

## 4. Manure, Compost/Compost Tea and Other By-Products

### RATIONALE:

Product may become contaminated with biological, chemical or physical contaminants if manure, compost and compost teas are not properly handled, applied or stored. It is important when purchasing manure to know the type (e.g., cow, sheep, chicken, etc.). Manure is known to carry pathogenic bacteria (e.g., *E. coli* O157:H7, Salmonella). These organisms can be eliminated through proper composting of manure (e.g., time, temperature) so that it is not a source of contamination to product. Presently there is little scientific information on pathogen survival when other by-products are applied in the production site (e.g., seafood waste, culls). Refer to Section 23: Deviations and Crisis Management 23.2: Major Deviations and Corrective Action – Chart Section 4: Manure, Compost/Compost Tea and Other By-Products for action to take if deviations occur when purchasing/selecting/receiving compost and compost tea.

- Manure is used on the premises
- Compost/compost tea is used on the premises
- Other by-products are used on the premises

If **ANY** of the above circles has been checked off, proceed below.  
If not, proceed to Section 5: Mulch and Row Cover Materials.

### IMPORTANT NOTE

It is assumed throughout the manual that EACH of the requirements (along with their procedures) are to be considered in terms of food safety. The risks are from those hazards that are in “direct contact with product” OR that may have an “impact on food safety through cross contamination”.

### 4.1 Purchasing and Receiving

<b>REQUIREMENT</b>	<i>Manure, compost/compost tea and other by-products must be purchased or selected and received with knowledge of origin and handling.</i>
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### PROCEDURES:

- The person responsible does NOT purchase or use sewage sludge on any production site intended for product production even in rotational years
- When purchasing or selecting manure or other by-products from a supplier (e.g., company, self, neighbour), the person responsible is aware of the type (e.g., cattle, horse or hog manure; culls; seafood waste) and its origin [i.e., produced under conditions that are not a source of chemical (e.g., heavy metals) or physical (e.g., glass) contamination]
- The person responsible receives only the manure and other by-products that were purchased or selected

**Purchased Compost/Compost Tea** (If not applicable, proceed to the next sub-section: Compost/Compost Tea Produced On-Site)

- The person responsible purchases compost/compost tea from a supplier and is aware of origin [i.e., produced under conditions that are not a source of biological (e.g., pathogens), chemical (e.g., heavy metals) or physical (glass) contamination] and requests a letter of assurance

- The person responsible receives only compost/compost tea that was purchased along with the letter of assurance (one letter per supplier per season) (File under Tab: Letters of Assurance/Certificates)

**Compost/Compost Tea Produced On-Site** (If not applicable, proceed to Section 4.2: Application)

- The person responsible produces compost/compost tea under conditions that are not a source of biological (e.g., pathogens), chemical (e.g., heavy metals) or physical (glass) contamination, and records the composting procedure (See Appendix C: Composting Livestock Manure – An Example and Compost Tea Information)
- The person responsible receives only the compost/compost tea that was produced following a completed composting procedure. (File procedures/records under Tab: Letters of Assurance/Certificates)

**4.2 Application**

<b>REQUIREMENT</b>	<i>Manure and compost/compost tea must be spread at the appropriate time to minimize contamination of product.</i>
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**PROCEDURES:**

- The person responsible spreads:
  - Manure only when the interval between application and harvest is greater than 120 days
  - Compost/compost tea (at any time)
- The person responsible records manure, compost/compost tea and other by-products (except cover crops/green manure) application details on Form (H2) Agronomy Inputs (Other) OR \_\_\_\_\_

**4.3 Storage**

- Manure is stored on the premises
- Compost/compost tea is stored on the premises
- Other by-products are stored on the premises

*If ANY of the above circles have been checked off, proceed below.  
If not, proceed to Section 5: Mulch and Row-Cover Materials.*

<b>REQUIREMENT</b>	<i>Manure, compost, compost tea and other by-products must be stored in designated areas.</i>
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**PROCEDURES:**

- The person responsible stores manure, compost/compost tea and other by-products separate from each other, product, packaging materials, fuels, oils, chemicals and cleaning agents
- The person responsible stores manure and other by-products away from water sources
- The person responsible stores manure and compost/compost tea in a location where drifting or leaching will not be a source of contamination to product, OR in a way that protects from leaching or drifting (e.g., tarped, lagoon, barrier, etc.)

