

Alaska School Garden Food Safety Guidelines

This document was created in response to the need for food safety guidance in the school garden setting. School gardens are increasingly popular and interest in using the food in the school setting has been discussed in many areas of the State. This document is intended for use in any school garden where product is making its way into the schools or for any other interested gardeners. The concepts provided in this document are relevant to other gardening projects as well.



Developed and compiled by:
Alaska Department of Natural Resources, Division of Agriculture, Inspections Services
& Farm to School Program
with input from
Department of Environmental Conservation
Cooperative Extension Services
Child Nutrition Services
Calypso Farm and Ecology Center
and
Fairbanks School Nutrition Services



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Product Quality Assurance School Garden Guidelines – Food Safety

Guideline Details

A. Personal Hygiene

1. **Restrooms and hand washing facilities are available for garden workers, for use during harvest and at any time working in the garden.**
 - a. Do not use the growing field(s) as a restroom.
 - b. Hands must be washed with soap and water after eating, drinking, smoking, using chemicals in the gardening process, using the restroom, or coming into contact with any contaminant source.
2. **Proper personal hygiene practices are being followed.**
 - a. Hands should be washed frequently.
 - b. Proper clothing suitable for gardening should be worn.
 - c. School foodservice employees should follow personal hygiene practices per the school garden food safety guidelines if visiting or working in the garden(s).
 - d. Drinking, eating, and smoking should not be allowed in the garden or food storage areas.
3. **Ill persons are prevented from working and handling food.**
 - a. Workers should not be allowed to work in the garden(s) or handle raw produce if they:
 - i. have any of the following symptoms associated with an acute gastrointestinal illness such as (a) vomiting, (b) diarrhea, (c) fever, (d) jaundice, (e) sore throat with fever;
 - ii. have lesions containing pus (such as boils and infected wounds that are open and draining) on the hands, wrists and on exposed portions of the arms or other exposed body parts;
 - iii. are diagnosed with an illness due to (a) Hepatitis A virus, (b) *Shigella* spp., (c) Shiga Toxin-Producing *Escherichia Coli*, (d) *Salmonella* Typhi, (e) Norovirus, or (f) other communicable diseases transmissible through food, as required by your state, county and / or city / town public health authority.

B. Plot Location and Soil Treatment

1. **Growing plot is positioned so it is not in the path of runoff from industrial and agricultural areas, parking lots, roads, or other sources of potential contamination.**
 - a. Run-off from these areas can contain chemicals or dangerous pollutants that are not desirable or safe for irrigation water.
 - b. Garden should be located away from potential contamination sources such as garbage and utilities such as gas or electric.
2. **Growing plot is properly protected from domestic and/or wild animals.**
 - a. Fencing off growing areas is recommended.
 - b. Domestic pets are not allowed in or near the garden area.
 - c. The garden should be protected from the spread of waste from adjacent livestock areas, etc.
 - d. Growing areas should also be protected from people who may intentionally contaminate the area.
3. **Raised bed gardens, containers, stakes or trellises should be made of non-toxic, non-leaching material. Do not use pressure treated wood, used tires, single use plastics, old rail road ties, etc.**

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4. Use only properly treated compost or commercially prepared compost.

Composted plant and animal materials must be produced through a process that assures that:

- a. For in-vessel or static aerated piles, temperatures must remain at 131 degrees or above for three consecutive days.
- b. For windrow compost piles, the temperature must remain at 131 degrees or above for at least 15 days. Windrow compost should also be turned a minimum of five times during the 15 day period after remaining at 131 degrees for three consecutive days. Static piles and windrows are to be probed for temperature daily at 10- to 15- foot intervals using a variety of depths to determine whether self-heating is taking place.
- c. Untreated manure contains dangerous pathogens that can contaminate growing areas, plants, and produce. Compost of this nature can be used on non-food gardens.

More information can be found at Cornell's "Composting in Schools" website at:
<http://compost.css.cornell.edu/schools.html>

5. **Label instructions for the use of pesticides, soil amendments, and fertilizers are being followed. Material Safety Data Sheets (MSDS) should be maintained for all chemicals used.**
6. **Chemicals, including fertilizers, paints, lubricants, cleaning supplies, etc, are not stored in close proximity to the garden or to harvested food.**
7. **Food scraps / food waste is not being added to the garden soil.**
 - a. Materials of this nature in the garden may introduce dangerous pathogens and may attract wild or domestic animals and insect pests.

