



115 4th Street South, Great Falls, Montana 59401
(406) 454-6950 | www.cchdmt.org

PLAN REVIEW APPLICATION FOR FOOD SERVICE ESTABLISHMENTS

Montana Administrative Rules for Food Service Establishments - *Plan Submission and Approval* requires a copy of construction plans and specifications be submitted **PRIOR TO** construction of a new retail/wholesale food establishment OR remodeling an existing establishment to expand or add food processing/food service facilities AND as a condition of obtaining a license to operate. **This plan review is required in addition to any City/County/State permits** - the applicant is responsible for contacting the individual entities (planning, fire, zoning, other) to ensure compliance with their requirements.

The completed Plan Review application and payment should be submitted to Environmental Health, City-County Health Department at least 30 calendar days before **any** construction or alterations will begin.

<p>Scope of Proposed Project (select one):</p> <p><input type="checkbox"/> Small (≤ 2500 ft²) Retail/Wholesale</p> <p><input type="checkbox"/> Large (>2500 ft²) Retail/Wholesale</p> <p><input type="checkbox"/> Warehouse</p> <p>Select all the following that apply:</p> <p><input type="checkbox"/> New Construction</p> <p><input type="checkbox"/> Conversion of Existing Building/Business to Food Facility/Business</p> <p><input type="checkbox"/> Existing Food Business to new, different food Business/Remodel</p> <p><input type="checkbox"/> Change of Business ownership (same food service establishment)</p> <p><input type="checkbox"/> Existing Business/No remodel</p>	<p>Proposed license endorsement(s)*:</p> <p>Check all that apply</p> <p><input type="checkbox"/> Food Service Establishment</p> <p><input type="checkbox"/> Perishable Food Dealer (retail only)</p> <p><input type="checkbox"/> Tavern or Bar</p> <p><input type="checkbox"/> Food Service/Catering (retail)</p> <p><input type="checkbox"/> Meat Market (onsite retail only)</p> <p><input type="checkbox"/> Food Service/Delicatessen (onsite retail)</p> <p><input type="checkbox"/> Bakery (onsite retail only)</p> <p><input type="checkbox"/> Produce (onsite retail only)</p> <p><input type="checkbox"/> School Cafeteria</p> <p><input type="checkbox"/> Mobile</p> <p><input type="checkbox"/> Food Manufacturer (onsite retail only)</p>								
<p>Fee Structure: Fees include one onsite walk-through (if requested) and one pre-opening inspection</p> <table> <tr> <td>New construction or conversion:</td> <td>Existing facility: (e.g. Equipment and/or significant menu change, kitchen remodel, new endorsement)</td> </tr> <tr> <td>Small: \$150 +\$50 for each license endorsement</td> <td>Small: \$75 +\$50 for each new license endorsement</td> </tr> <tr> <td>Large: \$250 +\$50 for each license endorsement</td> <td>Large: \$125 +\$50 for each new license endorsement</td> </tr> <tr> <td>Warehouse: \$50</td> <td>Ownership change (No remodel): \$50</td> </tr> </table>		New construction or conversion:	Existing facility: (e.g. Equipment and/or significant menu change, kitchen remodel, new endorsement)	Small: \$150 +\$50 for each license endorsement	Small: \$75 +\$50 for each new license endorsement	Large: \$250 +\$50 for each license endorsement	Large: \$125 +\$50 for each new license endorsement	Warehouse: \$50	Ownership change (No remodel): \$50
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Warehouse: \$50	Ownership change (No remodel): \$50								

Allow a minimum of 30 calendar days (from date received) for complete applications to be reviewed. CCHD will contact you when the review has been completed.

Incomplete applications will not be reviewed and will be returned to applicant for completion.

I have contacted City/County/State entities to ensure compliance with their requirements.

Submit application and a check written to **CCHD** for the full amount to:
City-County Health Department, Environmental Health Department
Attn: Plan Review
115 4th St. South, Great Falls, Montana, 59401
For questions, call (406) 454-6950

APPLICANT SIGNATURE _____ DATE _____

<i>For office use only</i>	
Sanitarian signature _____	Date received _____

Food Establishment Inspection Checklist
for Pre-opening Health Department Inspection (day of licensing)
KEEP THIS PAGE FOR YOUR REFERENCE

