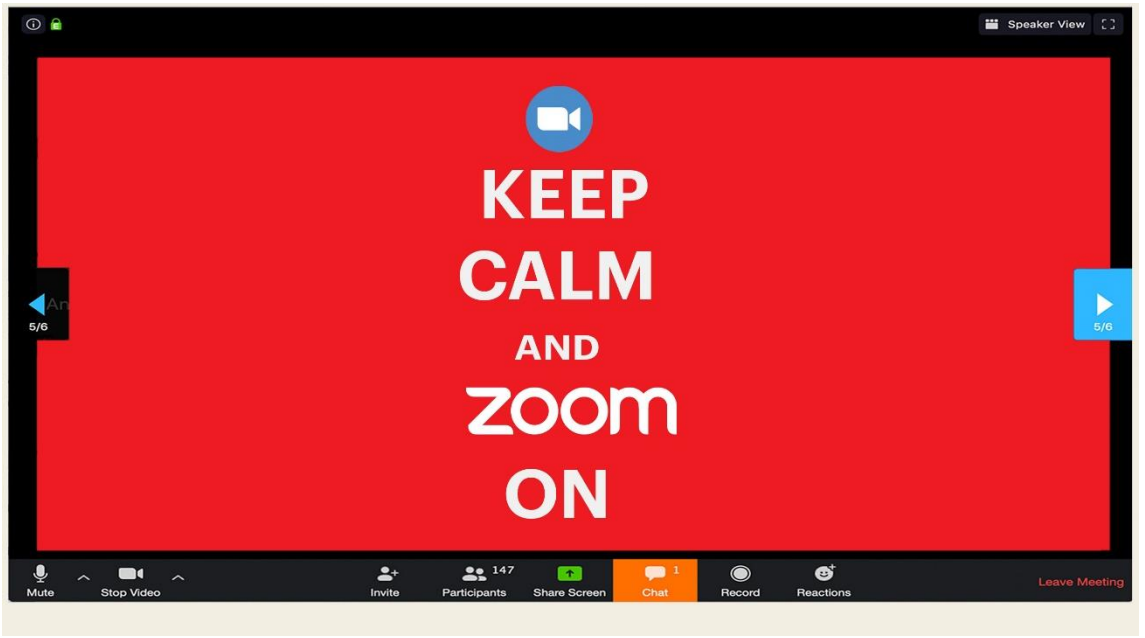

Regulatory Industry DPC® Education

Welcome!
Dairy Practices Council®
51st Annual Conference

November 4 - 6, 2020

Zoom Webinar Tips

- Participants will be on mute during this session.
- Participants will be able to type in comments via Q&A
- Chat will be used during breaks
- Be sure to  your screen if it locks up
- This session will be recorded




Presidential Welcome

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November 4 - Day 1 Agenda

Speakers

- Rachel Kyllo - Keynote
- Dr. Jamie Jonker, NMPF
- Dr. Joe Scimeca, IDFA

- New Member Orientation to DPC
- Introduction of Task Forces
- Update on DPC Guidelines
- Update on Future Conferences
- Thank You to All of Our Sponsors
- Some Fun Polling Questions will be spread around to keep you all engaged

Keynote Speaker

Rachel Kyllo

Sr. VP Marketing
& Innovation
DFA Dairy Brands

Answer The Poll Question

Chat is On

Feel Free to Say Hi

Tell Us How It’s Going

Check Out Our Sponsors @ www.dairypc.org

10 Minute Break

THANK YOU TO OUR SPONSORS

Dr. Jamie Jonker

V.P. Sustainability &
Regulatory Affairs
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Dr. Joe Scimeca

Sr. V.P. Regulatory &
Scientific Affairs
International Dairy Foods
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Answer The Poll Question

Chat is On

Feel Free to Say Hi

Tell Us How It’s Going

Check Out Our Sponsors @ www.dairypc.org

10 Minute Break

THANK YOU TO OUR SPONSORS

Dairy Practices Council®
New Member Orientation

Objectives of DPC

- Develop & distribute educational guidelines
- Guidelines are designed to improve sanitation & production practices in the production of milk & dairy products
- DPC cooperates with other organizations that have similar educational goals

DPC Annual Conference

- The 3-day conference takes place each Fall. Usually starts the day after election day in November
- Task Forces meet concurrently and provide a forum where topics of common interest can be shared with the members & other attendees

DPC Financing

- Financed by Membership Dues:
  - Sustaining
  - Educational / Cooperative Extension
  - Regulatory State Agriculture & Health
  - Regulatory Federal FDA & USDA
  - Individual Members

- Supports the distribution of DPC Guidelines to the Dairy Industry in the US & throughout the world.

