Michigan Department of Agriculture and Rural Development
Food Manufacturing Industry Best Practices for Controlling Listeria

The following is based on industry best practices and regulations for *Listeria* controls (**regulations are **bolded** and best practices are *italicized***). Maple Leaf Consumer Foods and Wesiberger Consulting LLC recommend managing the microorganism wet environment using the following American Meat Institute Listeria Intervention training formula:

Listeria Control	=	**Controlled traffic patterns**	+	*Dry,* **un-cracked, cleanable floors**	+	**Effective GMPs**	+	**Sanitary facility & equipment design**	+ **Effective sanitation procedures**

Recommended industry controls for Listeria monocytogenes include:

- **Identify symptoms in wet environments that pose problems** (including, but not limited to):
  - Condensation above exposed product or food contact surfaces.
  - Wet floors:
    - Cracks create harborage sites that protect *Listeria* in interstitial water between floor layers even after floors are chemically sanitized.
    - Facilitate transfer from source zone to food contact surfaces via movement of people, equipment and material-handling items (i.e. totes or pallets). *Listeria* doesn't spread through air, but aerosolized water can move *Listeria* from one surface to another (i.e. sanitation room near RTE zones without proper ventilation or separation, moving racks with motorized vehicles, mid-shift rinsing, or employee walking through standing water).

- *Utilize best practices to prevent problems (for example):*
  - *Wet Cleaning: Use low-pressure, cold water if wet washing is required during operations. This should not be done if adjacent areas are operating. It is also best to perform a flood sanitation step before operations resume if mid-shift cleaning is required. Find alternate methods to perform changeovers that reduce water usage.*
  - *Condensation: Use sanitized wipers to remove condensation from above exposed product or food contact surfaces.*
  - *Product Racks: Install splash guards over wheels. Avoid placing product on the lowest level. Clean racks between each use. Identify racks so environmental test results can be traced back to the specific rack for remediation.*
  - **Floors: Maintain intact un-cracked floor coatings to prevent water collection, harborage sites, and areas that cannot be cleaned.**
  - **Equipment: Develop periodic interventions for all equipment.** *For example, the AMI Listeria Intervention training program recommends that peelers should be cooked or steamed in place routinely (monthly or more often if necessary) if unable to disassemble for cleaning. Hand tools should be cooked weekly to manage harborage sites in the plastic handles. Tables, racks or other equipment with hollow legs should be tent steamed or cooked in a smokehouse until they can be replaced.*

- *Dry out processing area (*if wet operations exist, then **prevent product recontamination***).*
  - *Prevent standing water in employee traffic or product staging areas. Use sanitized squeegees to move water directly to drain. Equipment generating water should be connected directly to a drain to avoid water spilling on floor.*

References and Presentations:

1. Steve Tsuyuki and John Weisberger, Managing the Control of Listeria in a Wet Processing Environment, Best Practices article - Meatingplace.com, July 2010