



New River Health District Mobile Food Establishment Guidelines

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Mobile Food Establishment Guidance

Introduction

This document is intended as a guide to assist potential owners and operators of mobile food establishments in meeting the requirements of the Commonwealth of Virginia Food Regulations. It is designed to be a companion document to the mobile food establishment plan review packet and pertains to potential owners and operators of mobile food establishments (mobile unit, pushcart, vending truck). This material does **NOT** contain all of the health rules and regulations, but rather provides guidance on obtaining an operating permit and lists most of the basic requirements. Thorough review of this information and guidance may help expedite the processing of the food service permit application.

Frequently there is confusion between a Mobile Food Establishment Permit and a Temporary Event Permit.

- A Mobile Food Establishment Permit is issued annually and is valid for a year. An operator possessing a valid annual Mobile Food Establishment Permit from a county or city health department within the Commonwealth of Virginia is able to operate on a daily basis and from place to place. These “mobile units” are confined in their operation by distance from their base of operations in that they may have to return to their service area at least one time each day.
- A Temporary Event Permit is valid for one event that is no more than 14 consecutive days. Permits for food service facilities constructed for the service of foods on a temporary basis are to be issued through the Temporary/Special Event Food Guidelines and require completion of the Application for Temporary Restaurant Permit.

When you start a new mobile food service operation or make changes to an existing one, or its commissary, the mobile unit, available equipment, or menu, you must contact the Health Department. The changes will determine whether you need to update existing plans or submit new ones.

Mobile food establishments are **not** movable restaurants but rather mobile kitchens. Because the facilities are limited, food preparation is restricted. Mobile food establishments vary in equipment and design, depending upon the type of food and service. The menu may be restricted based on the type of unit. The three major types of mobile food establishments are mobile food units (mobile units), push carts and vending trucks. See the following definitions for more information about each type.

Definitions

- **Approved Water Supply**- A waterworks which has a valid waterworks operation permit from the health department or a nonpublic water supply which is evaluated, tested and if found in reasonable compliance with construction standards of the Private Well Regulations and the bacteriological water quality standards of the Virginia Waterworks Regulations, accepted and approved by the Health Department director or designee. Periodic water tests may be required for private water supplies.
- **Commissary** - A catering establishment, restaurant, or any other place in which food, food containers or supplies are kept, handled, prepared, packaged or stored for distribution to satellite operations.
- **Easily-Cleanable** - A characteristic of a surface that:
 - (a) Allows effective removal of soil by normal cleaning methods;
 - (b) Is dependent on the material, design, construction, and installation of the surface; and
 - (c) Varies with the likelihood of the surface's role in introducing pathogenic or toxigenic agents or other contaminants into FOOD based on the surface's APPROVED placement, purpose, and use.
- **Mobile Food Unit** – A food establishment that is mounted on wheels that is readily moveable from place to place and shall include pushcarts, trailers, trucks, or vans. There is no size limit to mobile units but they must be mobile at all times during operation and must be on wheels (excluding boats in the water) at all times. The unit, all operations and all equipment must be integral to and be within or attached to the unit.
- **Packaged** - Bottled, canned, cartoned, securely bagged, or securely wrapped, whether packaged in a food establishment or a food processing plant.
- **Person-In-Charge** - The individual present at the food establishment who is responsible for the operation at the time of inspection.
- **Pushcart** – Any wheeled vehicle or device other than a motor vehicle or trailer, which may be moved with or without the assistance of a motor and which does not require registration by the Department of Motor Vehicles. A pushcart is limited to the sale and/or service of hot dogs and frankfurter-like foods. The unit, all onsite operations, and all equipment must be integral to and be within or attached to the unit. A pushcart requires a commissary where wares can be washed; waste water and solid waste can be discharged; and where food, supplies and unit can be stored when not in operation.
- **Servicing Area** – An operating base location to which a mobile food establishment or transportation vehicle returns regularly for such things as vehicle and equipment cleaning, discharging liquid or solid wastes, refilling water tanks and ice bins, and boarding food.
- **Sewage** – Liquid waste containing animal or vegetable matter in suspension or solution and may include liquids containing chemicals in solution.