DPC Organization

Governing body is the Executive Board.

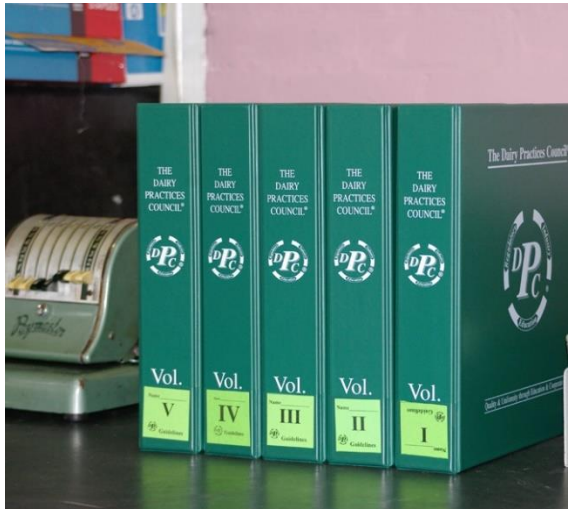
- **State** Departments of Health & Ag
- **Federal** Departments of Health & Ag
- **Dairy Industry:** Representatives from Production, Processing, & Service areas of the industry
- **Education:** Representatives from Production, Processing, & Engineering areas of academia
- **Task Force Directors**

Guideline Development

- Developed in Task Forces by people who have an interest in the guideline topic.
- There are approximately 100 Guidelines currently online and more in the development process.
- Guidelines are periodically updated & revised, depending on changes in technology or procedures.

Guideline Development Peer Review

- Each Guideline goes through several levels of peer review.
- Peer Review ensures that Guidelines represent the state of knowledge at the time they are written.

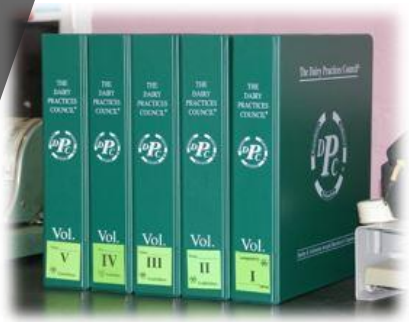


Guideline Development

Three step development process:

1. ***White cover*** **-** a Guideline developed by the task force and is in draft form and open to revision.
2. ***Yellow* cover** - a Guideline completed & ready for final review by "*Key Sanitarians*" in each state who can insert footnotes and recommend changes if their state standards & regulations differ.
3. ***Green cover*** - a Guideline in final copy & ready for distribution

Guideline Sets & Sales



Pre-1990

2006 - 2014

2014 - 2020

Guidelines - Sales 2020...

Guidelines

Search | Search Products | Guidelines

GL 001 Planning Dairy Freestall Barns

The guideline provides general information that should be considered before...

Non-Member Price: $25

Member Price: $20

VIEW

GL 051 Controlling The Accuracy Of Electronic Testing Instruments For Milk Components

This guideline sets down suitable procedures to be followed for adjusting and controlling the...