- All plumbing, mechanical, and electrical inspections must be completed by the appropriate building authority.
- All refrigeration and freezer units must be on and at temperature (41°F or lower for refrigerators, 0°F for freezers). All units must have visible working thermometers.
- All refrigerated make tables, steam tables, warmers, or other temperature regulating units must be on, at temperature, and setup as if they were ready to serve food. Have all inserts or hot pans in the units and water in at least one insert per unit. Hot hold units must be able to hold 135°F or higher and cold units 41°F or lower.
- Have hot and cold running water at all sinks.
- Have soap and paper towel dispensers installed at each hand sink and stocked.
- Have sanitizer set up at the correct concentration. If you are using an automatic system, have it dispensing at the proper concentration.
- Have the appropriate test strips for the sanitizer you choose to use.
- Have your dishwasher ready and able to sanitize. If you have a chemical system, have the correct test strips available.
- Have all surfaces finished. This means floors, walls, ceilings, insides of walk-in units, cupboards, etc. There cannot be any raw wood or unfinished surface. Any sections of the walls, floors, ceilings, or cupboards which have been cut away to accommodate plumbing, wiring, etc., must be tightly sealed to prevent pest entry and to aid cleanability.
- All floors, walls, and ceilings in food prep areas or areas subject to high moisture must be non-absorbent.
- All lighting must be shielded.
- All hoods must be properly installed, inspected, and serviced.
- Proper air gaps and backflow prevention must be in place where required.
- All equipment must be onsite and in place as per the approved floor plans.
- Restroom must be fully equipped.
- All construction activities must be completed, and all construction related equipment and debris removed from the premises.
- All conditions cited in the approval letter must be addressed.

You should set up as though you intend to serve your first customer at the end of the pre-opening inspection. You do not need food onsite, but all of the equipment must be working and ready, and all of your facility cleaned and sanitized for service.

KEEP THIS PAGE FOR YOUR REFERENCE

Commercial Kitchen Equipment/Sink Guidelines

- Food-contact surfaces must be (§4-202.11):
 - Smooth;
 - Free of breaks, open seams, cracks, chips, inclusions, pits, and similar imperfections;
 - Free of sharp internal angles, corners, and crevices;
 - Finished to have smooth welds and joints; and
 - Accessible for cleaning and inspection by one of the following methods:
 - Without being disassembled,
 - By disassembling without the use of tools, or
 - By easy disassembling with the use of handheld tools commonly available to maintenance and cleaning personnel such as screwdrivers, pliers, open-end wrenches, and Allen wrenches.
- Equipment should be easily movable:
 - Portable; mounted on casters, gliders, or rollers; or provided with a mechanical means to safely tilt a unit of equipment for cleaning; and
 - Having no utility connection, a utility connection that disconnects quickly, or a flexible utility connection line of sufficient length to allow the equipment to be moved for cleaning of the equipment and adjacent area.
- Equipment that is not easily moveable shall be either sealed to the floor or mounted on legs that provide at least six inches of clearance between the equipment and the floor (§4-402.12) or, in the case of counter-mounted equipment, 4 inches of clearance between the equipment and the counter.
- Equipment should be commercially rated (§4-205.10). “Homestyle” equipment (i.e. non-commercial refrigerators or ovens) is not designed for the continual use that a commercial kitchen demands, and may fail to maintain proper temperatures or operate consistently.
- Temperature measuring devices must be placed so as to measure the air temperature, or product temperature, in the warmest part of a refrigerated unit or the coolest part of a hot hold unit.
- There must be a 3-compartment ware washing sink, even if there is a mechanical dish machine present. Sink compartments of a 3-compartment ware washing sink must be large enough to accommodate immersion of the largest equipment and utensils used in the kitchen, unless the equipment is clean-in-place (§4-301.12).
- A food preparation sink must be provided if food is placed into a sink or sink compartment for the purposes of thawing or cleaning (§4-301.12(F)).
- There must be enough handwashing sinks so that at least one is available for convenient use by employees in all food preparation areas of the establishment; there may be no less than one handwashing sink (§5-203.11). Handwashing sinks may be used for no other purpose than handwashing, and must be accessible at all times (§5-205.11). Handwashing sinks must provide water that is at least 100°F. Self-closing faucets must provide a flow of water for at least 15 seconds without reactivation (§5-202.12).
- At least one service sink, or mop sink, must be provided and conveniently located for cleaning mops and other floor cleaning tools and for the disposal of mop water and other liquid waste. Toilets and urinals may not be used for disposal of mop water (§5-203.13).

KEEP THIS PAGE FOR YOUR REFERENCE

Employee Hygiene Guidance and Requirements

The purpose of this guidance document is to encourage employee practices and behaviors that can help prevent food handlers from spreading viruses and bacteria to food that cause foodborne illness outbreaks.

Section 2-103.11(M) of the ARM states that management has the responsibility to inform and monitor conditional employees(new hires) or food employees to ensure that they have good hygienic practices and know when they should not come to work because of illness.

Should employees exhibit the following symptoms, refer to section 2-201 of the 2013 FDA Food Code to determine when a food handler should be excluded or restricted from food handling duties:

- **Vomiting**
- **Diarrhea**
- **Jaundice (yellow skin or eyes)**
- **Sore throat with fever**
- **Infected cuts and burns with pus on hands and wrists**

Below is a list of highly-infective pathogens that are transmissible through food and cause severe illness:

1. Norovirus
2. Hepatitis A virus
3. *Salmonella Typhi*
4. *Shigella* spp.
5. *Escherichia coli* (*E. coli*) O157:H7 (or other Enterohemorrhagic or Shiga toxin-producing *E. coli*)
6. Other enteric bacterial pathogens such as *Salmonella* or *Campylobacter*

If an employee has been diagnosed by a health practitioner to have any of these pathogens, prior to returning to work, they must be cleared by their health practitioner and the Health Department. In lieu of a diagnosis of any of these pathogens, employees can return to work if they have been free of the symptoms listed above for 24 hours or more.

Additional Resources

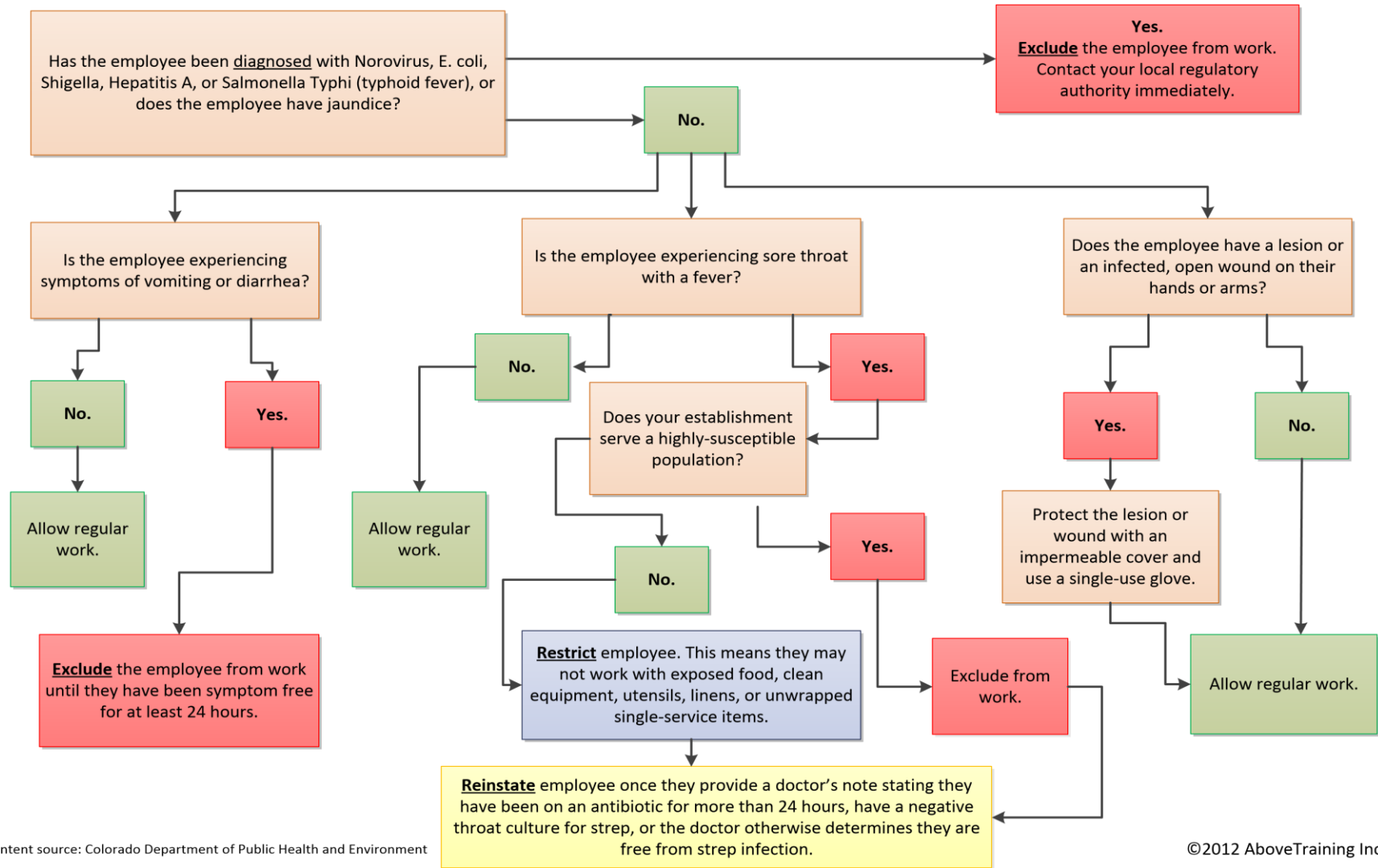
Employee Health and Personal Hygiene Handbook:

<http://www.fda.gov/Food/GuidanceRegulation/RetailFoodProtection/IndustryandRegulatoryAssistance/ndTrainingResources/ucm113827.htm>

Communicable Disease Manual:

<https://www.colorado.gov/pacific/cdphe/communicable-disease-manual>

EMPLOYEE ILLNESS FLOWCHART – *KEEP THIS PAGE FOR YOUR REFERENCE*



Content source: Colorado Department of Public Health and Environment

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Plan Review Form

Establishment Information

Name of Establishment:	Phone:
Street Address:	Cell:
City:	Fax:
State/Zip:	Email:
County:	

Business/Ownership Information

Individual or Corporate Name:	Phone:
Street Address:	Cell:
City:	Fax:
State/Zip:	Email:

Contact Information

Name of Primary Contact:	Phone:
Street Address:	Cell:
City:	Fax:
State/Zip:	Email:
Name of Architect:	Phone:
Street Address:	Cell:
City:	Fax:
State/Zip:	Email:
Name of Contractor:	Phone:
Street Address:	Cell:
City:	Fax:
State/Zip:	Email:

Date construction is to start: _____ **Date of planned opening:** _____



	Facility Floor Plan/Equipment Layout		Site Plan
	Equipment Specifications		Chemical and Personal Storage
	Plumbing Plans and Schedules		Fixtures Requiring Hot Water (<i>table 11</i>)
	Menu		Employee Hygiene Guidance (<i>See Annex 3, pg. 16</i>)

Have plans for this establishment been submitted to the building department:

In City of Great Falls? Yes No NA

Outside the City of Great Falls, State building official? Yes No NA

Circle applicable status:

Newly Constructed

Extensively Remodeled

Existing Business/Some Remodel

Existing Business/No Remodel

Other

Type of Retail Food Establishment (Check all that apply)			
	Full Service Restaurant		Bar
	Fast Food		Coffee Shop
	Market (Grocery)		School Food Program
	Deli		Catering Operation
	Fish Market		Concession
	Meat Market		Manufacturer with Retail Sales
	Convenience Store		Other:

Indicate number of seats in each area:

Indoor: _____ Outdoor: _____

Square Footage and Area Location

**If the establishment is in a multi-story structure, indicate on which floor each area is located.*

Please indicate square footage in each area	Square Feet (ft ²)	*Floor
Total Square Feet of the Kitchen Area		
Square Feet of the Food Preparation and Dishwashing Area		
Square Feet of Food/Beverage Storage Areas		

Days and Hours of Operation

Insert hours below in the following format: 8am to 8pm

If there is a break in the hours you are open, use the second line to insert additional hours.

Days	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Hours	to	to	to	to	to	to	to
Hours	to	to	to	to	to	to	to

For seasonal operations, check all that apply.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
-----	-----	-----	-----	-----	-----	-----	-----	------	-----	-----	-----

Add additional information (if necessary):

Projected daily maximum number of meals to be served per shift, where applicable.

Breakfast		Lunch		Dinner	
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Maximum number of kitchen staff per shift, where applicable.

Breakfast		Lunch		Dinner	

FACILITY FLOOR PLAN/EQUIPMENT LAYOUT

- A.** Submit floor plans drawn to scale that include the location and identification of all equipment including but not limited to the items listed in Table 1 below. Check all that apply to your facility.

Table 1: Floor Plan/Equipment Layout.