- **Temporary Food Establishment** – A food establishment that operates for a period of no more than 14 consecutive days in conjunction with a single event or celebration
- **Time/Temperature Control for Safety (TCS) food**- a food that requires time and/or temperature control in order to limit pathogenic microorganism growth or toxin formation.

Construction Guidelines

Construction and Materials:

- Everything necessary for the operation of the unit must be integrated into the unit.
- Units must be designed to protect food from potential contaminants.
- Units must be constructed in such a manner that all joints are fully sealed.
- All openings to the outside must be screened or fitted with other devices to repel or prevent the entrance of flies, insects, and vermin (except when foods are being served through a service window).
- Construction materials and all surfaces must be smooth, non-absorbent, and easily cleanable; preferably consisting of smooth material such as stainless steel or plastic.
- All mobile units must provide proper equipment for foods on menu.

Lighting:

Sufficient lighting is required. The intensity must be:

1. At least 10 food candles (110 lux) at a distance of 30 inches (75 cm) above the floor, in walk-in refrigeration units and dry food storage areas and in other areas and rooms during periods of cleaning;
2. At least 20 food candles (220 lux)
 1. at a surface where food is provided for consumer self-service such as buffets and salad bars or where fresh produce or packaged foods are sold or offered for consumption;
 2. Inside equipment such as reach-in and under-counter refrigerators;
 3. At a distance of 30 inches (75 cm) above the floor in areas used for handwashing, warewashing, and equipment and utensil storage, and in toilet rooms; and
3. At least 50 candles (540 lux) at a surface where a food employee is working with food or working with utensils or equipment such as knives, slicers, grinders, or saws where employee safety is a factor.

All lights must be either coated bulbs or shielded to preclude accidental breakage over food and equipment.

Sinks, Water Tanks and Hoses:

- Every mobile unit or pushcart where unpackaged food is handled must have a handwashing sink with pumped (100 °F) and cold running water, dispensed soap, paper towels, and a waste basket. This is required for all units except those serving only prepackaged foods and bottled drinks.

- A three compartment washing sink is required for a mobile unit and available for use in push cart commissaries. It must be large enough to accommodate the immersion of the largest equipment and utensils. It must have integrated drain boards, utensil racks, or tables large enough to accommodate utensil holding before cleaning and after sanitizing, and accommodate all soiled and cleaned items that may accumulate during the hours of operation.
- A potable and waste water tank is required for all units other than those serving only prepackaged foods (see attached Mobile Water Tank and Mobile Food Establishment Water Tank regulations for specific requirements). The volume of the wastewater tank must be 15 % larger than the volume of the potable water storage tank.
- Units must contain a food-grade potable water hose that is stored on board in a clean area.

Refrigeration:

- Refrigeration is required that is capable of maintaining time/temperature control for safety (TCS) foods or ingredients, capable of supporting growth of pathogenic organisms or production of toxins, at a temperature of 41⁰ F or less at all times.
- Drainage ports for ice containers must be provided.

Operational Guidelines

Source of Foods:

- All food and ice must be purchased from an approved source, i.e., USDA, VDACS, or Health Department permitted food establishment. Home canned or prepared foods are not allowed to be stored on the unit or served to the public.
- No food prepared or stored in a private home can be used, stored, served, and offered for sale, sold, or given away in a food facility.

Integrity of Foods:

- All food must be prepared, stored, displayed, dispensed, placed, transported, sold, and served as to be protected from dirt, vermin, unnecessary handling, droplet contamination, overhead leakage, or other contamination.
- All food products must be free of spoilage, microorganisms, toxic chemicals, and other harmful substances that can make people sick.
- All food products must be prepared, stored, handled or displayed in a manner making it safe for human consumption.
- Insects or vermin must not be present in the unit.
- An accurate thermometer is required for all refrigeration units.
- A food thermometer must be available and used to check internal food temperatures.

Food Packaging and Storage:

- Only single service articles may be used.
- Condiments such as salt, sugar, ketchup, mustard, mayonnaise, etc. must be protected from contamination by being kept in dispensers that are designed to provide protection; protected food displays provided with the proper utensils; original containers designed for dispensing; or, individual packages or portions. (i.e., individually packaged or offered in pump or squeeze bottles).