C. Plants and Seeds

1. **Consideration should be taken when plants and/or seeds are procured in order to prevent the spread of invasive species and diseases to Alaska.**
 - a. Current information about invasive species and disease control is available from the Alaska State Division of Agriculture, Plant Materials Center website:
www.plants.alaska.gov/
 - b. Current information about inspection services and certification is available from the Alaska State Division of Agriculture, Inspection Services website:
http://dnr.alaska.gov/ag/ag_is.htm
 - c. To prevent the spread of potato Late Blight, only Certified Seed Potatoes should be used for planting potatoes.
2. **Sprouts for harvesting are not being grown.**
 - a. Due to the increasing number of illnesses associated with eating raw sprouts, the Food and Drug Administration has advised all consumers - especially children, pregnant women, the elderly, and persons with weakened immune systems - to not eat raw sprouts as a way to reduce the risk of foodborne illness.

D. Water and Irrigation

1. **Only potable water (drinking water) is being used for irrigation.**
 - a. Untreated water can be a significant source of contamination.
 - b. If well water is used, it must be tested according to local health authority requirements to confirm that it is appropriate for garden irrigation purposes.
2. **Gray water, waste water, recycled water or runoff water from any source can not be used.**
 - a. Water from sources of this type can contain dangerous pathogens.
 - b. Non-potable water can only be used on gardens not used for food production.
3. **Ensure that drinking water system safety meets DEC Drinking Water Program requirements and is not compromised by cross-connections (i.e. hoses/irrigation systems must have backflow preventers or air gaps).**

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4. **If using containers to transport water, only food grade containers be used.**
 - a. Containers to transport water should be food grade if water comes in contact with the plant or produce.
 - b. Disposable, single use plastic containers should not be used to transport water that will come in contact with the plant or produce.

E. Pesticides

1. **Pesticides (Insecticides, Herbicides, Fungicides, Rodenticides) are not to be used by unauthorized personnel.**
 - a. Regulations require that only licensed, certified pesticide applicators apply insecticides / pesticides in school settings.
 - b. Bait-type pesticides (rodent baits, etc) shall not be used in or near the garden area. Only enclosed-type rodent traps shall be used; snap traps are not allowed.
 - c. State Pesticide Regulations must be followed, including requirements for parental notification, posting of warning signs, and recordkeeping. These requirements can be found under section 18 AAC 90.625 at:
<http://dec.alaska.gov/regulations/pdfs/18%20AAC%2090.pdf>
 - d. Preference is that pesticides not be used.

F. Harvest and Preparation

1. **Containers and implements used to transport harvested items should be food-grade, properly cleaned and in good condition.**
 - a. Wash and sanitize containers between uses.
 - b. Do not use harvest containers for storage or transport of non-food items.
 - c. Dispose of containers that cannot be effectively cleaned.
2. **Transfer of product to school kitchen should be done under supervision of the on-site professionals.**
 - a. The garden supervisor should be in charge of the transport coming from the garden. The school food service staff should be in charge of receiving and handling the product when it gets to the kitchen.
 - b. Product that is received by the kitchen should be already cleaned.
3. **On site HAACP guidelines and procedures are being followed for all garden items used in the school for consumption.**
 - a. Do not handle ready to eat fresh produce with bare hands in the foodservice area (kitchen).
 - b. Do not soak or store fresh produce in standing water.
 - c. Product that has come into contact with potential sources of contamination (blood, bodily fluids, chemicals, broken glass, animal contact, etc.) is disposed of.
 - d. Garbage receptacles are kept tightly closed and facility area is kept clean.
 - e. Food contact surfaces are kept clean and are sanitized prior to use. Cleaning logs are maintained.
4. **Harvested items are labeled and properly stored prior to use in recipes.**
 - a. Harvested items should be clearly labeled as being from the school garden.
 - b. Harvested items should be transported to the storage area in less than 6 hours and be stored by harvest and not commingled with other produce.
 - c. Store prepared fresh produce at 40°F or below.
 - d. Use fresh produce items within 72 hours (3 days) of receipt at the facility.
 - e. Do not use produce that shows visible signs of damage or decay or has an off odor.
 - f. Do not shell peas for anything other than immediate consumption. Shelled peas cannot be accepted by the kitchen for processing.

