



General Requirements Update

The New 3-A Sanitary Standards
General Requirements

Streamlining & Modernizing the 3-A Program
2015 Update

Lyle W. Clem – Chair
3-A Steering Committee



Overview

- 3-A SSI is an ANSI accredited Standards Developer Organization.
- 3-A maintains over 80 Equipment Standards and Accepted Practices.
- A Strategy was needed to leverage the critical resources of the stakeholder participants who form the base of 3-A.
- 3-A SSI is also focused on expanding hygienic knowledge into new applications.



Work Group 14

- WG14, formed to organize the 3-A General Requirements document continues to process additions and refinements
- The companion document created provide guidance for creating new Standards will also be updated as necessary
- These documents reflect consensus building among 3-A stakeholders.



Gen. Reqmts. Architecture

- Follows the structure of all 3-A Standards.
- Scope, Normative References, Definitions, Materials Reqmts, Fabrication Criteria for Product Contact and Nonproduct Contact Surfaces.
- Supporting Appendices, i.e. CIP Cleaning, SS Materials & EHEDG Harmonization.



Architecture cont.

- Now includes all 3-A Standards and Accepted Practices as Normative References.
- 34 External Normative Reference Documents are included (examples PMO, Specific CFR's, ASTM docs, etc.)
- 51 Defined Terms are included.



Materials Criteria

- Expanded sections for metallic alloys.
- Defining acceptance criteria for Non-Metals
- Rubber and Plastics now include multiple methods for inclusion. i.e. FCN, specific CFR references, GRAS, Threshold of Regulations (TOR) exemption, Letter of No Objection, by present test methods in Standards 18 and 20, or by a prior sanction letter,



Materials Criteria cont.

- Coatings and application methods
- Lubricants used in supporting fabrication methods
- Adhesives by CFR References



Fabrication Criteria

- Welding and joining methods defined per AWS and EHEDG Guidelines.
- Defining Soldering and Brazing Techniques
- Define acceptable Coating performance
- Define Bonding performance
- Define Powdered Metal usages



Fabrication Criteria cont.

- Define Surface Treatments (mech. polishing, electropolishing, ion implantation, etc.)
- Define Nonpermanent joining methods and criteria
- Cleaning and Inspectability Sections for general performance and baseline conformities



Additional Fabrication Reqmts.

- Draining
- Defining Dead Ends
- Criteria for Gaskets, O-rings and Seals
- Baseline Radius Criteria
- Criteria for Exposed and Enclosed Threads
- Defining Acceptable Perforated Surfaces
- Defining Coil Springs and Design Details
- Define Criteria for Openings and covers

ANSI/3-A 00-00-2014



- ANSI/3-A 00-00-2014 was approved by ANSI on Sept. 28, 2014 and effective through 3-A rules on October 11, 2014
- Conversion of all 3-A Standards is now underway to recognize the General Requirements and simplify content
- New Standards Development Projects are underway that incorporate Gen. Reqmts.



B-Level Standards Conversions

- WG1 - Vessels has started to convert 3-A Standard 05-15 to:
- **B-05-15-A Stainless Steel Automotive Transportation Tanks for Bulk Delivery and Farm Pick-Up Service**
- Steve McWilliams, Walker Engineered Products, is leading this project.



B-Level Standards Conversions

- WG2 - Fillers has started to convert 3-A Standards 17-11 and 23-06 to:
- **B-17-11-A Fluid Formers, Fillers, and Sealers**, Gabe Miller, PI-FS, Inc., is leading this project.
- **B-23-06-A Equipment for Packaging Viscous Products**, Frank DiMattei, Osgood Industries, is leading this project.



B-Level Standards Conversions

- WG3 – Valves & Fittings has started to convert 3-A Standard 33-02 to:
- **B-33-02-A Metal Tubing**
- George Medal, Mixproof Solutions, is leading this project.



B-Level Standards Conversions

- WG4 – Pumps & Mixers has started to convert 3-A Standard 02-11 to:
- **B-02-11-A Centrifugal and Positive Rotary Pumps**, Curt Hagen, SPX Flow Technology, is leading this project.
- WG4 is also processing an amendment to 3-A 21-01 for Separators and continues development for T-77-00, Mechanical Seals



B-Level Standards Conversions

- WG5 – Heat Exchangers has started to convert 3-A Standard 31-06 to:
- **B-31-06-A, Scraped Surface Heat Exchangers**
- Curt Hagen, SPX Flow Technology, is leading this project.



B-Level Standards Conversions

- WG6 – Conveyors & Feeders has started to convert 3-A Standard 88-00 to:
 - **B-81-00-A, Auger-type Feeders:**
- James McKenzie, Schenck Process, LLC, is leading this project.



B-Level Standards Conversions

- WG7 – Instruments has started to convert 3-A Standard 46-03 to:
- **B-46-03-A, Refractometers and Energy-Absorbing Optical Sensors**
- John Kinney, Foss North America, is leading this project.



B-Level Standards Conversions

- WG8 – Concentrating Equipment has started to convert 3-A Standards 45-02 and 16-05 to:
- **B-45-02-A Cross-Flow Membrane Modules**, Amy Simmer, GEA Filtration, is leading this project.
- **B-16-05-A Evaporators and Vacuum Pans**, Natalie Herman, SPX Flow Technology, is leading this project.