- Foods that have been cooked and/or heated for hot holding can not be cooled and reused unless the operator can demonstrate* that such cooling can be accomplished according to the following regulations:
 - A. Cooked TCS food must be cooled:
 - 1. Within two hours, from 135⁰ F (57⁰ C) to 70⁰ F (21⁰ C); and
 - 2. Within four hours, from 70⁰ F (21⁰ C) to 41⁰ F (5⁰ C) or less
 - B. TCS food must be cooled within four hours to 41 F (5⁰ C) or less, if prepared from ingredients at ambient temperature, such as reconstituted foods and canned tuna.
 - C. Except as specified in subsection D of this section, a TCS food received in compliance with laws allowing a temperature above 41° F (5° C) during shipment from the supplier as specified in 12 VAC 5-421-340 B, must be cooled within four hours to 41⁰ F (5⁰ C) or less.
 - D. Raw shell eggs must be received as specified under 12 VAC 5-421-340 C and immediately placed in refrigeration equipment that maintains an ambient air temperature of 45⁰ F (7⁰ C) or less.
 - *Demonstration of capability to properly cool foods according to above regulations may be accomplished through the use of temperature monitoring logs.
- On board storage must be limited to items necessary for operation.
- A storage facility/area must be available to protect the unit from the elements and vermin.
- Food storage boxes must be food grade.

Water, Ice, and Wastewater:

- All water must be potable, from an approved source.
- Mobile unit may connect to water and sewer if it is available at the operating location; however, tank must remain on the unit at all times.
- Ice for use as a food or a cooling medium must be made from drinking water. Ice for human consumption must be properly protected, drained, and stored separately from ice used for refrigeration. Ice must be dispensed using an ice scoop.
- All wastewater must be disposed of in a commercial facility (commissary or service area).

Routine Cleaning:

- Sufficient solid waste receptacles with tight fitting lids must be provided for the use of staff and the public and must be emptied when the unit returns to the commissary or service area.
- Wiping cloths used for wiping down counter tops must be clean, used for no other purpose and stored in container with sanitizer (i.e. chlorine or quaternary ammonium).
- Sanitizer test strips are required to check sanitizer concentration in wiping cloth buckets and three compartment sinks used for ware washing.
- Food preparation/service area needs to be protected from insects/rodents and other potential contaminants.

Food Service Operators and Workers:

- A Person-In-Charge (PIC) must be in charge at all times during the hours of operation and demonstrate knowledge of the rules applicable to the food service operation. This person is responsible for knowing the food safety requirements and the procedures within the unit. A Certified Food Protection Manager is required whenever raw meats are prepared and served or when facility utilizes two-stage cooling of TCS foods. The PIC must be able to provide employees with information they need to perform their job and ensure food safety regulations are followed at all times.

- Employee Health Policy required: The PIC must ensure all employees are informed that if they are infected with a communicable illness (salmonella, shigella, E. coli, norovirus, Hepatitis A), or have had vomiting, diarrhea, sore throat with fever, and/or jaundice within the past 48 hours, they must report this to the PIC. The PIC must have the authority to send an employee home. The PIC must also ensure that persons with infected sores or cuts on their hands use a watertight cover, such as a finger cot, that protects the lesion.
- Every operator, employee or volunteer must be clean; wear clean clothing; be free from and not a carrier of any disease that can be spread through food; and, wear effective hair restraints (hair nets, caps, etc.).
- No bare hand contact is allowed with ready-to-eat foods (RTE); appropriate barrier such as disposable gloves, tongs, scoops, deli tissue/paper must be used when handling RTE foods.
- Food service workers must wash hands when beginning to work, between changing tasks, after handling raw meat, and any time their hands may have been contaminated with body fluids or other types of contaminants, e.g., after smoking, eating, or using restroom.

