

Texas Department of State Health Services

PSQA Milk Group 2019

During this training, you will learn specific procedures necessary to receive, agitate, and sample milk brought into your processing facility, as well as tanker unloading and CIP guidelines.

Grade “A” Milk Sampler/Receiver

- Training/Certification
- Definitions
- Professionalism
- Duties/Responsibilities
- The Tanker
- Equipment/Supplies
- Milk Quality Checks
- Agitation/Sampling
- Pump-off Procedures
- Tanker CIP
- Security
- Information

Training and Certification

- Must complete training provided by Texas DSHS Milk Group
- Must pass a qualifying exam with a score of 70 or above
- Will be issued a 30 day Temporary Permit after passing exam
- Will be evaluated while sampling a tanker after the Temporary Permit is issued

Training and Certification

- Sampler/Receiver card will be issued after successfully passing exam and evaluation
- Will be evaluated by Regulatory Agency at least once every 24 months thereafter
- Must keep Sampler/Receiver card in your possession at all times while at work

Training and Certification

- Sampler/receiver is responsible for requesting re-certification before card expires
- Sampler/receiver card may be revoked for failing to follow procedures outlined in this training

Definitions

“PMO”- Pasteurized Milk Ordinance
is used for the regulation of processing,
packaging, and sale of Grade “A” milk and
milk products.

Definitions

“Appendix N” – A monitoring and surveillance program that requires industry to screen all bulk milk pickup tankers for Beta lactam drug residues.

Definitions

“Industry Plant Sampler” – An employee of the milk plant, receiving or transfer station responsible for the collection of official samples for regulatory purposes as outlined in Appendix N of the Pasteurized Milk Ordinance(PMO).

Definitions

“Contaminate”- To “make impure” any surface which has been cleaned and sanitized

Definitions

“Sanitize”- The application of any effective method or substance to a clean milk contact surface in order to destroy microorganisms

Definitions

“BTU” – Bulk Tank Unit

A dairy farm, or group of dairy farms, from which raw milk for pasteurization is collected under the routine supervision of one Regulatory Agency, and rated as a single entity and given a sanitation compliance and enforcement rating.

Definitions

“IMS” – Interstate Milk Shipper

Facility that has been certified by State Milk sanitation authorities as having attained compliance with the requirements of the Grade “A” PMO.

Professionalism

Personal Appearance

- Practice good hygiene; wash hands often
- Maintain a neat & clean appearance
- Wear hair net or other approved head covering
- Wear clean clothing
- Be conscientious about your work
- **Do Not** use tobacco in the milk plant or receiving areas

Duties and Responsibilities

- Remember, you represent your employer, and most importantly, yourself.
- Your job is not just that of a sampler or receiver, it is much more important than that.

Duties and Responsibilities

- Remember, you are a **FOOD HANDLER**, and must practice sanitary handling of milk products.
- The job you do affects the dairy producer, the milk plant, and the consumer.
- Consider this: no one but you will see the milk before it is processed.

Duties and Responsibilities

- Follow all procedures to prevent contamination of milk and milk contact surfaces.
- Make sure all security seals are intact before receiving, sampling, or unloading the tanker.

Duties and Responsibilities

- Close covers and cap outlet valves on the tanker and hoses
- Determine if the tanker, pump and hoses have been washed and sanitized
- Check for a valid cleaning(wash) tag less than 96 hours old, prior to receiving milk

After the tanker is brought into the receiving bay, you will need to verify that the tanker has been Permitted and Inspected by an authorized Regulatory Agency.



The Tanker

Must be properly identified, with a Department issued Permit number.



The Tanker

- Construction must comply with Pasteurized Milk Ordinance(PMO) Regulations
- Must be Permitted by an authorized Regulatory Agency
- Permit must be current for hauling Grade “A” milk.



Contact your supervisor if you are unsure about a Permit or its expiration date. Different states use different decals/Permits.