B-Level Standards Conversions

- WG9 – Farm / Raw Milk has started to convert 3-A Standards 13-11 & 30-01 to:
- **B-13-11-A Farm Milk Cooling and Holding Tanks**, and
- **B-30-01-A Farm Milk Storage Tanks**
- Whitney Thompson, Paul Mueller Co., is leading both projects.



B-Level Standards Conversions

- WG10 – Cheese & Butter Equipment has started to convert 3-A Standards 38-01 and 83-00
- **T-38-01 Open Cheese Vats & Tables:**
- Paul Bokelmann, Advanced Process Technologies, Inc. is leading this project.
- **B-83-00-A Enclosed Cheese Vats & Tables,** Steve Thomas, RELCO, LLC, is leading this project.



B-Level Standards Conversions

- WG12 – Plant Support Systems continues to develop 3-A Standards B-103-00
- **B-103-00 Robot-based Automation Systems**
- Bob Rochelle, Stäubli Corporation, is leading this project.



Robotics Developments

- The North American robotics market had a 28% increase in 2014
- The Robotics Industries Association (RIA) data indicates 27,685 robots valued at over \$1.6 Billion were ordered from North American companies in 2014
- The RIA also estimates in excess of 230,000 robots are in use in the U.S.
- 11% are used in Materials Handling

Summary



- The 3-A Program anticipates the General Requirements will find acceptance by a global marketplace.
- Standards maintenance is simplified
- Knowledge base experience is leveraged.
- New Standards Projects will benefit through time savings by referencing the General Requirements.

WE ARE NEEDED !



- The application of 3-A Sanitary Standards including the 3-A General Requirements will lead to improved equipment and process cleanability.

USA TODAY
FRIDAY, APRIL 10, 2011

LISTERIA BEHIND RECENT RECALLS

Pregnant, elderly, newborns among those at risk

Lee Szabo
USA TODAY

A bacteria called listeria has been the cause of several recent high-profile food recalls.

Sabra Dipping Co. recalled 30,000 cases of hummus Wednesday because of the bacteria, which can cause symptoms such as diarrhea, nausea and cramps.

Although most people with listeria get better on their own, listeria can invade the bloodstream, brain or spinal cord in people whose immune systems are too weak to fight the bacteria, says Robert Glatter, an emergen-

cy physician at Lenox Hill Hospital in New York.

About 90% of people who get serious listeria infections are pregnant women, their newborns, people older than 64 or people with weakened immune systems, such as patients with cancer or HIV, according to the Centers for Disease Control and Prevention.

Listeria sickens just 1,600 Americans a year, according to the CDC. It's likely that many more become ill with diarrhea, cramps and nausea but never see a doctor, choosing to suffer at home and use over-the-counter medications, Glatter says.

Listeria is the third-leading cause of death from food poisoning, according to the CDC. A total of 49 million Americans suffer some kind of food poisoning each year.

About 1,000 die from it.



Sabra Dipping Co. voluntarily recalled about 30,000 cases of hummus nationwide Wednesday because of possible listeria contamination.

Some foods are riskier than others, according to the CDC. Foods that carry a higher risk include raw sprouts, raw milk, soft cheeses, deli meats, hot dogs and

smoked seafood.

On Tuesday, Blue Bell Creameries expanded a recall of ice cream produced in an Oklahoma facility as the number of people sickened with listeria after eating the ice cream grew to eight.

In January, Bidart Bros. of California recalled Granny Smith and Gala apples when 35 people were sickened with listeria after consuming prepackaged caramel apples, according to the CDC. Thirty-four people were hospitalized, seven died.

In one of the biggest listeria outbreaks, cantaloupes sold by Jensen Farms were linked to 147 cases and 33 deaths in 2011, according to the CDC.

As the ice cream recall shows, freezing foods doesn't necessarily kill listeria, Glatter says. The bacteria can survive in refrigerators unless the temperature is below 39 degrees.

Jeni's to destroy 265 tons of ice cream after listeria find

Associated Press

Jeni's Splendid Ice Creams is destroying more than 265 tons of ice cream after listeria was found in the production facility and in products last week.

CEO John Lowe says in a statement Tuesday that the product to be destroyed amounts to 15 tractor-trailer loads or more than 300 pallets. It will cost the Columbus, Ohio-based company more than \$2.5 million.

The company said last week that it had recalled all its products from retailers and closed ice cream shops in six states over concerns about possible listeria contamination.

Jeni's has two scoop shops in Chicago, one in the Southport Corridor and a second in Wicker Park.

Lowe says a team is working to eradicate the bacteria detected in the production kitchen.



TONY DELANEY/AP

A sign on Friday at a Jeni's Splendid Ice Creams in Chagrin Falls, Ohio, states that the store is closed.

Also last week, Tussock-based Blue Bell Creameries closed facilities in three states for intensive cleaning after listeria was discovered.

Listeria can cause serious and sometimes fatal infections in young children, frail or elderly people, and others with weakened immune systems.

Healthy individuals infected by listeria may suffer only short-term

symptoms such as fever, headache, stiffness, nausea, abdominal pain and diarrhea. Pregnant women can suffer miscarriages or stillbirths.

The contamination was discovered in a sample randomly collected by the Nebraska Department of Agriculture. No illnesses have been reported.

Chicago Tribune staff contributed.

More information

The Symbol
of Assurance



- www.3-A.org
- <http://www.techstreet.com/products/1883380>
- <http://www.3-a.org/Standards/Forms/Status-Report.pdf>

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