Non-Member Price: $6

Member Price: $4.50

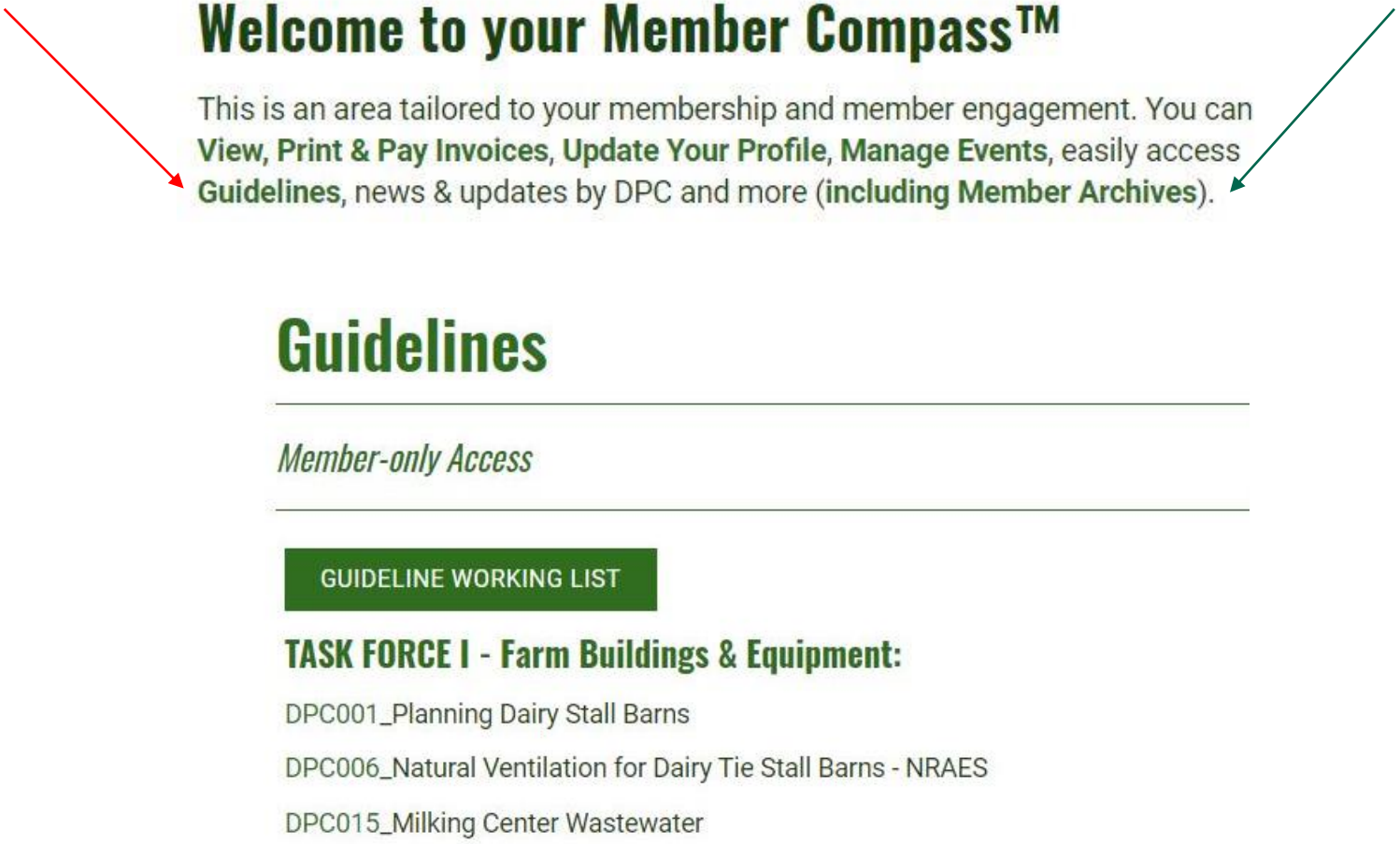
VIEW

FEATURED PRODUCTS

GL 060 Trouble Shooting Microbial Defects In Dairy Processing Plants

GL 025 Cleaning & Sanitation Responsibilities For Bulk Pickup & Transport Tankers

Guidelines – Sustaining/HLM Member Access 2020…



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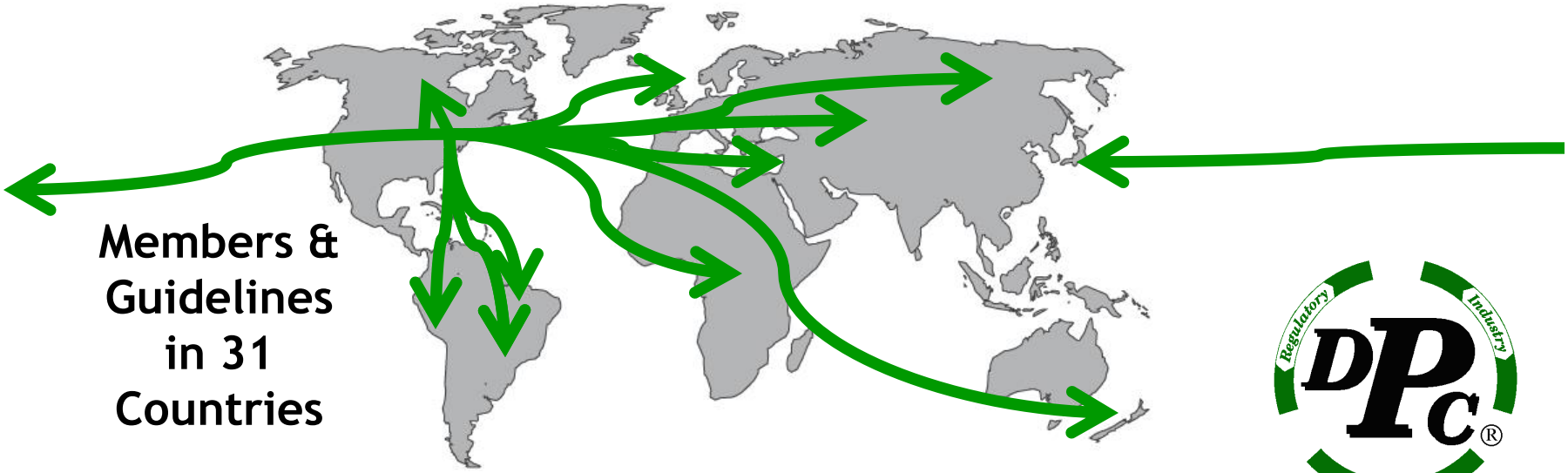

Members & Guidelines in 31 Countries

DPC® Regulatory Industry Education

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Amanda Rife

Land O'Lakes, Inc.

MEMBER AT LARGE

DPC
Task Forces

- DPC Guidelines are started, developed, and completed in a Task Force.

- DPC Members may belong to any or all six of the following Task Forces:

Joseph Zulovich

University of Missouri

TASK FORCE I FARM BUILDINGS & EQUIPMENT

Activities & Guidelines of this Task Force involve buildings & equipment for dairy operations.

Systems include designs for handling cows, feed, milk, ventilation, & manure.

Carli Peskar

USDA-FMMA Cleveland

TASK FORCE II PLANT EQUIPMENT & PROCEDURES

To develop meaningful guidelines for procedures and equipment involved in dairy plant operations.

To promote uniformity between the states.

Jessica Smith

USDA-FMMA Cleveland

TASK FORCE III LAB & QUALITY CONTROL PROCEDURES

To cover topics related to laboratory, quality control, product evaluation & trouble shooting procedures.

To cover methods of assuring quality through good production & manufacturing procedures.

Melinda Davis

HP Hood LLC

TASK FORCE IV REGULATORY ISSUES & HACCP

To foster communications & uniformity between the states.

This TF has been assigned guidelines concerning inspections as well as those relating to HACCP and FSMA.

Neil Bendixen

Dairy Farmers of America

TASK FORCE V MILKING SYSTEMS & PROCEDURES

To address guidelines relating to milking system design, equipment and facility function and cleaning.

Isaac Espinoza

Meyenberg Goat Milk

TASK FORCE VI SMALL RUMINANTS

To develop guidelines pertaining to all aspects of production and processing for dairy goat, sheep and other small ruminant operations.

Joint Task Force Sessions - Thursday, November 5th

8:30 a.m.-10:30 a.m. EST

TF 1 Farm Buildings & Equipment/TF 5 Milking Systems & Procedures

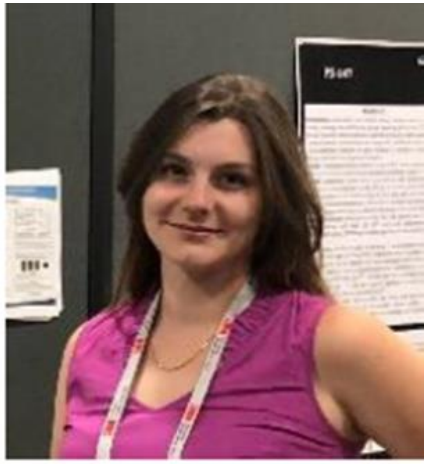
Topic: On-Farm Milk Cooling, Storage & Controls 2020 Guest Speakers: Chris Ancipink, Mike Kelley, and Rick McClenning, Paul Mueller Company

Joint Task Force Sessions - Thursday, November 5th

11:00 a.m-1:00 p.m. EST

TF 2 Plant Equipment & Procedures/TF 4 Regulatory Issues & HACCP

Topic: Food Defense Guest Speaker: Dr. Marie Limoges, Food Safety Planning Consultant, Sanitary Design Industries



Joint Task Force Sessions - Thursday, November 5th

1:30 p.m.-3:30 p.m. EST

TF 3 Laboratory & Quality Control Procedures/TF 6 Small Ruminants

Topic: Testing Supply Technologies for Environmental Monitoring

Guest Speakers: Cari Lingle, Luke Thevenet, Burcu Yordem

3M Food Safety

Guideline Update Process

- Created a GL Working Group
- Based on review of existing GLs it was apparent that a standard template was necessary
- Development of Hybrid Template with Instructions
- New template will be discussed in TF sessions
- Executive Board will address the GL pricing structure early in 2021

OLD – cover page

25

THE DAIRY PRACTICES COUNCIL®

GUIDELINES FOR CLEANING & SANITATION RESPONSIBILITIES FOR BULK PICKUP AND TRANSPORT TANKERS

Publication: DPC 25
Single Copy: $4.00

October 1999
First Edition November 1977
First Revision – August 1978
Second Revision – July 1990
Third Revision – October 1999

Prepared by

PLANT EQUIPMENT AND PROCEDURES TASK FORCE
Gaylord B. Smith, Director
QUALITY ASSURANCE TASK FORCE
Steven C. Murphy, Director
Robert Gilchrist and George Wilcox, Subcommittee Co-Chairs
Patrick Boyle, Lead Author

Sponsored by

THE DAIRY PRACTICES COUNCIL®
Robert E. Turner, President
Lynn S. Hinckley, Vice President
Terry B. Musson, Executive Vice President

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Order From: DPC, 51 E. Front Street Suite 2, Keyport, NJ 07735 TEL/FAX: 732-203-1947
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NEW – cover page

THE DAIRY PRACTICES COUNCIL®

GUIDELINE FOR CLEANING & SANITATION RESPONSIBILITIES FOR BULK PICKUP & TRANSPORT TANKERS

Publication: DPC025

October 2020

Prior Version – October 1999

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EXCEPTIONS FOR INDIVIDUAL STATES NOTED IN TEXT OR FOOTNOTES
Additional Guidelines may be ordered from:
https://www.dairypc.org
evp@dairypc.org

OLD – intro & definitions

Introduction

Proper hauling procedures and effective cleaning and sanitizing of bulk milk pickup tankers are primary components of dairy total quality programs. Though appropriate procedures are generally followed, a breakdown in the system can be devastating, not only to the parties involved but to the dairy industry as a whole. Such an incident occurred in the fall of 1994 when a nationwide outbreak of salmonellosis was linked to the consumption of ice cream contaminated with *Salmonella enteritidis*. The implicated ice cream was made from pasteurized mix delivered to an ice cream plant in a tank truck that previously hauled unpasteurized eggs. Based on this information, the tank truck was considered to be the most likely source of contamination of the mix which was further made into ice cream with no additional processing. Distribution and consumption of the contaminated ice cream resulted in thousands of suspect cases of salmonellosis, with at least 645 confirmed cases in 28 states (Food Chem. News, Feb. 13, 1995). The outbreak cost the dairy plant involved in excess of one million dollars due to product recall and disposal, loss of business, and settlements with those affected by the illness (Food Chem. News, June 12, 1995). In response, the dairy company sued the suppliers and the hauler for breach of contract and negligence claiming that they failed to "ensure the cleanliness" of the trucks. This incident alone demonstrates the importance of following proper procedures for hauling dairy products, keeping and reviewing accurate records of products hauled, treating all products hauled in tankers as "raw" ingredients and ensuring that proper cleaning and sanitation procedures are followed for all dairy transport tankers.

Though a majority of tank trucks are well maintained, inadequate cleaning of tankers is not uncommon. This can result from using poorly established procedures, by taking short cuts to save time, and from faulty design of tank trucks or cleaning systems. Along with the potential for contamination with pathogens, milk and other food products transported in tankers may be subject to other forms of contamination due to inadequate cleaning procedures. Contamination with microorganisms from improperly cleaned tankers can reduce the quality of the product, defeating the hard work of the dairy farmers. High numbers of thermoduric bacteria often contaminate raw milk from improperly cleaned tankers, sometimes to a level where the pasteurized milk made from these loads exceeds the legal limit (20,000/ml). Pathogenic bacteria may be included in the total contamination load, jeopardizing the safety of the product transported, especially if the tanker is used to haul products that receive no further processing, as occurred in the case cited above. Aside from microorganisms, another concern is the use of tankers for other foods, especially if a food hauled is considered to be a potential allergen (i.e. eggs). **See DPC GUIDELINE #80.** These allergens could contaminate subsequent loads if proper washing procedures are not followed. Certain foods may also result in films, stains and flavors/odors that are not easily removed. In general, tank trucks hauling other food products may require washing procedures that are dramatically different than those commonly used for dairy products and such use requires care.

The purpose of this document is to provide milk tank truck haulers, dairy plant operators and employees with a set of guidelines that can be used to assure that the tanker and its associated

equipment are thoroughly washed, sanitized and inspected in order to maintain product quality and safety. Other areas of importance covered include considerations for the materials, design and construction of transport tankers; considerations for safety and OSHA standards relative to entering confined spaces; and general recommendations regarding the use of tank trucks for hauling other food products. This guideline will emphasize that effective procedures and commitment, along with a strong working foundation between management, milk receivers, haulers and all others associated with cleaning and sanitizing the bulk milk tanker and its equipment will help ensure the quality and safety of our dairy products.

Definitions and Terms

CIP. Refers to "Clean In Place" procedures that allow cleaning and sanitizing equipment without dismantling, generally by means of an automated system. Also referred to as "mechanical cleaning."

COP. Refers to "Clean Out of Place" procedures requiring that equipment be dismantled to be cleaned, either manually or with assistance of circulating wash sinks (COP tanks).

Dome, Dome Lid and Dome Cover. Refers to the covers attached to the tanker at the manhole area of the vessel made of stainless steel.

Hydraulics. Term used to describe fluid flow rate and pressure relative to wash systems.

Manifolding. Equipment needed to transfer the raw milk from the farm bulk tank or other bulk milk source to the milk tanker, generally associated with the tankers milk pump. Includes the crossover hose or pipe (connects tank truck milk pump to tank truck tank valve), clamps and short pipe sections.

Milk Hauler/Driver. Refers to any person transporting or delivering milk or milk products to or from a milk plant, receiving station or transfer station.

Milk Tank Truck or Tanker. Refers to over-the-road trucks used to carry or transport milk and milk products including **Bulk Milk Pickup Tankers** (transfer bulk milk from dairy farms) and **Milk Transport Tankers** (used to transport milk from plants, receiving stations or transfer stations).

Receiver and Milk Receiver. Refers to the employees of the milk plant or receiving station responsible for sampling incoming milk, off-loading the milk, and cleaning the milk tank truck vessel.

3-A Sanitary Standards. Material specification, design criteria and other information needed to satisfy public health concerns as determined by the appropriate 3-A Sanitary Standards Committee.

NEW – intro & definitions

INTRODUCTION

Proper hauling procedures and effective cleaning and sanitizing of bulk milk pickup tankers are primary components of dairy total quality programs. Although appropriate procedures are generally followed, a breakdown in the system can be devastating, not only to the parties involved but to the dairy industry as a whole. Such an incident occurred in the fall of 1994, when a nationwide outbreak of salmonellosis was linked to the consumption of ice cream contaminated with *Salmonella*. The implicated ice cream was made from pasteurized mix delivered to an ice cream plant in a tank truck that previously hauled unpasteurized eggs. The tank truck was considered to be the most likely source of contamination of the mix, which was made into ice cream without re-pasteurizing it. Distribution and consumption of the contaminated ice cream resulted in thousands of suspect cases of salmonellosis, with at least 645 confirmed cases in 28 states (Food Chem. News, Feb. 13, 1995). The outbreak cost the dairy plant involved in excess of one million dollars due to product recall and disposal, loss of business, and settlements with those affected by the illness (Food Chem. News, June 12, 1995). In response, the dairy company sued the suppliers and the hauler for breach of contract and negligence, claiming that they failed to "ensure the cleanliness" of the trucks.

This incident demonstrates the importance of following proper procedures for hauling dairy products, keeping and reviewing accurate records of products hauled, treating all products hauled in tankers as "raw" ingredients and ensuring that proper cleaning and sanitation procedures are followed for all dairy transport tankers. This event also changed the mind set of dairy processors in regard to bulk transportation of pasteurized milk and dairy products for packaging at another facility without further processing. Currently, the Grade "A" Pasteurized Milk Ordinance (PMO, 2017) requires that "*bottling, packaging and container filling of milk and milk products shall be done at the place of pasteurization in a sanitary manner.*" This policy has been adopted by regulatory agencies for manufacturing facilities (e.g., ice cream) as well, although provisions may be made for the use of designated tank trucks for pasteurized milk products only following stringent sanitation procedures approved by the regulatory agency.

While a majority of tank trucks are well maintained, inadequate cleaning of tankers is not uncommon. This can result from using poorly established procedures, by taking short cuts to save time, and from faulty design of tank trucks and/or cleaning systems. Along with the potential for contamination with pathogens, especially if the tanker is used to haul products that receive no further processing, as in the case cited above, milk and other food products transported in tankers may be subject to other forms of microbial contamination due to inadequate cleaning procedures, including microorganisms that can reduce product quality. Chemical hazards are also of concern, especially if a food hauled prior to effective cleaning is considered to be a potential cross-contact allergen (i.e., eggs). These allergens could contaminate subsequent loads if proper washing procedures are not followed. DPC080, *Food Allergen Awareness in Dairy Plant Operations*, addresses these concerns. Certain foods may also result in films, stains and flavors/odors that are not easily removed. In general, tank trucks hauling other food products may require washing procedures that are dramatically different than those commonly used for dairy products and such use requires care.

The purpose of this document is to provide bulk milk haulers, dairy plant receivers, plant and wash facility managers and other employees with a set of guidelines that can be used to ensure that the tanker and its associated equipment are thoroughly washed, sanitized and inspected in order to maintain product quality and safety. Other areas of importance covered include general considerations for the materials, design and construction of transport tankers; considerations for

safety and *Occupational Safety & Health Administration* (OSHA) standards relative to entering confined spaces; and general recommendations regarding the use of tank trucks for hauling other food products. This guideline will emphasize that effective procedures and commitment, along with a strong working foundation between management, milk receivers, haulers and all others associated with cleaning and sanitizing the bulk milk tanker and its equipment will help ensure the quality and safety of our dairy products. Additional information related to this guideline can be found in the PMO, Appendix B, *Milk Sampling, Hauling and Transportation;* DPC007, *Sampling Fluid Milk;* and DPC050, *Farm Bulk Milk Collection Procedures*.

DEFINITIONS

3-A Sanitary Standards – Material specification, design criteria and other information related to sanitary design and cleanability needed to satisfy public health concerns as determined by the appropriate 3-A Sanitary Standards Committee. Other standards may be used as applicable.

Bulk Milk Hauler/Sampler (PMO) – Person responsible for collecting official regulatory samples and who may transport raw milk from a dairy farm and/or raw milk products to or from a milk plant, receiving or transfer station and is permitted by any Regulatory Agency to sample raw milk/raw milk products.

Bulk Milk Pickup Tanker (PMO) – A bulk milk pickup tanker is a vehicle, including the truck, tank and those appurtenances necessary for its use, used by a bulk milk hauler/sampler to transport bulk raw milk for [processing] from a dairy farm to a milk plant, receiving station, or transfer station.

CIP – "*Clean-In-Place*" procedures that allow cleaning/sanitizing equipment without dismantling, relying on circulatory flow, in most cases with an automated system. Also referred to as "mechanical cleaning."

COP – "*Clean-Out-of-Place*" procedures that require equipment to be dismantled to be cleaned, either manually or with assistance of circulating or turbulent wash sinks (COP tanks).

Dome, Dome Lid, Dome Cover, Vents & Gaskets – The covers attached to the tanker at the manhole area of the vessel made of stainless steel, plastic or rubber.

Farm Milk Pump – Equipment needed to transfer the raw milk from the farm bulk tank or other bulk milk source to the milk tanker, generally associated with the bulk milk pickup tanker. Includes the jumper hose (connects tank truck milk pump to tank truck tank valve), clamps and short pipe sections.

Hydraulics – Term used to describe fluid flow rate and pressure relative to wash systems.

Milk Hauler/Driver – Any person transporting or delivering milk or milk products to or from a milk plant, receiving station or transfer station.

Milk Tank Truck or Tanker (PMO) – Refers to over-the-road trucks used to carry or transport milk and milk products including *Bulk Milk Pickup Tankers* (transfer bulk milk from dairy farms) and *Milk Transport Tankers* (used to transport milk from plants, receiving stations or transfer stations).

Milk Tank Truck Cleaning Facility (PMO) – Any place, premise, or establishment, separate from a milk plant, receiving station or transfer station, where a milk tank truck is cleaned and sanitized.

Milk Tank Truck Driver (PMO) – Any person who transports raw or pasteurized milk or milk products to or from a milk plant, receiving station or transfer station. Any transportation of a direct

farm pickup requires the milk tank truck driver to have responsibility for accompanying official samples.

Milk Transport Tanker (PMO) – A vehicle, including the truck and tank, used by a bulk milk hauler/ sampler to transport bulk shipments of milk and milk products, from a milk plant, receiving station or transfer station to another milk plant, receiving station or transfer station.

Milk Transportation Company (PMO) – A company/person responsible for a milk tank truck(s).

Receiver/Milk Receiver – Employees of the milk plant or receiving station responsible for sampling incoming milk, off-loading the milk, and cleaning the milk tank truck vessel. Milk receivers are generally **Dairy Plant Samplers** (PMO), responsible for collecting official samples for regulatory purposes, and may be licensed by the state.

Industry Plant Samplers – Responsible for the collection of official "Universal" samples.

Sanitization (Sanitizing) – A process applied to a clean surface capable of reducing numbers of the most resistant human pathogen by 99.999% (5 log10) to 99.99999% (7 log10). Methods include hot water, hot air, or steam, or an EPA-registered sanitizer per label directions, by mechanical or manual methods.

Transfer Equipment – Includes, but is not limited to, the equipment needed to transfer the milk and milk products such as milk pump, jumper hose and transfer hose.

Transfer Hose – Milk hose carried on a tank truck used to transfer milk into the tanker from a farm bulk tank or other bulk milk source when attached to the tank truck's milk pump.

HTST Systems – High Temperature Short Time continuous-flow pasteurization of milk or milk products.

ATP Systems – Adenosine Triphosphate based test that assesses the cleanliness of surfaces or liquid samples.

GUIDELINE CONTENT

AREAS OF RESPONSIBILITIES: RECEIVING, CLEANING, SANITIZING, INSPECTION & FACILITIES

When a bulk milk pickup tanker arrives at a receiving plant, established procedures should be followed to ensure that the milk is accepted or rejected and off-loaded correctly, and that the tanker and its components are properly cleaned and sanitized. Bulk milk tankers shall be cleaned immediately after each day's use and sanitized prior to the next day's use. There are exceptions in some states, where the bulk milk tanker is not required to be cleaned or sanitized between loads during a 24 hour period, provided that the bulk milk tanker is cleaned after that day's use and sanitized prior to the next day's use. It is important that all parties involved understand and fulfill their responsibilities.

Hauler/Driver and Receiver

Generally, the person in charge of receiving the milk is responsible for proper off-loading of the milk and cleaning and sanitizing the tank truck, while the hauler is responsible for the farm transfer equipment.

Conference Planning Update

52nd Annual Conference
Pittsburgh, Pennsylvania
Nov. 3-5, 2021

53rd Annual Conference
Minneapolis, Minnesota
November 2-4, 2022

Please Enjoy the Conference

- We hope you enjoyed today's session and Invited Speakers
- Participate in Task Force Sessions
- Network through Chat at Breaks
- Visit our Sponsor's Websites
- Visit our New Digital Home

Friday November 6th – please stick around for our "Cheers to DPC" – it may only be 2:00pm EDT but it's probably 5:00 somewhere

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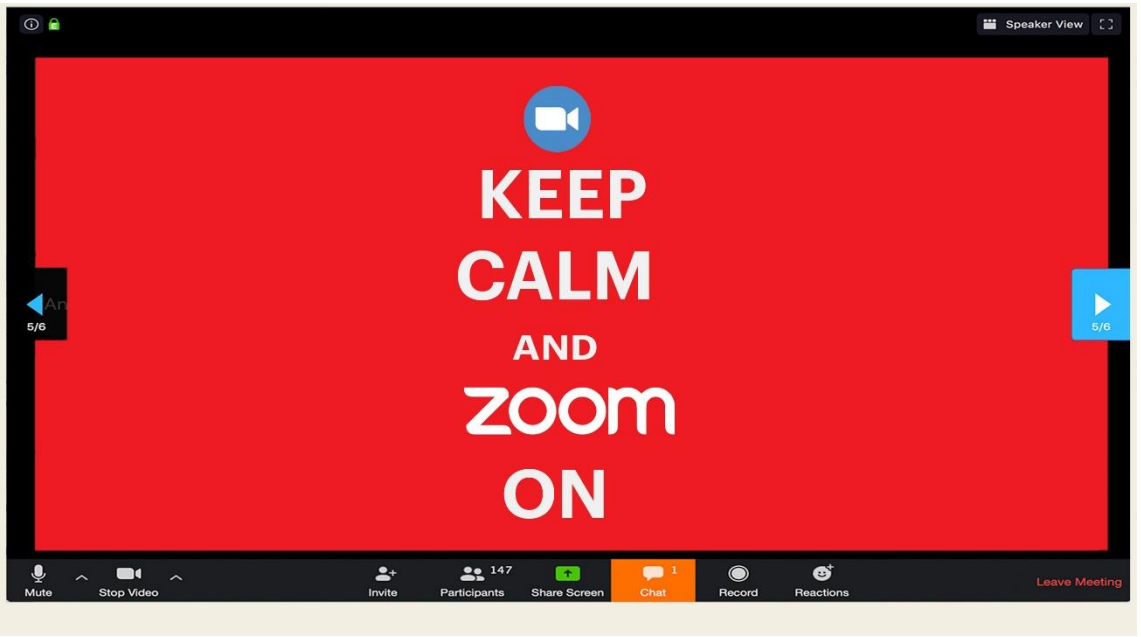

Regulatory Industry DPC® Education

THANK YOU! SEE YOU ALL TOMORROW!