The Tanker

- Must be Inspected by a Regulatory Agency at least one time every two years
- Tanker inspections are valid for 24 months from the date of inspection
- Proof of inspection may consist of:
 1. A decal affixed to the rear of the tanker, identifying the Regulatory Agency and date of inspection



2. Proof of Inspection may consist of an Inspection Report, carried in “the bubble” of the tanker.

The Inspection must be current to be valid.

TEXAS DEPARTMENT OF STATE
HEALTH SERVICES
Milk Group
Austin, Texas

STATE ISSUING PERMIT:
INSPECTION STICKER NO.: 12504
TANKER UNIT NO.: 6892
TANK VIN. NO.: ND36892
TANK PERMIT NO.:

MILK TANK TRUCK INSPECTION FORM

NAME OF OWNER OF MILK TANK TRUCK: Lane Star Milk Producers
ADDRESS OF OWNER: 1111111111, Texas
NAME OF DRIVER: NA
DELIVERS TO: NA
SAMPLER'S PERMIT NO.: NA
INSPECTION LOCATION: Plains Dairy - Amarillo

An inspection of your milk tank truck showed violations existing in the item marked below in the non-compliance column. You are further notified that this inspection sheet serves as notification of the intent to suspend this tanker's permit if the violations are not in compliance at the time of next inspection. Description of non-compliance items may be included in the remarks section.

	Compliance	Non-Compliance	NA
1. SAMPLES AND SAMPLING EQUIPMENT (PMO Appendix B)			
A. Storage of sample containers			✓
B. Sample box in good repair, clean			✓
C. Sample transfer instrument			✓
D. Sample transfer instrument container			✓
E. Sample storage compartments			✓
F. Samples 32° - 40°, control temp.			✓
G. Approved thermometer available			✓
PRODUCT TEMPERATURE 45° OR LESS (PMO Sec 7, Items 18R and 17P)			
A. Temperature of product in tank			✓
B. Product in external fluid transfer systems that exceeds 45°F is discarded			✓
3. EQUIPMENT CONSTRUCTION, CLEANING, SANITIZING (PMO Sec 7, Items 10p and 11p)			
A. Equipment in good repair			✓
B. Assembly			✓
C. Hose(s)			✓
4. EXTERIOR CONDITION OF TANK (PMO Appendix B)			
F. Hose connection(s)			✓
G. Hose(s) more than 8 ft in length mechanically cleaned			✓
H. Valve(s)			✓
I. Protection from contamination			✓
J. Interior condition of tank			✓
K. Other			✓
5. WASH & SANITIZE RECORD (PMO Sec 7, Item 12p)			
A. Is wash/sanitize recording chart available?			✓
B. Is wash/sanitize tag available?			✓
I. Recording chart available for cross-reference?			✓
II. Attached to tanker?			✓
III. Date of last wash/sanitize (PMO Appendix B)			✓
IV. Properly completed (PMO Appendix B)			✓
6. LOCATION OF LAST CLEANING			
7. LABELING			
8. VEHICLE AND MILK TANK TRUCK PROPERLY IDENTIFIED			
9. PREVIOUS INSPECTION SHEET AVAILABLE			
10. SAMPLE CHAIN OF CUSTODY			



Tanker Permit and Inspection decals should be located at the rear of the tanker. Note: Some states have only ONE decal that doubles as both Inspection and Permit. If you are uncertain whether or not a tanker displays the proper Permit or Inspection decal, contact your supervisor.