Comparison of Different Mobile Units

Mobile Food Units (usually fully contained):

The majority of vehicle driven units are fully self-contained “kitchens on wheels” that can be driven or pulled to various locations. The menu is dependent on available equipment. A copy of the Department of Health Mobile Food Establishment Permit is to be posted. The features required are a three-compartment sink, handwashing sink, hot and cold water under pressure, at least one wastewater holding tank, and potable water holding tank. If cooking is proposed on-board the mobile food unit, the unit must be kept free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke and fumes by mechanical means. A service area where potable water is obtained and wastewater is discarded is required. A copy of the agreement signed by owner allowing for use of service area is required. Receipts for waste water dumping from service area should be maintained on the unit.

Pushcarts:

Pushcart units have a simpler design than traditional mobile units. They are restricted to preparation and service of hot dogs or frankfurter like foods; i.e., hot dogs, pre-cooked sausages, pre-cooked hamburger patties, etc. **Raw meats or other perishable foods that are not-ready-to-eat are not permitted on pushcarts.** The Health Department will advise you on what foods may or may not be allowed. The features required are a handwashing sink and an integrated cold storage well capable of maintaining food at 41⁰ F or less. A commissary where the unit is stored and or serviced is required. Requirements of a commissary include a three compartment sink for ware washing, a handsink, an area for discarding waste water and solid waste, a separate storage area for food and supplies, and a source of potable water. A copy of the agreement signed by owner allowing for use of site as your commissary is required. A copy of the Department of Health Mobile Food Permit is to be posted.

Vending Trucks:

Vending trucks have a simpler design than traditional mobile units. They are enclosed commercial units operated from a truck and must have proper storage and display space. They are restricted to dispensing only pre-wrapped, bottled, canned or otherwise packaged food in individual servings for immediate consumption. If unit is vending TCS foods, a completed plan review application and permit are required. *If there are questions about whether proposed menu consists of TCS foods or*

not, please contact your local health department. Because there is no actual food handling in these units, on-board dishwashing or handwashing fixtures are not required.

Requirements of Fully Contained Units Compared to Pushcarts

| Requirements | Fully Unit | Pushcart |
|-------------------------------------------------------------------------------------------------------|-------------------|---------------------|
| Water Supply Required | Yes | Yes |
| Handwashing System Required | Yes | Yes |
| Dishwashing System Required | Yes | Yes (at Commissary) |
| Currently Permitted Food Service Establishment Required as Commissary | No | Yes |
| Service Area Required (dumping of wastewater and refilling of water tanks if applicable) | Yes | Yes (at Commissary) |
| Storage Site Required (unit storage area for protection from the elements and vermin when not in use) | No | Yes |

Commissary and Servicing Areas

Approved Sewage Disposal System Required:

The Health Department will evaluate the sewer facilities at the commissary or service area to ensure it is adequately designed for the proposed use. If a septic system is being considered, it will be evaluated to assure it can handle the proposed volume and strength of the wastewater from your unit. This will be based on your menu and an evaluation of the potential daily volume of wastewater and other facilities served by the system.

Approved water supply required:

The Health Department will evaluate the water supply at the commissary or service area to ensure it is adequately designed for the proposed use. If a private water supply is being considered, it will be evaluated to assure it meets the minimum requirements necessary for food establishments.

Service Area:

Must be clean, well maintained, properly constructed, fixed, designated area where each mobile unit reports to daily or as needed for servicing operations, which includes, but is not limited to:

- Proper cleaning and servicing of the mobile food unit
- Proper flushing and disposal of accumulated liquid wastes
- Providing potable water necessary to the operation of the unit

Commissary:

Must be a fixed food product establishment permitted and regularly inspected by USDA, VDACS, or the Health Department. **Home based operations are not allowed.** All pushcart units must report daily to a commissary where:

- Foods served from the unit are stored, handled or prepared
- Single service articles are properly stored
- All food contact surfaces are washed, rinsed and sanitized (minimum requirements are a three compartment sink with drain board, hand wash sink, and a utility sink)
- Pushcarts are to be stored at the commissary overnight.

Commissaries complying with the requirements of a servicing area may also be used for servicing operations.

An operator intending to seek approval for a mobile food establishment permit (for mobile food units or push cart) is required to complete an application and submit plans to the Health Department for review. Please refer to the Mobile Food Establishment Plan Review Packet for appropriate information to be provided in those plans.

For additional information contact a member of the Environmental Health Office in your locality.

Water Supply Hoses and Storage Tanks**Water Supply Hose Requirements:**

Hoses used as a supply line connection to a piped water system or for filling water tanks must be:

- Clean, disinfected, and in good condition
- Used for no other purpose
- Constructed of non-toxic materials
- Clearly labeled as to its use

Recreational vehicle parts outlets and large hardware stores should be able to supply the proper type of hose (often white in color or white with a thin blue stripe). An approved hose (food grade) should be clearly marked as approved for potable (drinking) water use. Common garden hoses do not generally meet this criterion.

Tank, Pump, and Hoses:

- A water tank, pump, and hoses used for conveying drinking water may be used for no other purpose.
- Water tanks, pumps, and hoses approved for liquid foods may be used for conveying drinking water if they are cleaned and sanitized before they are used to convey water
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System Flushing and Disinfection:

The water tank, pump, and hoses should be flushed and sanitized before being placed in service or after construction, repair, modification, and periods of nonuse.

For specific instructions/guidelines for effective cleaning, disinfection and sanitization of hoses and storage tanks please check with the disinfectant manufacturer. One example (Appendix A) is attached at the end of this document.

Sections of the VA Food Regulations Pertaining to Mobile Food Units

Article 3 - Mobile Water Tank and Mobile Food Establishment Water Tank

12 VAC 5-421-2360. Approved materials.

Materials that are used in the construction of a mobile water tank, mobile food establishment water tank, and appurtenances shall be:

1. Safe;
2. Durable, corrosion resistant, and nonabsorbent; and
3. Finished to have a smooth, easily cleanable surface.

Materials used in the construction of a mobile water tank are affected by the water they contact. Tank liners may deteriorate and flake. Metals or platings can be toxic. To prevent the degradation of the quality of the water, it is important that the materials used in the construction of the tank are suitable for such use.

12 VAC 5-421-2370. Enclosed system, sloped to drain.

A mobile water tank shall be:

1. Enclosed from the filling inlet to the discharge outlet; and
2. Sloped to an outlet that allows complete drainage of the tank.

12 VAC 5-421-2380. Inspection and cleaning port, protected and secured.

If a water tank is designed with an access port for inspection and cleaning, the opening shall be in the top of the tank and:

1. Flanged upward at least one-half inch (13 mm); and
2. Equipped with a port cover assembly that is:
 - a. Provided with a gasket and a device for securing the cover in place, and
 - b. Flanged to overlap the opening and sloped to drain.

The tank must be a closed system from the filling inlet to the outlet to prevent contamination of water. It is important that the bottom of the tank be sloped to the outlet to allow the tank to drain completely, to facilitate the proper cleaning and disinfection of the tank, and to prevent the retention of water or solutions after cleaning. Some tanks are designed with an access opening to facilitate the cleaning and servicing of the water tank. The access must be constructed to prevent the opening from becoming a source of contamination of the water.

12 VAC 5-421-2390. "V" type threads, use limitation.

A fitting with "V" type threads on a water tank inlet or outlet shall be allowed only when a hose is permanently attached.

V-type threads are difficult to clean if contaminated with food or waste. To prevent the contamination of the drinking water, this type of thread should only be used on water tank inlets and outlets if the connection is permanent which eliminates exposed, difficult-to-clean threads.

12 VAC 5-421-2400. Tank vent, protected.

If provided, a water tank vent shall terminate in a downward direction and shall be covered with:

1. 16 mesh to 1-inch (16 mesh to 25.4 mm) screen or equivalent when the vent is in a protected area; or
2. A protective filter when the vent is in an area that is not protected from windblown dirt and debris.

Water tanks are equipped with a vent to preclude distortion during filling or draining. The vent should be equipped with a suitable screen or filter to protect the tank against the entry of insects or other vermin that may contaminate the water supply.

12 VAC 5-421-2410. Inlet and outlet, sloped to drain.

- A. A water tank and its inlet and outlet shall be sloped to drain.
- B. A water tank inlet shall be positioned so that it is protected from contaminants such as waste discharge, road dust, oil, or grease.

Both the inlet and outlet must be sloped to drain to prevent the pooling of possibly contaminated water or sanitizing solution.

12 VAC 5-421-2420. Hose, construction and identification.

A hose used for conveying drinking water from a water tank shall be:

1. Safe
2. Durable, corrosion resistant, and nonabsorbent;
3. Resistant to pitting, chipping, crazing, scratching, scoring, distortion, and decomposition;
4. Finished with a smooth interior surface; and
5. Clearly and durably identified as to its use if not permanently attached

Hoses used to fill potable water tanks should be dedicated for that one task and should be identified for that use only to prevent contaminating the water. Hoses must be made of a material that will not leach detrimental substances into the water.

12 VAC 5-421-2430. Filter, compressed air.

A filter that does not pass oil or oil vapors shall be installed in the air supply line between the compressor and drinking water system when compressed air is used to pressurize the water tank system.

Compressor pistons are lubricated with oil to minimize wear. Some of the oil is carried into the air lines and if not intercepted may contaminate the tank and water lines.

12 VAC 5-421-2440. Protective cover or device.

A cap and keeper chain, closed cabinet, closed storage tube, or other approved protective cover or device shall be provided for a water inlet, outlet, and hose.

Protective equipment provided for openings of the water supply must be in use to prevent contamination which may be present where the supply is exposed to the environment, i.e., at water inlets or outlets or the ends of transfer hoses.

12 VAC 5-421-2450. Mobile food establishment tank inlet.

A mobile food establishment's water tank inlet shall be:

1. Three-fourths inch (19.1 mm) in inner diameter or less; and
2. Provided with a hose connection of a size or type that will prevent its use for any other service.
3. Mobile units may be particularly vulnerable to environmental contamination if soiled hose connections are coupled to the tank inlet.

12 VAC 5-421-2460. System flushing and disinfection.*

A water tank, pump, and hoses shall be flushed and sanitized before being placed in service after construction, repair, modification, and periods of nonuse.

Contaminants of various types may be introduced into a water system during construction or repair or other incidents. The system must be flushed and sanitized after maintenance and before it is placed into service to prevent contamination of the water introduced into the tank.

12 VAC 5-421-2470. Using a pump and hoses, backflow prevention.

A person shall operate a water tank, pump, and hoses so that backflow and other contamination of the water supply are prevented.

When a water system includes a pump, or a pump is used in filling a water tank, care must be taken during hookup to prevent negative pressure on the supplying water system.

Backflow prevention to protect the water supply is especially necessary during cleaning and sanitizing operations on a mobile system.

12 VAC 5-421-2480. Protecting inlet, outlet, and hose fitting.

If not in use, a water tank and hose inlet and outlet fitting shall be protected using a cover or device as specified under 12 VAC 5-421-2440.

When not connected for use, water inlets, outlets, and hose fittings should be closed to the environment. Unless capped or otherwise protected, filling inlets, outlets, and hoses may become contaminated by dust or vermin.

12 VAC 5-421-2490. Tank, pump, and hoses, dedication.

A. Except as specified in subsection B of this section, a water tank, pump, and hoses used for conveying drinking water shall be used for no other purpose.

B. Water tanks, pumps, and hoses approved for liquid foods may be used for conveying drinking water if they are cleaned and sanitized before they are used to convey water.

Article 4 - Sewage, Other Liquid Waste, and Rainwater

12 VAC 5-421-2500. Mobile holding tank capacity and drainage.

A sewage holding tank in a mobile food establishment shall be:

1. Sized 15% larger in capacity than the water supply tank; and
2. Sloped to a drain that is 1 inch (25 mm) in inner diameter or greater, equipped with a shut-off valve.

12 VAC 5-421-2540. Conveying sewage.*

Sewage shall be conveyed to the point of disposal through an approved sanitary sewage system or other system, including use of sewage transport vehicles, waste retention tanks, pumps, pipes, hoses, and connections that are constructed, maintained, and operated according to law.

12 VAC 5-421-2550. Removing mobile food establishment wastes.

Sewage and other liquid wastes shall be removed from a mobile food establishment at an approved waste servicing area or by a sewage transport vehicle in such a way that a public health hazard or nuisance is not created.

Improper disposal of waste provides a potential for contamination of food, utensils, and equipment and, therefore, may cause serious illness or disease outbreaks. Proper removal is required to prevent contamination of ground surfaces and water supplies, or creation of other insanitary conditions that may attract insects and other vermin.

12 VAC 5-421-2560. Flushing a waste retention tank.

A tank for liquid waste retention shall be thoroughly flushed and drained in a sanitary manner during the servicing operation.

Thoroughly flushing the liquid waste retention tank will prevent the buildup of deposits within the tank which could affect the proper operation of the tank.

12 VAC 5-421-2570. Approved sewage disposal system.*

Sewage shall be disposed through an approved facility that is:

1. A public sewage treatment plant; or
2. An individual sewage disposal system that is sized, constructed, maintained, and operated according to law.

Many diseases can be transmitted from one person to another through fecal contamination of food and water. This transmission can be indirect. Proper disposal of human wastes greatly reduces the risk of fecal contamination. This Code provision is intended to ensure that wastes will not contaminate ground surfaces or water supplies; pollute surface waters; be accessible to children or pets; or allow rodents or insects to serve as vectors of disease from this source.

Hoses, pumps, and tanks used for food or water may not be used for other liquids because this may contaminate the water supply. If a hose, tank, or pump has been used to transfer liquid food, the equipment must be cleaned and sanitized before using it for water delivery. Failure to properly clean and sanitize the equipment would introduce nutrients, and possibly bacteria, into the water as well as inactivate residual chlorine from public water supplies.

(VDH Food Regulations)

Appendix A - Example Disinfection Of Water Supply Hoses And Mobile Food Unit Piping*

**Obtained from Fresno, California Environmental Health*

Household bleach (sodium hypochlorite – for example: Clorox, Purex, etc.) may be used for disinfection. It contains 5% available chlorine (95% inert ingredients).

Note: All bleach used for disinfection should be newly purchased or of recent stock. “Old” bleach which has been stored for extended periods may have undergone degradation which could greatly reduce its disinfection effectiveness.

The desired chlorine concentration for disinfection should be at least 100 parts per million (ppm). This concentration, or chlorine residual, can be made by mixing clean water and bleach in one of the following example ratios:

ONE TABLESPOON (TBSP) BLEACH TO ONE GALLON WATER
OR
ONE CUP (8OZ.) BLEACH TO 25 GALLONS WATER
OR
ONE QUART (32 OZ.) BLEACH TO 100 GALLONS OF WATER

Water chlorinated at 100 ppm is not suitable for drinking or cooking and prolonged contact with metal piping, containers, or fixtures may cause corrosion.

After initial cleaning, the hose should be immersed in a tub or sink of heavily chlorinated waste with a chlorine residual of at least 100 ppm for 3 hours. Flush the hose thoroughly with clean water prior to use, unless you have a mobile food vehicle.

If you operate a mobile food vehicle your unit’s water pipes must also be disinfected. Once you finish disinfecting your supply hose, keep it filled with the chlorine solution. Then, connect one end of the hose to your mobile unit and the other end to the piped water system connection (hose bib). Turn the hose bib on. Turn on the water to each fixture in the mobile food unit until you smell the chlorine coming from the water, then turn the water off. Allow the disinfection solution to remain in the unit’s piping for at least 3 hours. After this time, flush out the piping with fresh water by turning on the water at each fixture until you no longer smell chlorine.

You should also be aware that if your unit uses a water filter the filter itself may be a source of bacterial contamination if the filter cartridge has not been routinely serviced or changed according to the manufacturer’s instructions.

DISINFECTION OF STORAGE TANKS

The storage tank disinfection process involves thoroughly draining and flushing the tank (or container) with fresh, clean water, then completely refilling the tank and all associated piping and fixtures with heavily chlorinated water (see above) and allowing it to remain in the tank for a period of at least 3 hours. Then the tank and piping should be thoroughly drained and flushed out again with clean water.

Be sure to thoroughly drain and flush out the storage tank and all associated piping after the 3 hour retention period.