPA, state or local guidelines. Water used in a portable wash station must have initially met drinking water standards, but it is understood that added chemicals or sitting stagnant may deem it unsuitable for drinking.
- Well water may or may not meet microbial standards for drinking water. Testing of well water will determine its suitability for use as drinking water. Certified drinking water that has sat stagnant in a container or after chemical additions may be used for hand washing, mixing, or cleaning, but not drinking.
- A grower must have documentation of testing water used to clean or to mix chemicals and/or fertilizer. If the water used to mix the chemicals and/or fertilizer is sourced off-site (aerial applicator, spray service, etc.) a copy of that company's water test must be on file.
- In summary, water used for the purposes listed below must be tested annually and meet drinking water standards:
 - Drinking
 - Handwashing
 - Mixing cleaning or sanitation solutions
 - Mixing fertilizers, foliar or post-harvest sprays
 - Storage humidification

➤ **IRRIGATION WATER**

- Water for irrigation must be tested for Total Coliform and *E. coli*. Irrigation water test results must be enumerated, and a value provided. It cannot only state present or absent.
- USDA has stated that since there are no specific allowable amounts for *E. coli* in irrigation water, Idaho recreational water standards are applicable. The current number used in Idaho is for secondary contact which is 576 *E. coli* organisms per 100 ml of sample. To date, there has not been any number established for Total Coliform. A policy statement should be included in your SOP outlining the step(s) that will be taken if *E. coli* levels exceed the threshold.
- Growers that use surface water for irrigation purposes must have it tested at least 3 times throughout the growing season. The dates below are used as a guideline only. Timing is determined by irrigation practices. For a typical fall harvested crop, you will need 3 water tests before the Harvest Audit.
 - A grower must have documentation of a minimum of one water test, per irrigation source, per field, for surface and/or well water, early in the season when irrigation is first introduced to the crop. (for Farm Review audits usually performed prior to July 16)
 - A second water test for each surface water irrigation source is required at peak flow and documented at Farm Review audits generally conducted between July 16 and September 15.

- A third and final water test is collected at the end of season (usually after September 15) for each surface water irrigation source and documented at the Field Harvest audit. Any previously undocumented water tests will also be noted.
- Growers that use well (ground) water for irrigation purposes must have one test and it should be when water is first introduced to the crop. The test cannot occur later in the season.

➤ **ANIMAL-BASED SOIL AMENDMENTS**

- The September 17, 2019 survey has changed the term “manure” to animal-based soil amendments for questions 1-14 to 1-22. Raw manure is referred to as untreated animal-based soil amendments.
- As with earlier surveys, an analysis report must be available for treated or composted animal-based soil amendments used.

FARM OPERATION INFORMATION

_____ (Farm name) has designated
 _____ (Employee name) to implement and oversee a food
 safety program that incorporates GAP and/or GHP for this farm.

Farm name		
Owner's name		
Farm address		
Mailing address		
Contact person		
Contact person phone number	()	
Farm maps and descriptions		
Farm map(s) of all potato growing locations must be provided.	Maps are located under "Maps" in this manual	
On-farm potato storage facility maps are provided. <i>Must be provided if auditing Storage and Transportation-(Part 4).</i> If yes, these maps are located under the "Maps" tab	Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable <input type="checkbox"/>	
Total acreage covered by audit:		
Total square footage for each individual storage covered by a Storage and Transportation Audit:		
Total number of potato acreage:		
List names of fields and acreage to be audited:	Field	Acreage
Is any product co-mingled in a storage? (e.g. potatoes from different producers)	Yes <input type="checkbox"/> No <input type="checkbox"/>	

STANDARD OPERATING PROCEDURE (SOP) FOR GOOD AGRICULTURAL PRACTICES

REMINDER: The following policy manual is a template. It needs to be tailored to your specific farming operation since some points may not be applicable.

The following is a key to navigate the terminology in the audit checklist & manual:

P= Policy (Manual)

R= Record (record needs to be attached/filled out)

D= Documentation (both Policy & Record needed)

A= Appendix (provide additional resources/information that are not required)

Audit #		Record #
Implementation of Food Safety Program		
P1 P2 (D)	_____ (Farm name) has designated _____ (Employee name) to implement and oversee a food safety program that incorporates GAP and/or GHP for this farm. <i>(Record provided in Farm Operation Information section)</i>	
Traceability		
G1 (D) G2 (R)	A traceability program has been established and successfully tested with a “mock recall”. Records of the traceability program can be found in the Records section of this manual. If description of co-mingling is needed it can be found in the Farm Operation Information section.	R#1
Worker Health and Hygiene		
G3 (R)	Drinking water is available to all workers. Documentation is attached.	R#2
G4 (P) G5 (D) G7	All employees have been trained and are required to follow proper sanitation and hygiene practices. Employee name, date of training, and training method are documented. An employee signed policy form is attached. Follow-up training will be provided if necessary.	R#3 R#4
G7 G8	Readily understandable signs are posted in appropriate areas to instruct employees and visitors to wash their hands before beginning or returning to work (including all breaks, lunch and restroom use), or when their hands have been contaminated.	
G4 G6	Readily understandable signs are posted in appropriate areas to instruct employees and visitors to follow proper sanitation and hygiene.	
G9 G10 (R)	All toilet/restroom/field sanitation are serviced and cleaned on a scheduled basis. They are properly supplied with single use towels, toilet paper, and hand soap or anti-bacterial soap and water for hand washing that meets microbial standards for drinking water.	R#5

Audit #		Record #
Worker Health and Hygiene (cont.)		
G11 (P)	<p>Eating, drinking, chewing gum and tobacco use are confined to designated areas separate from where potatoes are handled. Designated areas include _____.</p> <p>Bottled water is allowed provided it is stored in closed plastic containers away from the product flow when not being used.</p>	
G12 (P)	Workers with flu-like symptoms or open wounds, or infectious conditions are prohibited from handling potatoes.	
G13 (P)	<p>A written policy is in place whereby potatoes that have come in contact with blood or other body fluids will be disposed using the most appropriate method for the situation (e.g. buried, burned, etc.).</p> <p>Equipment surfaces that have come into contact with blood or other body fluids will be cleaned and disinfected with bleach or other safe disinfectant.</p>	
G14 (P)	<p>First aid kits are identified, checked and restocked on a regular basis.</p> <p>All employees are instructed to seek prompt treatment with clean first aid supplies for cuts, abrasions, and other injuries. Workers are instructed to report any injuries to their supervisors and will be documented in the illness/injury reporting log.</p>	
G15 (R)	<p>Any pesticide, fertilizer, or nutrient applied in the production of the potato crop will be documented and kept on file.</p> <p>Company personnel applying regulated materials must have name and pesticide license recorded and on file.</p>	R#6

Audit #	Part 1 Farm Review	Record #
Water Usage		
1-1 1-2	The farm operator is knowledgeable of the irrigation water source and application method(s).	
1-3 (D) 1-4 (D)	Water quality is documented to be adequate for irrigation, chemical application and fertigation method.	R#7
1-5 1-11	Measures are used to restrict irrigation water sources from livestock, wildlife, and other potential pollution sources as needed.	
Sewage Treatment		
1-6	The farm sewage treatment system/septic system is functioning properly and there is no evidence of leaking or runoff.	
1-7	There is no municipal/commercial sewage treatment facility or waste material landfill adjacent to the farm.	
Animals/Wildlife/Livestock		
1-8	Controls are in place to decrease contamination of agricultural water and soil from other farm or animal operations.	
1-9 1-10	Manure lagoons located near or adjacent to potato production areas are maintained to prevent leaking or overflowing, or measures have been taken to stop runoff from contaminating the potato production areas.	
1-12 (R) 1-13 (R)	Presence or non-presence of wild and domestic animals is monitored and documented on a continual basis even when no animals are seen. All reasonable effort is made to keep animals away from water used for irrigation and the potato production area.	R#8
Animal-based Soil Amendments and Municipal Biosolids		
The farm operation will choose one of the following:		
A	This farming operation applies untreated or incompletely treated animal-based soil amendments or a combination of untreated or incompletely treated animal-based soil amendments, complete 1-14 through 1-17.	
B	This farming operation applies only composted animal-based soil amendments/treated municipal biosolids as a soil amendment, complete 1-18 through 1-21.	
C	If this farming operation applies no animal-based soil amendments, go to 1-22. This farm declines to use untreated or treated animal-based amendments or municipal biosolids, skip sections 1-14 to 1-21.	
Option A: Untreated Animal-based Soil Amendments		
1-14 (R)	If this farming operation applies untreated animal-based soil amendments or a combination of untreated and composted animal-based soil amendments it is incorporated immediately at least 2 weeks prior to planting and a minimum of 120 days prior to harvest.	R#9
1-15 (R)	Untreated animal-based soil amendments are not used on commodities that are harvested within 120 days of planting.	R#9

Audit #		Record #
1-16 (R)	If a combination of untreated and treated animal-based soil amendments are used, the treated animal-based soil amendments are properly treated, composted or exposed to reduce the expected levels of pathogens.	R#10
1-17	Animal-based soil amendments are properly stored prior to use.	
Option B: Composted Animal-based Soil Amendments		
1-18 (R) 1-19 (D) 1-21 (R)	If farm uses only composted animal-based soil amendments and/or treated biosolids as a soil amendment, it will be properly treated, composted, or exposed to environmental conditions that would lower the expected level of pathogens. Aged manure is not considered compost. Proper composting methods are described in the SOP appendix.	R#10 A#1
1-20	Composted animal-based soil amendments and/or treated biosolids are properly stored and are protected to minimize recontamination.	
Option C: No Animal-based Soil Amendments /Biosolids		
1-22 (P)	This farming operation applies no animal-based soil amendments or municipal biosolids of any kind.	
Soils		
1-23 (R) 1-24 (R) 1-25 (R)	All attempts have been made to acquire previous land use history to minimize the risk of produce contamination. If previous land use history indicates a potential for contamination action will be made to mitigate the contamination or the field will not be used for crop production. If flooding occurred in the crop production areas, soils are tested for potential microbial hazards.	R#11
Traceability		
1-26 (R)	Each field (production area) is coded, named or identified to enable traceability in case of a recall	R#15

Audit #	Part 2 Field Harvest and Field Packing Activities	Record #
Worker Sanitation and Hygiene		
2-1 (D)	A pre-harvest assessment is made for each production area (not the farm as a whole) with risks and possible sources of contamination recorded and assessed.	R#12
2-2 2-3	This farming operation will comply with all applicable state and/or federal regulations dictating the number, condition, and placement of portable field sanitation units. If the number of employees does not require a portable field sanitation unit, access to a clean toilet facility is readily available for all employees.	
2-4 2-5 (P)	Portable field sanitation units are located such that they minimize the risk for product contamination and yet are easily accessible for service, clean up and response teams. If a portable toilet is tipped over, damaged or leaking it will be fixed or replaced and contaminated soil around it will be removed.	
Field Harvesting and Transportation		
2-6 (D) 2-7 (D)	All harvesting containers (including bulk hauling vehicles) as well as hand harvesting implements that come in direct contact with harvested potatoes are cleaned and/or sanitized prior to use and kept clean. Water used in this process must be tested and meet drinking water standards before the addition of a cleaning agent.	R#13
2-8 2-9	All containers, equipment and/or machinery will be in good repair and any damaged containers or equipment will be properly repaired or disposed.	
2-10	Harvesting equipment containing light bulbs and/or glass will be protected to avoid produce or field contamination in case of breakage.	
2-11 (P) 2-12 (P)	If there is a glass, plastic breakage or any other source of contamination (chemical, petroleum, pesticide) during the harvesting operation the following action will be implemented: <ol style="list-style-type: none"> 1. Supervisor is contacted 2. Potatoes contaminated will be disposed of and field area avoided 3. Equipment will be cleaned and inspected after contamination 	
2-13	This farming operation instructs all employees to inspect and remove foreign objects such as glass, golf balls, metal, rocks, or other dangerous/toxic items. Other means to remove potential contaminants may include use of specialized equipment.	
2-14 (P)	All harvesting containers will be used solely for the carrying or storage of the intended crop (potatoes) and non-produce items will not be allowed in these containers during the harvest season.	

Audit #		Record #
2-15 (R)	If a post-harvest treatment using water is applied, then the water has been documented as originally meeting drinking water standards.	R#7
2-16	Manual and mechanical effort will be made to remove excessive soil and/or mud from harvested potatoes and/or containers during harvest.	
2-17 2-18 (P)	Transportation equipment used to move potatoes from field to storage areas or storage areas to processing plant which comes into contact with product is clean, in good repair and covered. To achieve points on question 2-18 all loads must be covered.	
2-19 2-20	N/A for potato operation	
2-21 (D)	Product moving out of the field is coded or identifiable to enable traceability. R#15 is used for direct trucking to packing shed or processor and also to a storage facility.	R#15

Audit #	Part 4 Storage and Transportation	Record #
Product, Containers and Pallets		
4-1 4-2 (R) 4-3 4-4 4-5 4-8 4-9	The storage facility is inspected, cleaned and maintained in an orderly manner. Storage rooms, buildings and/or facilities are maintained and sufficiently sealed to protect from external contamination and floors are reasonably clear of debris and standing water. Area outside of storage has been cleaned of litter and debris. Pallets, pallet boxes, totes, bags, bins, cellars, storage rooms, etc., are clean, and inspected to not contribute foreign material to the product. All attempts are made to protect these containers or areas from contamination (birds, rodents and other pests, etc.). Proper cleaning procedures are located in the SOP appendix.	R#16 A#4
4-6 4-7	Does not apply for potato storages.	
4-10	If potatoes need to be stored outside, they are covered and protected from contamination.	
4-11	Non-food grade substances such as paints, lubricants, pesticides, etc., will not be stored in close proximity to the harvested potatoes.	
4-12 (D)	All mechanical equipment used within the storage facility is cleaned and maintained to prevent contamination of the harvested potatoes.	R#16
Pest Control		
4-13 (D) 4-14 (D) 4-15 (R)	There is an established pest control program for the facility that includes measures to exclude animals and pests from storage facilities. Service reports for the current and/or previous year program are available for review. A description of the program is in the SOP appendix. Maps of rodent bait and trap locations are in the map section.	R#17 A#2
4-16	The storage facility is well maintained to minimize major cracks and crevices.	
Ice and Refrigeration		
4-17 (R) 4-18 (R)	Humidification water, cooling water or ice has met microbial standards for drinking water. If using ice, manufacturing, storage and transportation facilities used in making and delivering the ice used for cooling have been sanitized.	R#18 R#19 (if ice used)
4-19 (D) 4-20 (D) 4-21 4-22 (D) 4-23	Storage temperature logs are maintained, and refrigeration system is properly working (if used). Thermometer(s) are calibrated, and records are available. A calibration method is available in the SOP Appendix. Refrigeration equipment condensation or iced product does not come in contact with potatoes.	R#18 A#3

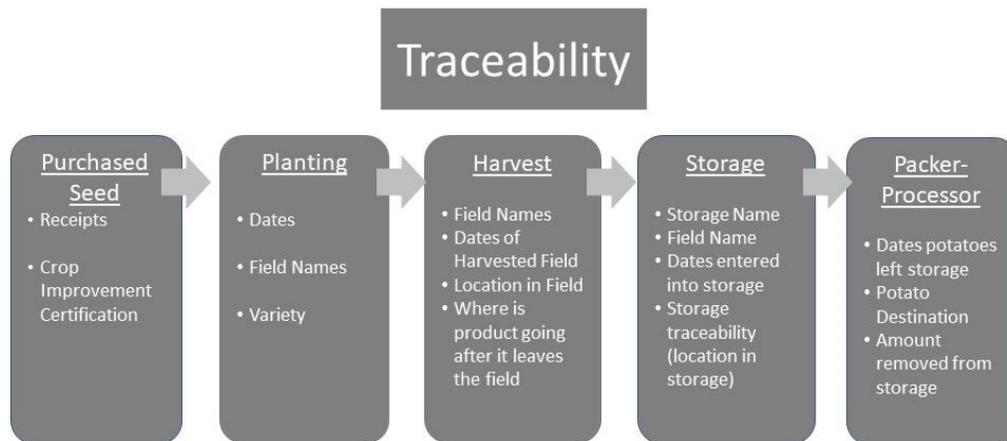
Audit #		Record #
Transportation		
4-24 (P)	Prior to the loading and unloading process, conveyor and other handling equipment will be clean, in good physical condition, free from disagreeable odors and from obvious dirt and/or debris. Cleaning procedures for equipment is in the SOP appendix.	A#4
4-25 (P) 4-26 (N/A) 4-27 (P)	All effort will be made to ensure minimal damage to the harvested potatoes during handling and transportation. The harvested potatoes will not be handled or transported with potentially contaminating products.	
Worker Health and Personal Hygiene		
4-28	Employee facilities are clean and located away from harvested potatoes (e.g. storage, shipping and receiving areas).	
4-29 (N/A)	Not applicable to potato storage and transportation facilities.	
4-30 (P)	Employees should not wear loose clothing and instead should wear snug- fitting clothes. Employees are not to wear jewelry in crop handling areas. Non- removable jewelry needs to be reported to a supervisor on advisement for how to cover the jewelry (e.g. waterproof gloves).	
Traceability		
4-31 (D)	Records uniquely identify the source of the incoming potatoes, storage placement and destination of the outgoing product.	R#15

RECORDS

Traceability Program

Documentation for the traceability program is within 3 general categories:

1. Crop history records: **R#6, 7, 8, 9, 10, 11, 18 and Farm Operation Information**
2. Sanitation/cleaning: **R#13, 16, 17**
3. Direct traceability of potatoes from harvest to storage or processor/fresh pack operation: **R#15**



- *A good rule-of-thumb is to know where your product came from and where it went.*
- *There are two document formats: one for a field-run operation, one for storage operation. Fill out the appropriate documents for your operations.*

NOTE: The following pages need to be filled out yearly as a DRILL or practice exercise. No recall was actually issued, but documentation must be filled out verifying procedures are in place for a recall and have been practiced each year. The following is a template to fill out for the required mock recall drill. Your individualized information will replace the yellow highlighted areas.

Mock Recall Drill

A Mock Recall Statement is required Yearly for G2 in the Audit

Mock Recall Statement for (J.Grower Farm) Field-Run Operation

(cultivar) Certified Rus. Burbank seed purchased from (seed source) Right Seed, planted in (field ID) Tower Field on (date planted) 4/25/19.

(cultivar and weight) Russet Burbank (750 cwt) were harvested on (date) 9/19/19 from (field ID) Tower Field and given traceability code(s) 0919T014, 0919T055. These potatoes were delivered to (packer or processor) SpudProc on (delivery date) 11/19/19. (grower/GAP designee) J.Grower called (packer/processor contact person) Tim Jones on (mock recall date) 3/1/20 and was told they had packed/processed (amount) 75,000 lbs and (amount not packed/processed) 0 remained.

Mock recall performed: Begin Time: 9:00 am End Time: 11:00 am Date: 3/1/2020

Mock Recall Statement for (J.Grower Farm) Storage Operation

(cultivar and weight) Russet Burbank (750 cwt) were harvested on (date) 9/19/19 from (field ID) Tower Field and given traceability code(s) 0919T0514, 0919T0525. These potatoes were unloaded into (storage ID/name) Valley Storage 5 on (date) 9/19/19 at ID Location (location within storage) duct/tube 14.

(cultivar and weight) Russet Burbank (750 cwt) were unloaded from (storage and location within storage ID) V.Storage 5 Tube 14, loaded into trucks (truck ID) ID JG1 T, ID JG2 T and delivered to (packer/processor) SpudProc on (date) 11/19/19.

(grower/GAP designee) J.Grower called (packer/processor contact person) Tim Jones on (mock recall date) 3/1/20 and was told they packed/processed (amount processed) 75,000 lbs and (amount not processed) 0 remained.

Mock recall performed: Begin Time: 9:00 am End Time: 11:00 am Date: 3/1/2020

Document R#15 in the GAP manual is a traceability record template for the needed information to fill out the mock recall statement.

Employee Drinking Water

R#2
G3

Drinking quality water supplied to the employee is:
(check all that apply)

Municipality

(municipality name)

Well

Attach water test

Bottled

(brand name)

Is water applied to harvested potatoes in the field or on hauling equipment:

Yes

No

Employee Health and Hygiene Policies

- All employees and visitors to the location are required to follow proper hygiene procedures.
- Employees must wash their hands before beginning or returning to work (e.g. from all breaks, use of restroom facilities). Signs will be posted in designated areas to remind you of this policy.
- Portable toilets and restrooms will be equipped with soap and water for washing hands. Only use single-use towels to dry hands and place in waste receptacle. Hand washing water must be documented as meeting drinking water standards. Employees will use the restrooms in a manner to maintain usability and will report any lack of usability to a supervisor. Used toilet tissue must be placed into the toilet fixture and **NOT** into a trash can.
- Employees should not wear loose clothing and instead should wear snug-fitting clothes. Employees are not to wear jewelry in crop handling areas. Non-removable jewelry needs to be reported to a supervisor on advisement for how to cover the jewelry (e.g. waterproof gloves).
- Smoking, eating and drinking are allowed in designated areas only. Signs will be posted to remind you of those locations. Enclosed vehicles may be used as a designated location. Only bottled water is acceptable in the work area provided it is in clear plastic containers and stored below the product flow zone. Glass containers are not allowed in the fields, storages or near the harvest operation. Garbage containers will be provided and maintained in the eating area.
- If you are experiencing flu like symptoms or have infectious conditions, you are prohibited from handling harvested potatoes.
- If you have knowledge of harvested potatoes that has come in contact with blood or other body fluids, you must report it to supervisors so that contaminated produce can be discarded. Potatoes that have come into contact with blood or other body fluids will be disposed of, buried, burned or put into safe garbage container. Machinery that has come into contact with blood or other body fluids will be disinfected with bleach or other safe disinfectants.
- First aid kits are available for all employees. Any cuts, abrasions or other injuries must be immediately reported to a supervisor and properly and promptly treated.

(continued)

- You are required to always be watchful for foreign material such as glass, metal, golf balls, packaging materials, rocks, bones, personal effects, insects, rodents, parts or feces. Any broken glass must be immediately reported to a supervisor for proper clean up.
- Any type of foreign material must be removed from the harvested potatoes or avoided in the field. If you are unable to remove the foreign material, contact your supervisor with information on the location of the material.
- You need to be alert for potential chemical hazards such as pesticides, oils, and fuels. Any type of leak or spill needs to be reported to the supervisor for immediate attention.
- Employees who are stationed around equipment must know the location of the controls to safely start and stop machinery. You must notify a supervisor immediately if there are any unsafe conditions with the equipment that may endanger employees or contaminate potatoes.
- Keep any type of chemical containers away from harvested potatoes and raw potato storage areas.
- Monitor crop production areas and document the presence, signs, or non-presence of wild or domestic animals entering the land/production or storage areas.
- If you are responsible for pesticide applications, you must be properly trained on best management practices, have read and understood the pesticide label, and, if necessary, be certified by Idaho State Department of Agriculture to apply restricted use pesticides.

I have received orientation on the above information and fully understand the required policy.

Employee Signature _____
Date _____

Supervisor Signature _____
Date _____

Políticas de Salud e Higiene del Empleado

- Todos los empleados y visitantes de este predio deben seguir procedimientos apropiados de higiene.
- Los empleados deben lavarse las manos antes de comenzar o antes de volver al trabajo (por ejemplo. Después de un descanso o intermedio, use los lavamanos del baño). Figuras/Símbolos serán colocados en áreas designadas para recordar esta política.
- Las zonas de descanso y los baños serán equipados con jabón y agua para lavarse las manos. Se debe usar solamente toallas descartables para secarse las manos y colocarlas en el basurero. El agua para lavarse las manos debe ser registrado potable. Los empleados deberán usar los baños de forma higiénica y mantener su utilidad reportando cualquier desperfecto o mal uso a un supervisor. El papel higiénico usado debe ser colocado en el interior del inodoro o letrina **no** en el basurero.
- Los empleados no deberán vestir ropa suelta y en su lugar, deberán vestir ropa ajustada y cómoda. Los empleados no están autorizados a portar joyas en áreas de manipulación de la cosecha. Joyas que no se pueden quitar, se deben reportar a un supervisor para buscar la forma de cubrirlas. (Ej. Guantes de goma)
- Fumar, comer y beber es permitido solamente en áreas designadas. Figuras/Símbolos serán colocados para reconocer esos lugares. Los vehículos dentro del predio se pueden utilizar como área designada. Solamente el agua embotellada es admisible en el área de trabajo siempre y cuando esté en envase plástico claro y se mantenga alejada de la zona de flujo de producto. Los envases de cristal no se permiten en los campos, almacenes o cerca a la labor de cosecha. Envases de basura serán proporcionados y mantenidos en áreas en que se permite comer.
- Si usted está sintiendo síntomas de gripe o parecidos, o sobrelleva un estado infeccioso, se le prohíbe manipular las papas cosechadas.
- Si usted tiene conocimiento que las papas cosechadas han entrado en contacto con sangre u otros fluidos corporales, usted debe informar de esto a los supervisores para poder desechar el producto contaminado. Papas que han entrado en contacto con sangre u otros fluidos corporales serán desechadas, enterradas, quemadas o puestas en un envase de basura protegido. La maquinaria que ha entrado en contacto con sangre u otros fluidos corporales será desinfectada con cloro u otros desinfectantes adecuados.

(continuado)

R#4
G5

- Los botiquines de primeros auxilios están disponibles para todos los empleados. Cualquier corte, herida u otras lesiones deben ser comunicadas inmediatamente a un supervisor y ser tratadas adecuadamente y sin demora.
- Usted está en la obligación de estar siempre alerta a la posible presencia de cualquier material diferente a la cosecha (material extraño) por ejemplo; cristal, metal, pelotas de golf, materiales de empaquetado, rocas, huesos, efectos personales, insectos, roedores, partes/porciones de algo o heces. Cualquier pieza de vidrio roto, debe ser reportada inmediatamente a un supervisor para su correspondiente limpieza.
- Cualquier tipo de material extraño se debe evitar en el campo o apartar de las papas cosechadas. Si usted no puede retirar el material extraño, contáctese con su supervisor e infórmelo sobre la localización del material.
- Usted necesita estar alerta a potenciales riesgos químicos tales como pesticidas, aceites, y combustibles. Cualquier tipo de fuga o derrame necesita ser comunicado al supervisor para su atención inmediata.
- Los empleados que tienen su puesto de trabajo alrededor de un equipo o maquinaria, deben conocer la localización de los controles para poner en marcha y detener sin peligro la maquinaria. Se debe notificar a un supervisor inmediatamente en caso de existir cualquier desperfecto del equipo que ponga en riesgo a los empleados o contamine las papas.
- Guarde cualquier tipo de envases químicos lejos de las papas cosechadas y de los almacenes de papa cruda.
- Supervise las áreas de producción de papa y documente la ausencia o la presencia, huellas, de animales salvajes o domésticos que ingresan al terreno de producción o a los almacenes.
- Si usted es responsable de la aplicación de pesticidas, debe estar apropiadamente entrenado en la mejor forma de manipulación, haber leído y entendido la etiqueta del pesticida, y si es necesario, estar certificado por el Departamento de Agricultura del Estado de Idaho para aplicar pesticidas de uso controlado.

Recibí orientación sobre la información indicada arriba y entiendo toda la política requerida.

Firma del Empleado _____

Fecha _____

Firma del Supervisor _____

Fecha _____

Field and Post-Harvest Pesticide Treatment Report Form*

Page _____ of _____

List all soil treatments, preplant soil and seed treatments, post plant soil and foliar treatments. Include all fumigants, herbicides, insecticides, fungicides, growth regulators, vine killers, etc.

Grower/Farm Name:				Field Location:				State:		County:		Field Number(s)- Acres:				
Storage/Processing Site:				Variety:				Total Acres or Weight treated:								
*Application Method: G=Ground A=Air C=Chemigation W=Ground Application - Water Incorporated																
** Pesticide Type: 0=Repellant 1=Seed Treatment 2=Fumigant 3=Nematicide 4=Herbicide 5=Fungicide 6=Insecticide 7=Grow Regulator 8=Sprout Inhibitor 9=Desiccant																
*** Rate Type: Field: Acre, 1000ft/row, 1000 sq ft Seed: CWT (100 lbs) Dilution: 10 gal, 50 gal, 100 gal																
**** Target Pest Type: 1=Bacterial 2=Fungal 3=Viral 4=Chewing Pest 5=Sucking Pest 6= Tube/Root Pest 7=Broadleaf Weed 8=Grass 9=General Weed																
Treatment Date & Time Start/Finish Product Name	Field #	Acres Treated	App. Method*	Pesticide Type**	Product Name & Formulation	Rate	Unit of Measure	Rate Type***	Primary Target Pest	EPA No.	Sensitive Area Y/N	Wind Speed	Wind Direction	Temp	Applicators's License # or Training Date if no license	Name of Applicator

Grower Signature: _____ Date: _____ Field Rep Review Initials: _____ Date: _____



Pre-harvest Assessment

Field or Production area: _____

Date: _____

Questions	Yes	No	Action Taken	Initials
Are toilets and wash facilities properly located?				
Is drinking quality water available for workers?				
Is harvest equipment available and in good condition?				
Is there evidence of unauthorized entry in the crop area and if so has it been investigated?				
Is there evidence of domestic or wild animal crop damage?				
Is there evidence of physical contamination in the crop area?				
Are possible fuel and chemicals contaminants isolated from the crop area?				
Has the land use history and other possible biological or physical sources of contamination been assessed and action taken if needed?				
Are contaminated areas isolated for "no harvest"?				
Is transportation equipment available and clean?				

Projected Harvest Date: _____

~Attach Additional Storage Temperature Records Here~

Ice Sanitation Log

R#19
4-17
4-18

Drinking quality water supplied for ice production
(check all that apply)

- Municipality
 - (name)_____

- Well **Attach water test**

- Purchased Ice
 - (company name)

**ADDITIONAL DOCUMENTS
(OPTIONAL)**

Sanitation Unit Spill or Leak Log

R#21
2-5

Date	Sanitation Unit	Event (describe)	Response Taken	Initials

R#22
2-11
2-12

Contamination During Harvest Log

Date	Incident Location	Breakage/Contaminant (describe)	Response Taken	Initials

EMPLOYEE HEALTH AND HYGIENE POLICY

insert signed policy for each employee here
See page 26 for policy template.

**STANDARD OPERATING PROCEDURES (SOP)
APPENDIX**

Composting Practices

For producers desiring to compost manure

A#1
1-19

There are two general practices recognized by the USDA for treating manure to make it safer than raw manure. The first is passive treatments, the second is active treatments.

Passive Treatment Practices

Passive treatment, or aging, relies on the passage of time and environmental factors to reduce pathogens in the manure.

1. The manure is piled and allowed to age.
2. The internal temperatures of piled manure will increase initially, but as oxygen and moisture are quickly depleted, the temperatures drop. In order to kill pathogens and weed seeds, manure must be held at a minimum of 131°F for 14 days. During this time, the outsides of the pile will never reach that temperature. Pathogens may be killed with the passage of time through drying and ultraviolet irradiation. Weed seeds, especially on the outside of the pile, will not be destroyed.

It will be very difficult, if not impossible, to document that the resulting product has reached the proper temperature for the proper amount of time as required by section 1-19 of the audit.

Active treatment practices

1. Manure that is to become compost must be turned frequently to maintain proper oxygen and moisture levels, and to ensure the entire amount of material is heated properly to destroy pathogens and weed seed.
2. After piling, a carbon source such as straw will need to be added to and mixed with raw manure to maintain an ideal Carbon:Nitrogen (C:N) Ratio of 25-30:1.
3. The temperature will rise and will need to be maintained at over 131°F for 14 days to destroy pathogens and weed seeds.
4. During this time, the pile will need to be mixed or aerated to maintain proper oxygenation and to ensure the entire pile is exposed to the high temperatures.
5. The recommended procedure is to follow the process known as Procedure to Further Reduce Pathogens (PFRP).

PFRP

- The pile is created, let heat for 3 days, and then turned.
- Subsequent turnings are done every three days for a total of 5 turnings.
- In order to comply with Section 1-21, it will be necessary to have a composting procedure and document pile temperatures and moisture content, as well as turning dates.
- This documentation will be referred to as a time/temperature log.

See next page.

Storage Pest Management Program

A#2
4-14

A rodent and bird control program has been implemented at this storage facility.

1. If rodent traps are placed inside the storage facility, only spring-loaded style traps will be used.
2. No bait traps will be used inside the storage facility.
 - i. Bait traps may be used outside the storage facility only.
3. All traps will be checked frequently, and bait traps will be restocked with bait when necessary. Logs from the previous year will be available to document compliance.
 - i. Traps can be located in several areas inside and outside around the facility.
4. If appropriate, chicken wire or netting will be used over the air intake door and exhaust louvers to help prevent birds from entering the storage facility.

Thermometer Calibration

A#3
4-20

Melting point of ice method

1. Place ice in a container and allow melting to begin.
2. Stir to ensure the temperature in the ice/water mixture is uniform throughout the container.
3. When the container is filled with a 50/50 ice and water solution, insert the thermometer and wait until the temperature stabilizes.
4. If the thermometer is properly calibrated it should read 32°F (0°C).
5. If the thermometer is not reading 32°F (0°C), adjust the thermometer (if possible), use the temperature difference to adjust for the readings, or replace the thermometer.

Avoid adding tap water to the ice (to obtain the 50/50 mixture) because the mixture will not be 32°F (0°C), but rather at a higher temperature. The calibration will be more accurate if ice is used.

Reference:

“Food Store Sanitation”, 1998, Sixth Edition, Gravani, Robert B., Rishoi, Don C., Cornell University Food Industry Management Distance Education Program, Lebhar-Friedman Books, Chain Store Publishing Corp.

Storage and Equipment Cleaning Procedures

General instructions for cleaning and disinfecting a potato storage and/or equipment:

1. Remove all plant and potato debris from the storage floor, plenum, duct pipes and/or from equipment used for production and handling.
2. Remove the top 1 to 2 inches of dirt floor and replace with soil not associated with potato production.
3. Thoroughly wash all components of the storage facility and/or equipment with soap and water or steam using a high-pressure sprayer and then rinse.
4. Use an appropriate, registered, and labeled disinfectant for your storage. Contact local suppliers or the Idaho State Department of Agriculture for an updated list of registered disinfectants.
5. When disinfecting, make sure the sprayer pressure and volume are sufficient to effectively clean all surfaces. Wet all surfaces thoroughly and allow the disinfectant to remain on the surfaces for at least 10-15 minutes to be fully effective.
6. Make sure to thoroughly clean the inside of duct pipes.
7. Close up the storage facility for 2 weeks for maximum disinfectant effectiveness and then open the facility, allowing all surfaces to dry.
8. Follow label and supplemental label instructions or hire a professional applicator.
9. Remember, storage and/or equipment cleaning and disinfecting are critical components of good potato storage management.

MAPS

Insert all required maps in this section.

Include

- farms maps of all potato growing locations or fields
- legal description of each field
- floor plan maps of all on-farm potato storage facilities (i.e., if used for traceability).
 - storage facility maps must also include locations of rodent bait and traps (see example below).

Rodent Bait and Trap Locations

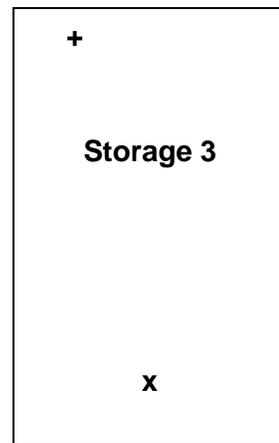
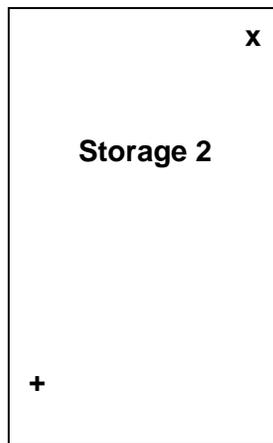
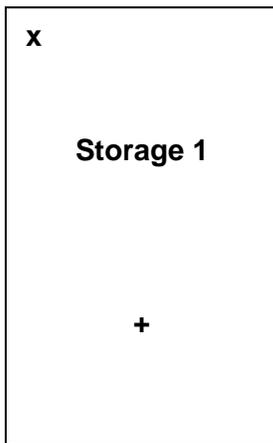
The following maps are examples only.

Each storage needs to be individually drawn specific to that storage.

Some storages may have catwalks that require placement of rodent traps and these need to be identified on the map.

Attach additional pages if necessary.

(x denotes rodent bait traps + denotes rodent spring trap)



Visit the website below to ensure that you have the current USDA Good Agricultural Practices (GAP) Audit Verification Checklist.

Print and place here the current version of the USDA Audit Checklist
<https://www.ams.usda.gov/services/auditing/gap-ghp/audit>

If there is a revised GAP Audit Verification checklist, remember to change your SOP, documents, etc., to correspond to the changes in the newly revised checklist.