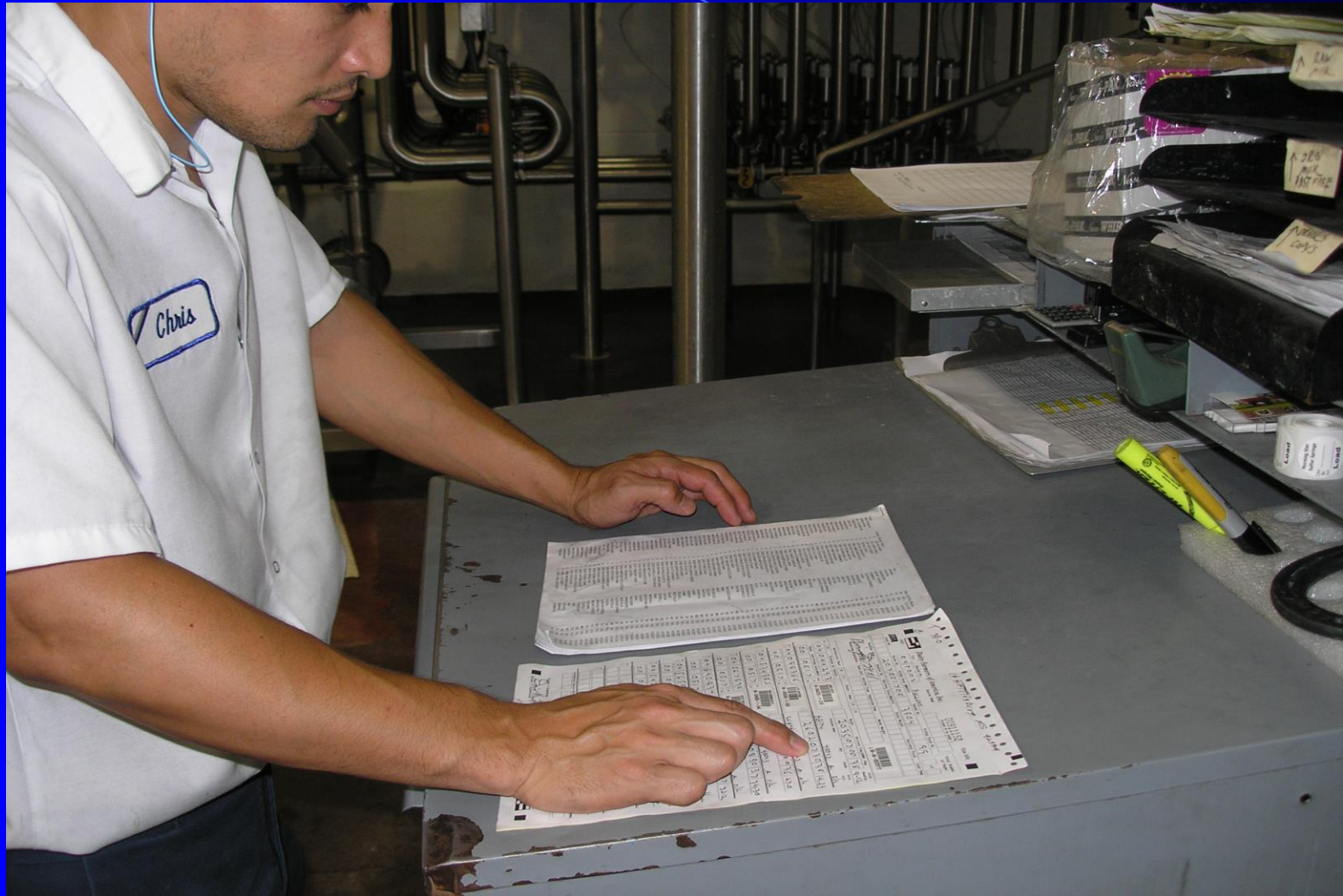
The Tanker

- If the tanker does not display a current State Regulatory Permit or Inspection Sticker, contact your supervisor before proceeding with the receiving process.

The Tanker

- The tanker must be accompanied by a Manifest, which will contain the farm BTU numbers for the milk in the tanker.
- These BTU numbers must be listed in the IMS List in order to receive the milk.
- Your Plant should provide a list with approved BTU numbers.

Checking Manifest BTU numbers.



The IMS list used for checking BTU numbers can be accessed by logging on to the following web site:

<http://www.cfsan.fda.gov/~ear/ims-toc.html>

The Tanker

If the tanker Manifest does not include currently approved BTU numbers, contact your supervisor before proceeding with the receiving process.