**Confirmation/Update Log:**

Date	APR 3	3/30/19	2/18/20			
Initials	LN	RL	PP			

# 11. Personal Hygiene Facilities

Forms Required

A, J

## RATIONALE:

Humans may be a source of biological contamination (e.g., Hepatitis A, Salmonella, *E. coli* O157:H7) especially if unable to properly wash their hands. Therefore, it is important to provide personal hygiene facilities and to keep them well maintained.

- Operation includes production site(s)
- Operation includes packing/repacking and/or product storage

If **ANY** of the above circles has been checked off, proceed below.  
If not, proceed to Section 12: Employee Training.

### IMPORTANT NOTE

It is assumed throughout the manual that **EACH** of the requirements (along with their procedures) are to be considered in terms of food safety. The risks are from those hazards that are in "direct contact with product" OR that may have an "impact on food safety through cross contamination".

## 11.1 Facilities

### REQUIREMENT

Sufficient personal hygiene facilities must be available. All facilities must be accessible, properly stocked, cleaned and well-maintained.

## PROCEDURES:

**In the Production Site** [If not applicable, proceed to the sub-section: Packing/Repacking and/or Product Storage]

- Washrooms are provided **FOR** production site employees and include:
  - 1 toilet per 35 employees (1 toilet per 75 employees for POTATOES ONLY and 1 toilet per 50 employees for SMALL FRUIT ONLY)
  - toilet(s) (portable and non-portable) located so as not to be a source of contamination to water sources and product
  - on-site toilets (e.g., 500 m or 5 minute walk) or accessible through transportation provided (e.g., employee vehicle)
  - fully equipped (i.e., toilet paper)
- ! ● Properly stocked hand washing facilities that are easily accessible are provided for employees **IN** the production site and include:
  - **Note:** Hand washing water stored in permanent tanks within portable washrooms is not considered potable **UNLESS**:
    - the water is tested from the tank each time the tank is filled to confirm potability, OR
    - the water is treated and tested to confirm potability is being maintained with treatment as per procedures in Section 15.3 Treatment, OR
    - the cleanliness of the tank is maintained, filling procedures are followed and the water is tested to confirm potability as per procedures in Section 15.2 Storage

Choose at least one of the following 3 options (*The items within each option are to be used ONLY in the order that they appear*):

hot and/or cold running **potable** water (with a receptacle to collect wastewater), soap and disposable paper towels

OR

water (with a receptacle to collect wastewater), disposable paper towels and hand sanitizer

OR

hand wipes and hand sanitizer

AND

a garbage container

all hand washing facilities have hand washing signs with understandable instructions (e.g., appropriate language for employees, pictograms) Refer to **Appendix I: Hand Washing Sign Templates**

Weekly (while in use) and daily (during the peak season) – The person responsible cleans and maintains the personal hygiene facilities and records the activity on **Form (J) Cleaning and Maintenance – Personal Hygiene Facilities** OR \_\_\_\_\_

**Packing/Repacking and/or Product Storage** [*If not applicable, proceed to the sub-section: Other Facilities in the Production Site and Building(s)*]

Annually – The person responsible records all locations of personal hygiene facilities on **Form (A) Buildings Sketch and Agricultural Chemical Storage Checklist** OR \_\_\_\_\_

• The person responsible provides properly stocked handwashing facilities **IN** the packinghouse and **FOR** handling of market ready packaging materials and **FOR** product storage including:

- **Note:** Hand washing water stored in permanent tanks within portable washrooms is not considered potable **UNLESS**:
  - the water is tested from the tank each time the tank is filled to confirm potability, OR
  - the water is treated and tested to confirm potability is being maintained with treatment as per procedures in Section 15.3 Treatment, OR
  - the cleanliness of the tank is maintained, filling procedures are followed and the water is tested to confirm potability as per procedures in Section 15.2 Storage

Choose at least one of the following 3 options (*The items within each option are to be used ONLY in the order that they appear*):

hot and/or cold running potable water (with a receptacle to collect wastewater), soap and disposable paper towels

OR

water (with a receptacle to collect wastewater), disposable paper towels and hand sanitizer

OR

hand wipes and hand sanitizer

AND

a garbage container

all hand washing facilities have hand washing signs with understandable instructions (e.g., appropriate language for employees, pictograms) Refer to **Appendix I: Hand Washing Sign Templates**

- The person responsible provides washrooms:
  - !  in the packinghouse/market ready packaging material handling building/product storage

OR

- !  in the immediate vicinity of the packinghouse/market ready packaging material handling building/ product storage (e.g., portable toilet, residence, bunkhouse)

- Washrooms include:
  - 1 toilet per 35 employees
  - Fully equipped facilities (i.e., toilet paper)
  - If the washroom is in the vicinity of the packinghouse/market ready packaging material handling building/product storage, describe where it is located: \_\_\_\_\_

- !  Weekly (while in use) and daily (during the peak season) – The person responsible cleans and maintains the personal hygiene facilities and records the activity on Form (J) Cleaning and Maintenance – Personal Hygiene Facilities OR \_\_\_\_\_

**Other Facilities: In the Production Site and Building(s) (e.g., lunchroom, break area)**

- The person responsible provides:
  - Fully stocked first aid kits
  - Waterproof covering for bandaged wounds on hands (e.g., rubber gloves)
- The person responsible provides a dedicated storage area for personal effects separate from product handling areas and washrooms
- The person responsible provides a dedicated lunchroom/break area separate from product handling areas
- The person responsible ensures employees remove working effects prior to entering washrooms and before breaks (e.g., reusable gloves/aprons)
- The person responsible ensures employees store working effects in a designated location separate from break areas, surfaces where food is prepared or eaten and other sources of potential contamination

**Confirmation/Update Log:**

Date	6/11/19	7/20/19	6/24/19	2/18/20		
Initials	RT	EA	PR	RE		

## 12. Employee Training

### RATIONALE:

Employees must be trained on good personal hygiene practices and safe product handling to help prevent the biological, chemical and physical contamination of product. Job-specific training is also important to ensure food safety related practices are adhered to.

#### IMPORTANT NOTE

It is assumed throughout the manual that **EACH** of the requirements (along with their procedures) are to be considered in terms of food safety. The risks are from those hazards that are in "direct contact with product" OR that may have an "impact on food safety through cross contamination".

### 12.1 Employee Training

#### REQUIREMENT

All employees must receive training on their role in food safety, food handling, personal hygiene practices, bio-security and any other area related to food safety for their job. Senior management must demonstrate its commitment to determining and providing, in a timely manner, all the qualified resources (including suitably qualified personnel) needed to implement and improve the processes of the food safety system.

### PROCEDURES:

- Responsibility for overseeing employee training is assigned to [record name here: Warren + Reicza + TAMARA ], who becomes the "person responsible" below
- Annually – The person responsible uses the following Employee Personal Hygiene and Food Handling Practices Policy Forms for training (*check those that are applicable*):
  - ~~Form (C)~~ Employee Personal Hygiene and Food Handling Practices Policy – Production Site
  - ~~Form (D)~~ Employee Personal Hygiene and Food Handling Practices Policy – Packinghouse/Product Storage
- The person responsible provides training:
  - To all employees at the beginning of each season
  - To new employees
  - As a refresher to reinforce good practices (i.e., as a result of non-conformances or mid-way through the season)
  - To provide feedback from an audit, or information on new techniques, new science or other technical findings
- The person responsible provides training and training materials in a language and comprehension level applicable to employee(s) (Refer to the CanadaGAP website to obtain training materials: [www.canadagap.ca](http://www.canadagap.ca))
- The person responsible records employee personal hygiene, food handling practices and minor and major food safety deviations training activities and employees' attendance on ~~Form (K)~~ Training Session OR \_\_\_\_\_
- The person responsible observes employees for compliance with the personal hygiene and food handling practices policy