Product Quality Assurance School Garden Guidelines Weekly Checklist

Garden Location Name: _____ Date: _____

Checklist Completed By (Name): _____

		YES	NO
A	Personal Hygiene		
1	Restrooms and hand washing facilities are available for garden workers.		
2	Proper personal hygiene practices are being followed.		
3	Ill persons are prevented from working and handling food.		
B	Plot Location and Soil Treatment		
1	Growing plot is positioned so that it is not in the path of runoff from agricultural areas, parking lots and roads, or other sources of potential contamination.		
2	Growing plot is properly protected from domestic and/or wild animals.		
3	Raised bed gardens, containers, stakes or trellises should be made of non-toxic, non-leaching material.		
4	Use only properly treated compost or commercially prepared compost and/or fertilizer.		
5	Label instructions for the use of pesticides, soil amendments, and fertilizers are being followed. MSDS are being maintained for all chemicals used.		
6	Chemicals, including fertilizers, paints, lubricants, cleaning supplies, etc., are not stored in close proximity to the garden or to harvested food.		
7	Food scraps / food waste is not being added to the garden soil.		
C	Plants and Seeds		
1	Plants and/or seeds are being used that are current with Alaska State Division of Agriculture website guidance.		
2	Only certified seed potatoes are being used to plant potatoes.		
3	Sprouts for harvesting are not being grown.		
D	Water / Irrigation		
1	Only potable water (drinking water) is being used for irrigation.		
2	Gray water, waste water, recycled water or runoff water from any source is not being used.		
3	Ensure that drinking water system safety is not compromised by cross-connections as required by DEC Drinking Water Program.		
4	Containers to transport water that comes into contact with the plant or produce are food grade quality.		
E	Insecticides / Pesticides		
1	Pesticides are not being used by unauthorized personnel.		
2	If pesticides are being used, they are applied in accordance with State of Alaska DEC school pesticide regulations.		

Product Quality Assurance Garden to Cafeteria Guidelines Weekly Checklist

Garden Location Name: _____ Date: _____

Checklist Completed By (Name): _____

		YES	NO
F	Harvest and Preparation		
1	Containers and implements used to transport harvested items are food-grade, properly cleaned and in good condition.		
2	On site HACCP guidelines and procedures are being followed for all garden items used for consumption.		
3	Transfer of product to school kitchen should be done under supervision of the on-site professionals, both the garden supervisor & school food service.		
4	Harvested items are labeled and properly stored prior to use.		
5	Product that has come into contact with potential sources of contamination (blood, bodily fluids, chemicals, broken glass, animal contact) is disposed of.		
6	Garbage receptacles are kept tightly closed and facility area is kept clean.		
7	Food contact surfaces are kept clean and are sanitized prior to use. Cleaning logs are maintained.		

The Alaska School Garden Guidelines are adapted from USDA's
Good Agricultural Practices (GAP) Audit Checklist.

The produce industry recognizes GAP as the best practices.

If you are interested in getting a GAP Audit done at your facility, or for more information on

Good Agricultural Practices, go to:

http://dnr.alaska.gov/ag/ag_is.htm

To do a GAP self-assessments online, go to:

http://groups.ucanr.org/UC_GAPs/GAP_Self-Audits/

For more information on food safety in school gardens visit:

<http://www.fns.usda.gov/cnd/F2S/implementing/safety.htm#Gardens>

Dude



WASH your hands!

Next time you see someone skip out on the suds, look at them and say, "Dude, wash your hands!"

How to wash your hands

- Wet hands with water
- Use enough soap to build a good lather
- Scrub hands vigorously, be sure to reach all areas of the fingers and hands for at least 10 seconds to loosen pathogens
- Rise hands to remove all soap residue while continuing to rub hands
- Dry hands with a paper towel

When should you wash your hands?