To insure that the milk on the tanker you receive has been protected, tamper-evident seals must be in place on all points of access to the interior of the tanker:

Inlet/outlet valves

Manhole cover

Vent tube

CIP connections

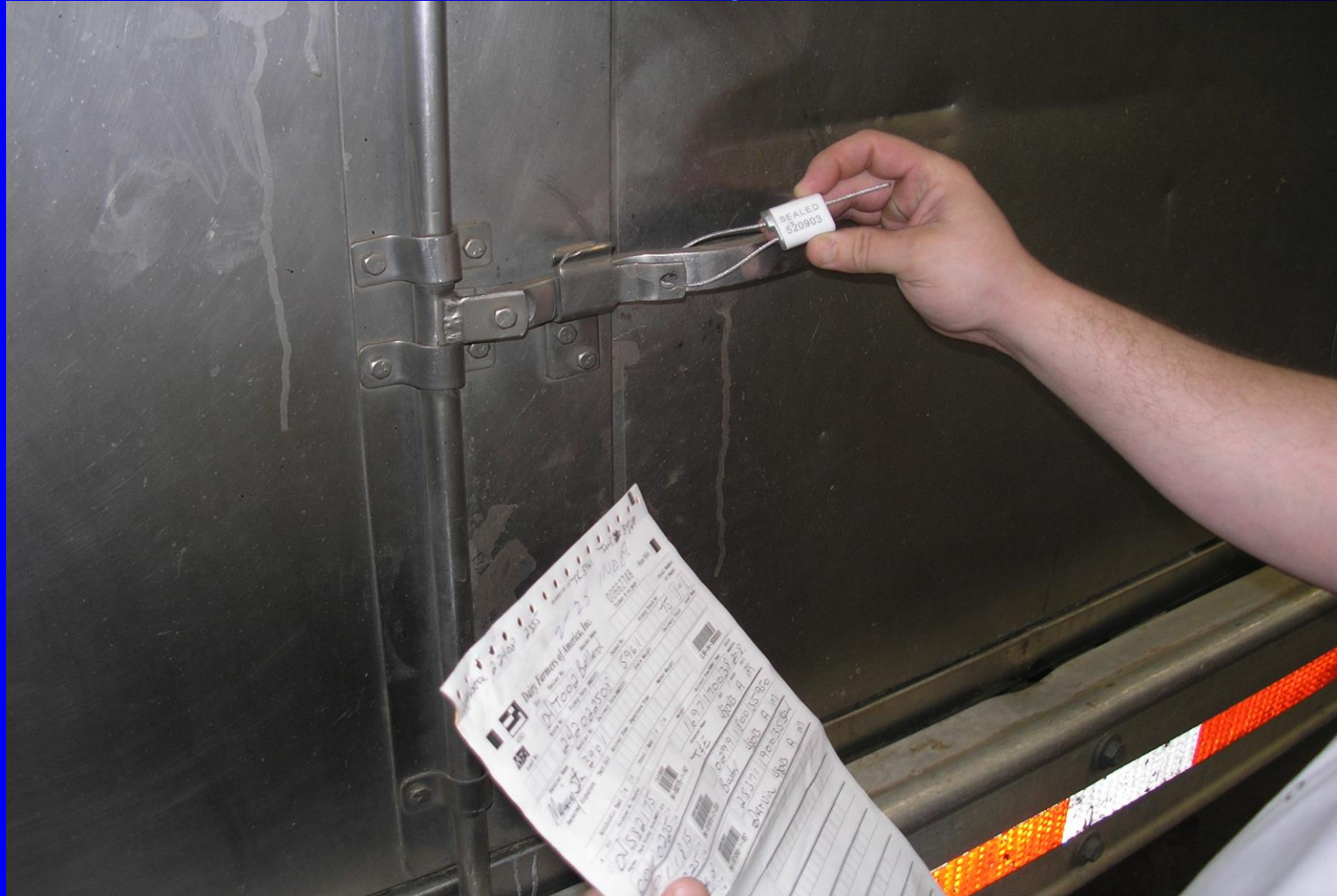
Rear compartment doors



The Tanker

Seals must be numbered and tamper-evident. They may be plastic, pressed metal, or wire cable.

Before removal , verify that ALL seal numbers match those found written on the manifest.



Cable cutters may be needed for wire cable seals.



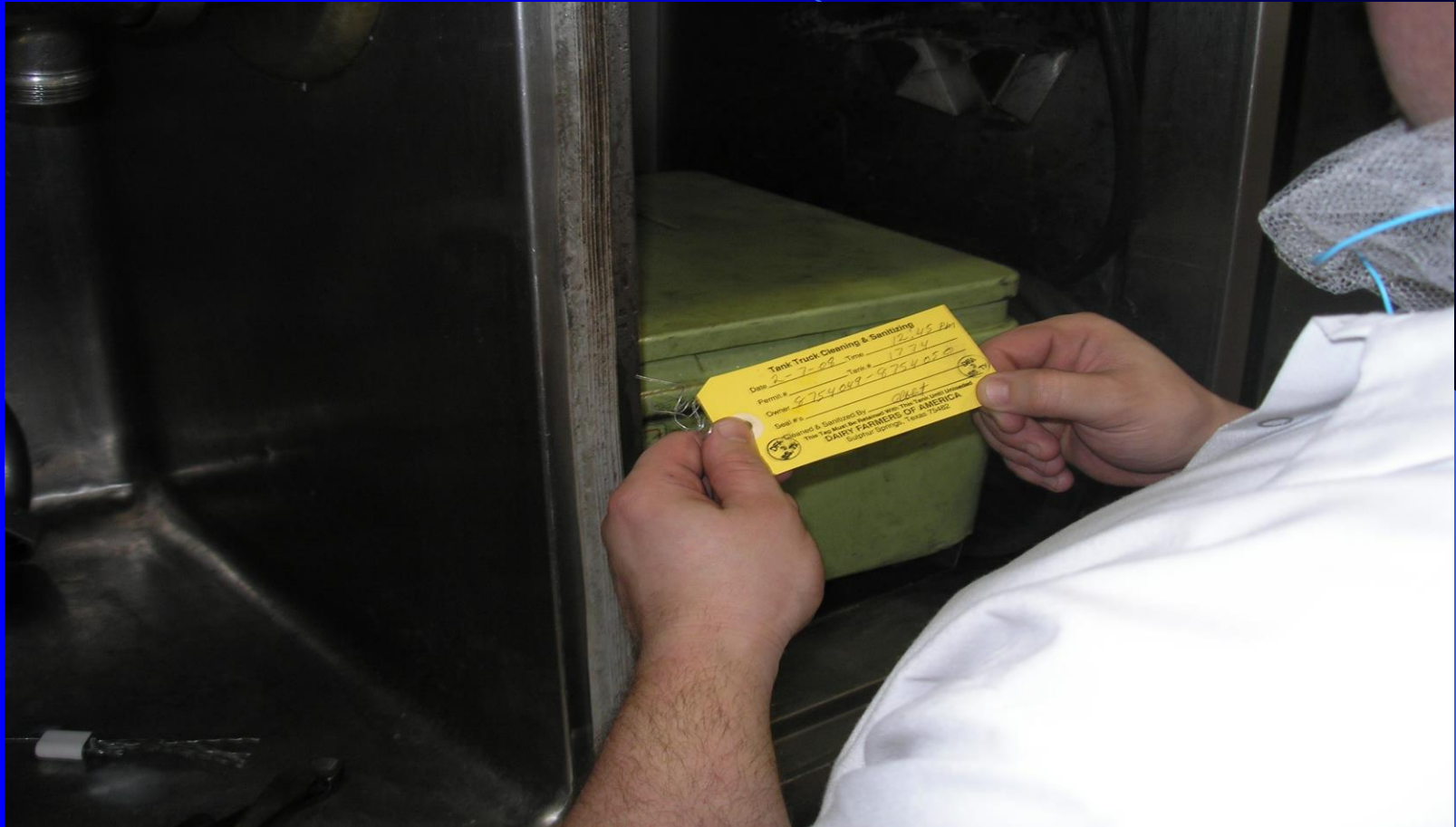
The Tanker

- