**NSF 174 - DRAFT NEW - Comments - July 15, 2025 Teleconference Discussions**

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| **REQUIREMENT** | COMMENT | SUBMITTER |
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| Overall | The draft for NSF 174 is very well written and encompasses the intentions of what we set out to do. I feel we are in a good position to begin line by line live discussions during our upcoming July meeting. I'm also very happy to see comments from the manufactures perspective. Kudos to all that have put in the work to get us to this point. | Bob Corrao |
| 4  Materials  The requirements contained in this section are intended to protect food from contamination and ensure that the materials used in the manufacture of food handling and processing equipment resist wear; penetration by vermin; and the effects of foods, heat, cleaning compounds, sanitizers, and other substances that can contact the materials in the intended use environment. Unless otherwise noted, material requirements apply only to the food preparation, storage, service, and display areas of mobile food units. Materials used in unexposed nonfood zone areas shall be exempt from all requirements in Section 4. | Non-food | Thomas Jumalon |
| 4.3 Sound-dampening material  Sound-dampening materials shall meet the requirements of the zone in which they are located except that they are not required to be smooth. Noncuring sound-dampening materials shall not be used in exposed  areas. | What is this word | Thomas Jumalon |
| 4.7.2 Potable water distribution system  If provided, potable water distribution piping and components integral to the mobile food unit structure shall comply with NSF/ANSI/CAN 61. Materials in potable water flow paths within individual pieces of food equipment such as beverage dispensers, ice machines, coffee brewers, water heaters, or other equipment covered by the scope of NSF/ANSI Food Equipment Standards shall comply with NSF/ANSI 51. | Water heater materials must comply with NSF/ANSI 51. Include to avoid confusion related to the first sentence of 4.7.2. | Jonathan Brania |
| 4.8 Liquid waste disposal system  If provided, the liquid waste disposal system in the unit shall be designed and constructed using materials that enable liquid wastewater to be removed without contaminating the interior of the mobile food unit. | Is this a materials concern or a design and construction concern (i.e., the location of the tank outlet)? | Jonathan Brania |
| 5.1.1 Mobile food units shall be designed and manufactured to prevent the harborage of vermin and the accumulation of dirt and debris, and to facilitate the inspection, maintenance, servicing, and cleaning of the equipment and its components. | Consider removing the word and after vermin. Insert comma after vermin. | Thomas Jumalon |
| 5.1.2 Mobile food units shall be designed and manufactured so that food can be added, processed, finished, dispensed, removed, served, or a combination of all six, in a sanitary manner. | Consider adding stored and change six to seven | Thomas Jumalon |
| 5.3 External angles and corners  Exposed external angles and corners in a food zone shall be sealed and smooth | Do we need to specify with a food grade type sealant | Thomas Jumalon |
| 5.4.1 Permanent joints and seams in a food or splash zone shall be sealed and smooth. | How would this apply to the floor of a truck? Assumedly the floor and potentially the walls are splash zones. | Jonathan Brania |
| Do we need to specify with a food grade type sealant | Thomas Jumalon |
| 5.4.2 Permanent joints and seams in a nonfood zone shall be closed. Welded joints and seams in a nonfood zone shall be deburred. | non-food | Thomas Jumalon |
| 5.4.3 Joints formed by overlapping sheets of material shall not create upwardly facing horizontal ledges. | Is the proposal that this requirement also extend to finish materials, such as flashing or trim? | Derek Taylor |
| 5.4.4 Sealants shall only be used to seal joints and seams that are structurally sound and are less than 1/8 in. (0.13 in., 3.2 mm) wide before sealing. Sealants may be used to fill spaces around collars, grommets, and service connections. | This represents a tight build tolerance for mobile food units, which rely far more on manual processes than the highly automated automotive industry, as they are not mass-produced. Additionally, mobile units tend to “settle” during transit due to the vibration and movement experienced on the road. It’s similar to how a house settles over time as the ground compacts beneath it, though in this case, it often occurs more quickly—despite proper suspension—due to the dynamic nature of travel. A 3/16 in tolerance would still be very exacting from what I’ve seen in the field. | Derek Taylor |
| 5.5 Floors and walls  Junctures of floors, walls, and adjoining fixtures shall be sealed. | The draft for Std. 174 seems to be basically well put together and covers the topic of MFU's well. I did find a couple of things that need to be reconsidered. 4.5 covers Floors, Walls and Ceilings but under 5.5 you find requirements that probably should be moved to 4.5 also. | Tony Gagliardi |
| What type of adjoining fixtures? Should this not also say properly secured? | Thomas Jumalon |
| 5.6.1 Fasteners shall not be used in a food zone. | Without the use of fasteners, is there a proposed method for securing equipment and/or splash guards to the countertops? | Derek Taylor |
| 5.6.5 There shall be no exposed threads, projecting screws, or studs in a food or splash zone. There shall be no more than two and one-half exposed threads or 1/4 in. (0.25 in., 6.4 mm) of exposed threads, whichever is less, in a nonfood zone. | Non-food | Thomas Jumalon |
| 5.7 Insulation  Insulated spaces in the food and splash zones shall be sealed. Insulated spaces in the nonfood zone shall be closed. | Again should we use any term indicating sealed with food grade sealants?  Non-food | Thomas Jumalon |
| **5.9 Inspection and maintenance panels**  When necessary for equipment inspection and maintenance, acess panels of adequate size shall be provided. Each panel shall be sized to facilitate removal and replacement by one person or attached to hinges complying with 5.13. | Access | Thomas Jumalon |
| 5.15.8 Cover that are part of individual pieces of food equipment covered by the scope of other NSF/ANSI Food Equipment Standards shall comply with the requirements therein. | Should the word be “covers”? | Thomas Jumalon |
| 5.23.2 Counter-mounted equipment shall be designed and manufactured to be one of the following:   portable   sealed to the counter   elevated on legs that provide a minimum clearance of 4.0 in. (102 mm) beneath the unit.   elevated on legs that provide a minimum unobstructed clearance beneath equipment of 3.0 in. (76 mm), provided that no part of the countertop under the footprint of the equipment is no more than 16 in. (41 cm) from the point of cleaning access.   elevated on legs that provide a minimum unobstructed clearance beneath equipment of 2.0 in. (51 mm), provided that no part of the countertop under the footprint of the equipment is no more than 3.0 in. (76 mm) from the point of cleaning access. | A MFU is intended to move from place to place. Any countertop equipment (e.g., dispenser, ice machine, food warmer, display) should be anchored by 3-axis restraints. I do not think restraints need be certified by an engineer as required in California, but ought to be firmly anchored in place. | Michael Perez |
| 5.26.3 Diverting shelves intended to prevent seepage or retain splashes and spills shall have sealed corners and seams. The back and end edges shall be turned up a minimum of 1.0 in. (25 mm) and the corners and seams shall be sealed. Shelf surfaces exposed to unpackaged foods shall conform with Section 5.2 (see Figure 5). | I have seen this word used earlier. What seepage is the concern? | Thomas Jumalon |
| 5.38.2 Openings through countertops shall be protected by a raised rim that extends at least 3/16 in (0.19 in, 4.8 mm) above the liquid level. | Would a properly sealed splash guard be sufficient to meet this requirement? | Derek Taylor |
| 5.41.2 Glass components of light fixtures shall conform to the requirements of Section 5.38 of this standard. | Is this the standard that deals with having shatter proof or shielded bulbs in a food zone? | Thomas Jumalon |
| 5.43 Beverage stands (beverage counter)  5.42.1 Beverage stands shall have a drip trough  5.42.2 Drip troughs shall conform to Section 5.43.  5.44 Drip troughs  5.56.1 Drip troughs shall be all of the following:   self-draining   provided with a minimum 1 in (1.0 in, 25 mm) IPS drain   equipped with a drip grate  5.56.2 Drip grates shall be all of the following:   readily removable   easily cleanable   designed and manufactured with smooth edges | The requirements under 5.43 and 5.44 are numbered wrong. In this same section, 5.3, you have something numbered 5.42.2 that just makes no sense and needs to be changed. | Tony Gagliardi |
| 5.48 Canopies and hoods  The interior surfaces of canopies and hoods shall meet the food zone material requirements and shall meet  the splash zone design and construction requirements. Interior reinforcing shall be smooth and easily cleanable and shall not act as a dam or create a surface on which grease or condensate may collect and drip. Gutters, when provided, shall be smooth, easily cleanable, and fitted with a drain or clean-out opening. The exterior surfaces of canopies and hoods shall be classified as nonfood zones, except that joints and seams shall be sealed and there shall be no exposed threads. | Since a MFU will be certified as a single assembly, a stipulation should be added requiring compliance to NFPA 96. I know this varies from Standard 2, but NFPA 96 includes specific construction requirement including liquid tight construction, capture, clearance to combustible walls, provisions for exhaust fan autostart, fire suppression systems, remote pull station and many others. | Michael Perez |
| 5.50 Potable water supply system  Mobile food units preparing foods, handling foods, or both shall have a potable water supply either from connection to a potable water system or from an on-board supply tank. Mobile units serving only pre-packaged food are exempt from this requirement. | This needs clarification please. | Thomas Jumalon |
| Maybe say potable tanks is required of all units, and then put an exemption for mobile units serving only pre-packaged foods”?  Words like prep and handling can get dicey when filling cups from a soda dispenser, etc.   Also, do we want water tanks and hand sinks on units where they handle/provide single service utensils? | Derek DeLand |
| 5.50.1 The water supply tank shall have a minimum capacity of 40 gal (151 L). | Since this standard applies to both food trucks and trailers, the required fresh water tank volume appears significantly higher than what is necessary to operate effectively during a 12+ hour shift—particularly for concepts with minimal or no warewashing needs. Handwashing alone typically requires a minimum of 5 gallons. Even if that were increased fourfold to account for warewashing, a 20-gallon capacity would generally suffice. | Derek Taylor |
| From where is this number derived?  Additional sentence is a modified version of 5-103.11 of the Food Code. Suggest adding “The water supply shall be of sufficient capacity to meet overall water demands.” | Jonathan Brania |
| 5.50.3 The water system shall be capable of delivering at least 1 GPM. | Is this to all water baring fixtures located within the unit, or just a plain minimum? | Thomas Jumalon |
| 5.50.4 Breather tubes or overflow pipe openings shall be protected from the entrance of dust insects, and other contamination. | FC Section 5-302.14: ...a water tank vent shall terminate in a downward direction and shall be covered with:  (A) 16 mesh to 25.4 mm (16 mesh to 1 inch) screen or equivalent when the vent is in a protected area; or  (B) A protective filter when the vent is in an area that is not protected from windblown dirt and debris.  Should we add this level of detail to this section?  Suggested adding:  5.50.5 Potable water storage tanks shall be enclosed from the filling inlet to the discharge outlet and  sloped to an outlet that allows complete drainage of the tank.  5.50.6 Potable water tank inlets shall be located to protect from contamination by road dust, grease, oil, or waste discharge and shall have a cover assembly, such as a cap, that can be secured when not in use.  5.50.7 Inspection and cleaning ports? *(Do we need a section on this? FC does provide language for when one is installed (FC 5-302.12). Should we just require one rather than “if one is installed?”)* | Derek DeLand |
| 5.52.1.2 The liquid waste tank shall have a capacity at least 15% greater than the combined capacities of the potable water tanks. When ice is utilized in the storage or display of foods or beverages, an additional minimum liquid waste tank holding capacity equal to one-third of the volume of the ice bin shall be provided for drainage of the ice melt. | I’d propose revising the standard to allow greater flexibility by permitting the wastewater tank capacity to exceed the 15% threshold, rather than requiring a separate tank dedicated solely to ice melt. | Derek Taylor |
| 5.52.2.3 All liquid waste drainage shall drain by means of an air gap or an overflow shall be provided on the waste tank to prevent waste backup in the drain lines. | Would the use of an s-trap or p-trap be an acceptable use for preventing waste back-up? A vast majority of plumbing codes permit a direct waste connection with a trap for hand sinks. Prep sinks, 3-comp sinks, ice machines/bins and warewashing equipment are required to use an indirect waste (air gap) drain such as a floor sink. | Michael Perez |
| 5.53 Hand sinks | Hand sinks require soap and a hand drying method. Is there a concern that mounting a paper towel dispenser on a certified unit is considered a modification, particularly if mounting is done by drilling holes/screwing something into the walls?   Should we consider requiring a paper towel dispenser? Or reserving space near the hand sink for a post-manufacturing install? | Derek DeLand |
| 5.53.1 A minimum of one hand sink shall be provided on all mobile food units where personnel handle unwrapped food items. | Will we know the truck’s intended operation? Each MFU may require a designation to signify allowable operations | Jonathan Brania |
| Again, might consider this a baseline requirement for all units and exempt the units where only prepackaged food is served. | Derek DeLand |
| 5.58 Ice machines  If provided, ice machines shall meet the requirements of NSF/ANSI 12. | If an ice machine operates continuously, then the manufacturer’s instructions as required by NSF 12 will be adequate. If an ice machine does not operate continuously, and there are multiple reasons why this could be (no power, no water), then the machine should be cleaned and sanitized in accordance with the ice machine manufacturer’s cleaning and sanitization instructions between uses. That isn’t the responsibility of the MFU manufacturer, so a requirement here isn’t appropriate. The language in NSF 12 may not be adequate to address such a situation. An informative annex for NSF 174 may one day be appropriate, or additional language in NSF 12 may also be appropriate. | Jonathan Brania |
| And ice bins | Derek DeLand |
| 5.59 Ventilation  Makeup air shall be provided at the rate of that exhausted. Adequate makeup air may be provided from screened openings, vents in the ceiling, or mechanical means. | Is this requirement necessary from a public health standpoint? The quality of the make-up air is not addressed, in which case this maybe pertains to logical air supply for equipment function, like a gas appliance; or employee health, which is assumedly covered by other codes. | Jonathan Brania |
| How much is needed? Will it be evaluated/tested per unit design? Are there any standards that can be referenced to be met, or standard testing protocols for evaluation? An air-balance report? | Derek DeLand |
| Would make-up air introduced directly into the exhaust hood be an acceptable method? National mechanical codes and most local mechanical codes require that a make-up air fan be de-energized if the fire suppression system discharges. | Michael Perez |
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| 5.61.1 Windows  Unless only pre-packaged individual items are offered for sale, each window shall be provided with a solid or screened window, or air curtain. Service windows shall be equipped with a self-closing device or air curtain. The air curtain shall be installed in such a manner to ensure airflow is not directed over areas where food is being prepared or stored. Screening shall be at least 16 mesh per square inch.  Air curtains shall meet the requirements of NSF/ANSI 37. | Why the distinction of pre-packaged food. This should apply regardless of pre-packaged or foods prepared on site. | Thomas Jumalon |
| Is there a specific cfm/ft@ opening that can be required? An undersized air curtain would be problematic, but nothing here seems to prevent it from happening. | Derek DeLand |
| 5.61.2..1 All entry or egress doors shall meet nonfood zone requirements. | Non-food | Thomas Jumalon |
| 5.61.2.2 All entry or egress doors shall be self-closing. If screened, screening shall be at least 16 mesh per square inch. | In several states, we have encountered resistance to the use of self-closing hardware on egress doors due to concerns that it may hinder a quick exit from the vehicle during an emergency. | Derek Taylor |
| 5.62 Lighting  All lights shall be shielded or shatterproof. Lighting shall provide a minimum of 20-foot candles of light on all working surfaces at all times during use. | Current food code required 50 FC shielded light at all food prep surfaces 30 inches from the floor or at the work surface. Why is this going to be different? | Thomas Jumalon |
| Use Breakable Glass Components and Light Fixtures from NSF/ANSI 2. Include light intensity as an additional requirement. | Jonathan Brania |
| 7.2 Mobile food units that include dispensing equipment for time/temperature control for safety foods, refrigerated display cases for time/temperature control for safety foods, or Type I refrigerated preparation tables shall have a permanently attached label that states:  *“The ambient air temperature in food preparation and service space within this mobile food unit shall be maintained so that the ambient temperature typically does not exceed 86 °F (30 °C).”* | This clause seems misplaced. The marking is would be provided by the manufacturer of the product and not the maker of the mobile food unit. Ideally this information moves up to Section 5. It’s then up to the maker of the MFU to ensure that this will be met. | Jonathan Brania |
| If this serves only as a general guideline or “rule of thumb,” does it provide value beyond informing the operator? In southern regions where temperatures frequently exceed 100 degrees, even with rooftop AC units and self-closing hardware or air curtains on serving windows, parking a unit on asphalt—as is common at many street festivals—makes this guideline more idealistic than practical. As such, it may offer little real benefit to either inspectors or operators. I’d propose striking this altogether. | Derek Taylor |
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