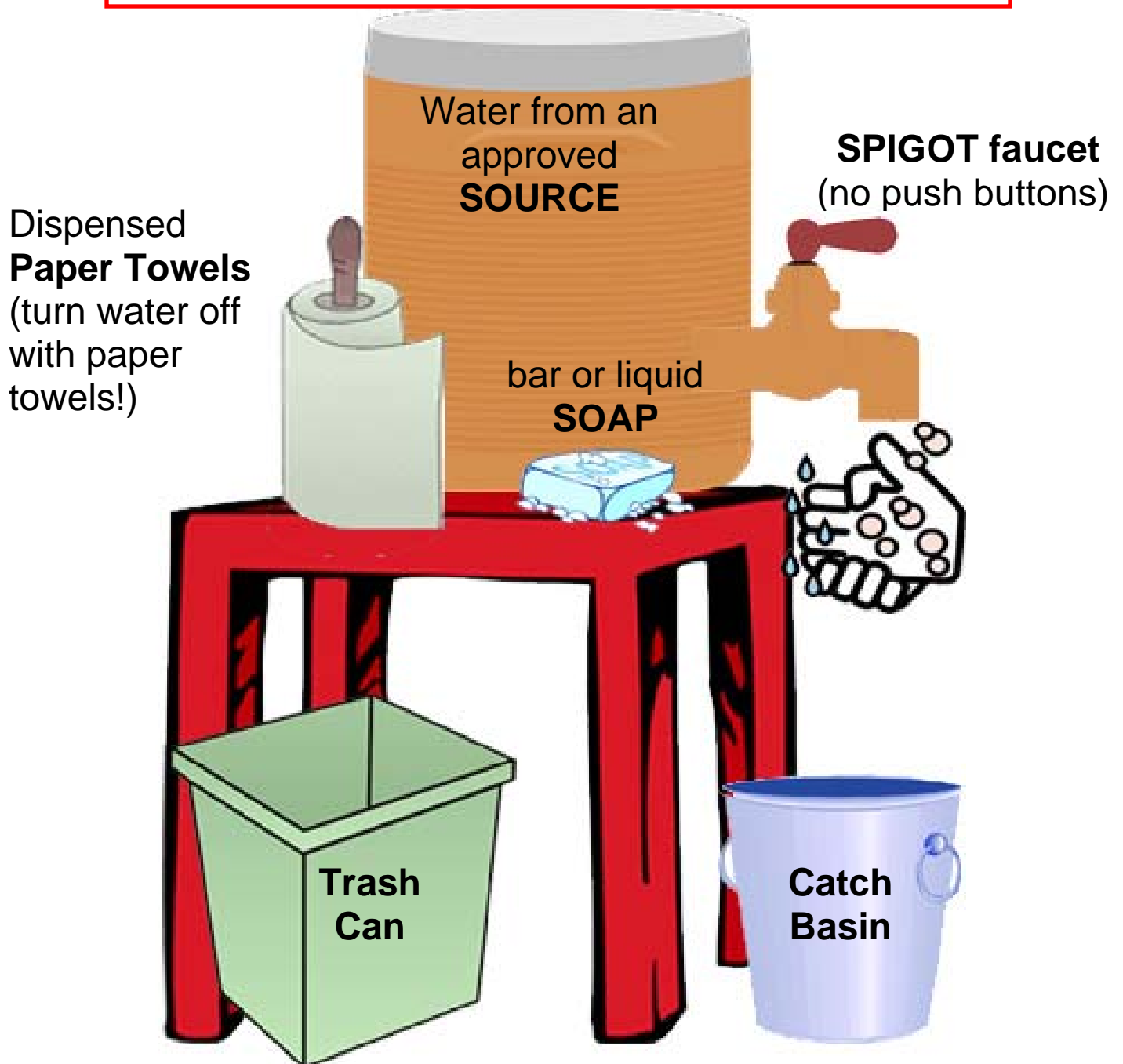
- After eating, drinking, or smoking
- After using chemicals in the gardening process
- After using the restroom
- After coming into contact with any contaminant source
- After handling garbage
- Before harvesting anything out of the garden

HANDWASHING STATION

*Use it **OFTEN!***

Use **CLEAN** water jugs:

1. **SANITIZE** with 2 tbsp unscented bleach in 1 gallon of water – **SLOSH** to cover all surfaces.
2. Let **STAND** 5 minutes and **DRAIN**. **DO NOT RINSE!**
3. **FILL** with approved drinking water





For further information or questions contact:

Johanna Herron
Farm to School Program Coordinator
Division of Agriculture
1648 S. Cushman St. #201
Fairbanks, AK 99701
Work: 907-374-3714

Or

Kristi Krueger
Farm to School Project Assistant
Division of Agriculture
1800 Glenn Hwy, Suite 12
Palmer, AK 99645
Work: 907-761-3858

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