“Mark” off with a check mark or an “X”

	Handwashing Sinks		Dry Storage Areas		Ventilation Hoods
	Food Preparation Sinks		Ice Bins/Ice Machines		Chemical Dispensing Units
	Utility Mop Sinks		Wait Stations		Chemical Storage Areas
	Dump Sinks		Bar Service Areas		Personal Storage Areas
	Warewashing Sinks		Water Heater Locations		Garbage/Recyclables Storage
	Dish Machines		Indoor/Outdoor Seating		Dipper Wells
	Toilet Facilities		Outdoor Cooking/Bar/Patio		Grease Interceptor/Grease Trap
	Floor Sinks/Floor Drains		Buffet Lines		Laundry Facility Locations

EQUIPMENT SPECIFICATIONS

- A.** Submit equipment specification sheets, including make and model numbers. All equipment shall be of commercial design. If a specification sheet lists more than one piece of equipment, identify the specific equipment to be used.
- B.** Provide number of hot holding and refrigeration units. Also provide capacities for refrigeration units in Table 3 and Table 4 below.

Table 3: Refrigeration Units

TYPE OF UNIT	# OF UNITS	TOTAL CUBIC FEET
Walk-in Cooler		
Walk-in Freezer		
Reach-in Cooler		
Sandwich Prep Cooler		
Reach-in Freezer		
Blast Chiller		
Retail Display (i.e. Glass cases)		
Other:		
Other:		
Other:		

Table 4: Hot Holding Units

TYPE OF UNIT	# OF UNITS
Steam Table FOH	
Steam Table BOH	
Hot Box FOH	
Hot Box BOH	
Cook & Hold Units	
Other:	
Other:	
Other:	
Other:	
Other:	

PLUMBING PLANS AND SCHEDULES

A. Submit a plumbing plan that indicates location and specifications of the following:

1. Floor sinks and floor drains
2. Restrooms, toilets, urinals, and hand washing sinks
3. Grease trap, grease interceptor, or solids interceptor, if required by the local building, Water, or sanitation authority
4. Hose bibs and hose reels, if applicable
5. Laundry facilities, if applicable
6. Showers, if applicable

B. Complete Table 5 below for all food service-related equipment and plumbing fixtures. Indicate if fixtures or equipment will be indirectly drained (e.g. floor sink or air gap), directly connected to the sewer, and/or what method of backflow prevention will be used, if applicable. If additional equipment is provided, please specify in the table below.

Table 5: Food Service-Related Equipment and Fixtures

ID # on Plan	Fixture or Equipment	Indirect/Direct Drainage	Method of Backflow Prevention
	Ware washing Facilities		
	Dish Machines		
	Garbage Disposals		
	Hand sinks		
	Food Preparation Sinks		
	Refrigeration Units		
	Ice Bins/Machines		
	Beverage Machines		
	Mop/Utility Sink		
	Chemical Dispensing Units		

Note: Approved backflow protection must be supplied on all fixtures and equipment with submerged inlets. Vacuum breakers must be installed on water inlet lines for dishwashing machines, garbage disposals, and hose bibs. Continuous pressure backflow protection devices must be installed on water lines where a valve or shut off is located between the backflow device and the inlet to the fixture/equipment, such as hose reels. Indirect drainage is required for ware washing, food preparation sinks, ice bins/machines and beverage machines.

- C.** 1. Is a dedicated food preparation sink provided? YES NO
 2. Is more than one food preparation sink provided? YES NO
 3. Attach a specification sheet for the food preparation sinks and complete Table 6.

Table 6: Food Preparation Sink Information

ID # on Plans	Length (inches) of Drain board	Dimensions (inches) of Sink Compartments (LxWxD)	
		x	x
		x	x

- D.** Is a garbage disposal provided? YES NO
 If yes, provide location:

- E.** Food will be primarily served on?
 Circle one or both: Multi-use tableware Single-Service Tableware Both

- F.** Provide the locations of **drink dump sink**(esp. bars and Coffee establishments) installed in areas where soiled drinking glasses are emptied and staged for ware washing:

G. Complete Table 7 and Table 8 for ware washing(dish washing area)

**Table 7: Manual Ware washing(dishwashing) Information,
 3-part sink- wash, rinse, and sanitize**

ID # on Plans	Dirty side drain board length (inches)	Dimensions (inches) of Sink Compartments (LxWxD)	Clean side drain board length (inches)	Pre-Rinse Sprayer Yes/No
		x x		
		x x		

Note: Ware washing sinks must be large enough to accommodate the largest piece of equipment or utensils used in the establishment.

1. Will alternate equipment or methods be used in place of traditional drain boards? YES NO
 If yes, indicate the methods that will be used: _____

Table 8: Mechanical (machine) Warewashing Information

Make	Model #	Dirty side drain board length (inches)	Clean side drain board length (inches)	Pre-Rinse Yes/No	High Temp.(HT) or Chemical Sanitizer(CS)	Water Usage (GPH)

H. Provide the number of plumbing fixtures requiring hot water in Table 11 below. This information will be used to determine the hot water demand within the facility and sizing criteria for the water heater.

If applicable, attach specification sheets.

If more than one water heater is to be installed, please indicate which plumbing fixtures each heater or system will service. _____

Table 9: Storage Tank Water Heater

Make	Model #	kW/BTU Rating

Table 10: Instantaneous/Tankless Systems (Gallons Per Minute, GPM, indicate which required degree rise will be used in the flow rate column)

Make	Model #	BTU Rating	Flow Rate (GPM) @ 80°F or 100°F rise	Storage Tank Capacity (Gallons), if applicable

Note:** For instantaneous/tankless systems when a dish machine is used, a properly sized storage tank (minimum 20 gallons), recirculation line, and an aqua stat (water thermostat) must be installed. For facilities with high temperature dishwashing machines, use 100°F rise. For all other facilities, use 80°F rise. If flow rate in GPM is not provided, contact the manufacturer to obtain the information.

****See Appendix A (Storage Tank) or Appendix B (Tankless/“On Demand”) at end of application for “Peak Hot Water Demand Guidelines” for facility.**

Hot Water Heater must meet or exceed Peak Hot Water Demand. Exceptions will be considered on case-by-case basis depending upon facility operations and menu.

Table 11: Number of Plumbing Fixtures Requiring Hot Water

Plumbing Fixtures Requiring Hot Water	Number of Fixtures throughout facility
3-compartment sinks	
Ware washing machines	
Pre-rinse sprayers	
Utensil soak sinks	
Hand sinks include restrooms	
Mop sinks/Utility sinks	
Garbage can washer	
Showers	
Hose bibs used for cleaning	

SITE PLAN:

A. Water Supply - Select the type of water supply system that services the establishment.

1. Circle one: Private (go to 3.) or Public (go to 2.)

2. If Public- Name of district (i.e. City Great Falls): _____

Public Water System ID Number (PWSID): _____

3. If Private - Provide the information requested in section “a.” below and complete

Table 12.

- a. Submit a copy of the most recent water sample test results and a piping diagram of the disinfection system. Include size of holding tank(s), pressure tank(s), make and model number of treatment system, etc.

Table 12

Private Drinking Water Supply Information		
	Well	Spring
Depth (feet)		N/A
Method of Disinfection		
Filtration (if applicable)		

- b. Location of well heads and well water supply lines servicing the building, if applicable

SEWAGE DISPOSAL:

- 1. Circle the type of sewage disposal system that services the establishment.

Private (septic) - go to ii Public (sewer) - go to i

- i. Public system – Name of district:

- ii. Private, septic system (on-site Waste Water Treatment System) –

- Attach location of on-site waste water treatment system (septic system) and septic lines servicing the building.

PERSONAL STORAGE:

- A. Where are employee personal items (i.e. purses, jackets) stored? Circle below

Lockers closet coat rack break room/area other _____

- Location? _____

FOOD:

Attach ALL menus (beverage, appetizer, breakfast, lunch, dinner, etc.)

A. Will vacuum packaging/reduced oxygen packaging or specialized processes as defined in **ARM 37.110.2, 3-502.11 Specialized Processing Methods** be conducted? **YES** **NO**

If yes, indicate which type(s) of specialized processing will be conducted below and attach specifications sheets for the equipment that will be used and a copy of the required HACCP plan for each category of food to be processed in this manner. (Contact the Sanitarian for more information and for additional variance and/or HACCP application papers)

- Smoking food as a method of preservation (not only for flavor)
- Curing food
- Using food additives (such as vinegar) as a method of food preservation
- Vacuum packaging/reduced oxygen packaging/modified atmosphere packaging
- Custom processing animals for personal use as food and not for sale in a retail establishment
- Operating a molluscan shellfish life-support system display tank
- Sprouting seeds or beans
- Other: _____

B. Describe how the temperature of foods will be monitored. Provide the frequency of temperature checks and what foods and/or equipment will be monitored. If logs or other types of documentation will be used to help manage proper food temperatures, please attach copies.

C. Will cooked foods be cooled? **YES** **NO**

D. What methods will be used to rapidly cool cooked foods to 41°F (5°C) or below?
Circle all that apply.

- | | | |
|-------------------------|----------------|---------------------------------------|
| Under refrigeration | Ice water bath | Adding ice as an ingredient |
| Rapid cooling equipment | Shallow pans | Separating food into smaller portions |

Other: _____

List the foods that will require rapid cooling. Include foods that are made from scratch such as soups, sauces, potato salad, pastas, chili, noodles, roasts, casseroles, sausages, yogurts, etc.

E. Will foods be reheated and then held hot before being served? **YES** **NO**

If yes, please explain how they will be rapidly reheated to above 165°F (74°C) within 2 hours.

1. List the equipment that will be used for reheating:

F. How will frozen foods will be thawed(circle).

Under refrigeration Under running water In a microwave
As part of the cooking process Other: _____

G. Will catering be conducted? **YES** **NO**

H. Will food be transported or delivered to another location? **YES** **NO**

If yes, please list the equipment that will be used to maintain food at proper temperatures during transport.

I. Will produce be washed? **YES** **NO** **N/A**

1. If not, will produce be received pre-washed? **YES** **NO**

J. Will the establishment prepare foods that will be sold to other retail food establishments?

YES NO

If yes, please visit <http://dphhs.mt.gov/publichealth/FCSS>, then click "Food safety", then click "Wholesale food" to obtain information on registering as a wholesale food purveyor.

K. How will bare hand contact with ready-to-eat foods be eliminated during preparation?
(Circle below)

Utensils

Gloves

Deli Tissue

Appendix A

Peak Hot Water Demand Guidelines

Storage Tank Heater

Appropriately sizing your hot water heater is important to ensure all equipment requiring hot water will have an adequate supply at all times, especially peak hours. Use the following tool to determine the estimated maximum hot water demand for the establishment with a **storage tank water heater**.

For storage tank water heaters, the estimated gallons per hour (GPH) for the facility should be less than or equal to the water heater's recovery rate (@ 80 degree F rise**), which can be found on the spec sheet for your hot water heater or by contacting the manufacturer.

**100 degree F rise if facility has high temperature dishmachine

Warewashing Sinks <i>(75% of sink capacity)</i>	Number of Compartments	Dimensions (single compartment, inches)			<i>For 75% Capacity: Multiply (# comp) x (cubic inches, LxWxD) x 0.003255</i>	GPH
		Length	Width	Depth	0.003255	
					0.003255	
Total						
Prep Sinks <i>(5 GPH per compartment)</i>	Number of Compartments					GPH
		X 5				
		X 5				
Total						
Handwashing Sinks <i>(5 GPH per sink)</i>	Number of Handwashing Sinks					GPH
		X 5				
Mop/Utility Sinks <i>(5 GPH per sink)</i>	Number of Mop/Utility Sinks					GPH
		X 5				
Hose Reel <i>(5 GPH per reel)</i>	Number of Hose Reels					GPH
		X 5				
Pre-Rinse Sprayer <i>(45 GPH per sprayer)</i>	Number of Pre-Wash Sprayers					GPH
		X 45				
Note: Only calculate pre-rinse sprayer if connected to hot water						
Dish Machine <i>(70% final rinse usage)</i>	Make	Model	Final Rinse Usage			GPH
				X 0.7		
Note: Find "Final Rinse Usage" on Equipment spec sheet						
Clothes Washer	Make	Model	Water Usage			GPH
Note: Find "Water Usage" on Equipment spec sheet						
For any other equipment type requiring hot water, see equipment spec sheet or consult manufacturer to find GPH					Overall Facility GPH Demand	

Appendix B

Peak Hot Water Demand Guidelines

On-Demand/ "Tankless" Heater

Appropriately sizing your hot water heater is important to ensure all equipment requiring hot water will have an adequate supply at all times, especially peak hours. Use the following tool to determine the estimated maximum hot water demand for the establishment with a **on-demand/tankless water heater**.

Because the efficiency of on-demand/tankless water heaters are dependant upon the temperature of the incoming water supply, these systems may not be ideal for the cold weather winters in Montana. The total gallons per minute (GPM) for the facility should be less than or equal to the water heater's GPM @ 80 degree F temperature rise**, which can be found on the equipment spec sheet (flow rate graph) or by contacting the manufacturer.

***100 degree F rise if facility has high temperature dishmachine*

Equipment	Quantity (Total Faucets)	Estimated Usage	GPM
Handwashing Sink		X 0.5 GPM	
Warewashing Sink		X 2 GPM	
Prep Sink		X 1 GPM	
Service Sink		X 1 GPM	
Pre-rinse Sprayer		X 2 GPM	
Total			
<p><i>If facility uses low-flow fixtures less than the estimated usage, use the GPM found on the spec sheet for the fixture.</i></p> <p><i>For any other equipment type requiring hot water, see equipment spec sheet or consult manufacturer to find GPM. List Make, Model, and GPM in chart below.</i></p>			
Equipment Type	Make	Model	GPM
Total			
Overall Facility GPM Demand			

Resources

General Information

MT Department of Public Health and Human Services (DPHHS), Rules for Retail Food Establishments (Administrative Rules of Montana)

<https://dphhs.mt.gov/Portals/85/publichealth/documents/FCS/FinalRetailRule.pdf>

Food and Consumer Safety Section (FCSS), Retail Food

<https://dphhs.mt.gov/publichealth/FCSS/RetailFood> or quick search MT FCSS

FDA Food Code, 2013

<https://www.fda.gov/food/fda-food-code/food-code-2013>

PDF version for download

<https://www.fda.gov/media/87140/download>

2017 FDA Food Code (will be adopted in the near future)

<https://www.fda.gov/food/fda-food-code/food-code-2017>

Food Service Establishment Licensing – Cascade County

<https://www.cchdm.org/environmental-health/food-establishment-safety/food-service-establishment-licensing/>

Food Recalls

DPHHS

<https://dphhs.mt.gov/publichealth/fcss/recalls>

USDA

<https://www.fsis.usda.gov/wps/portal/fsis/topics/recalls-and-public-health-alerts/current-recalls-and-alerts>

FDA

<https://www.fda.gov/Safety/Recalls/default.htm>

Food Safety News

Subscribe to Food Safety News and receive an email (5 to 6 articles) every morning about food safety in the US and world

Food Safety News info=foodsafetynews.com@send.aweber.com

Federal Food Safety Information

<https://www.foodsafety.gov/news/index.html>

Employee Hygiene

Employee Health and Personal Hygiene Handbook

<https://www.fda.gov/food/retail-food-industryregulatory-assistance-training/retail-food-protection-employee-health-and-personal-hygiene-handbook>

PDF download

<https://www.fda.gov/media/77065/>

Food Worker Handwashing and Food Preparation

https://www.cdc.gov/nceh/ehs/ehsnet/plain_language/food-worker-handwashing-food-preparation.htm

Sample Handwashing Policy

<https://dphhs.mt.gov/Portals/85/publichealth/documents/FCS/SampleHandwashingPolicy.pdf>

Sample Written Employee Health Policies

<https://dphhs.mt.gov/Portals/85/publichealth/documents/FCS/WrittenEmployeeHealthPolicyExamples.pdf>

Handwashing posters

<https://dphhs.mt.gov/Portals/85/publichealth/documents/FCS/HandWashingPosters.pdf>

Plan Review

2016 MT DPHHS Food Service Establishment Plan Review Manual

<https://dphhs.mt.gov/Portals/85/publichealth/documents/FCS/plan-review-for-food-establishments-guide-2016-final.pdf?ver=2017-02-07-141842-683>

Miscellaneous

Bacteria and viruses as sources of food poisoning

<https://www.foodsafety.gov/food-poisoning/bacteria-and-viruses>

Animals in Food Service Establishments

<https://dphhs.mt.gov/Portals/85/publichealth/documents/FCS/Animals%20in%20Food%20Service%20brochure.pdf>

Food Allergy information

<https://www.fda.gov/food/buy-store-serve-safe-food/what-you-need-know-about-food-allergies>

Temperature dangers

<https://www.webstaurantstore.com/article/29/following-food-safety-temperatures.html>

<https://www.foodsafety.gov/food-safety-charts/safe-minimum-cooking-temperature>

<https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/safe-food-handling/danger-zone-40-f-140-f>

<https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/safe-food-handling/how-temperatures-affect-food>

USDA Food Safety Fact Sheets

<https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets>

What to do (or not to do) during an inspection

Inspection guidelines (General information)

<https://www.webstaurantstore.com/article/16/health-inspection-checklist.html>

<https://www.markelinsurance.com/-/media/specialty/risk-management/small-business/fc-policyholder-training-series/things-health-inspectors-look-for.pdf?la=en&hash=210E1830F3D1B1FCA48D618694A0028030006938>

<https://freshideas.maines.net/health-inspectors/>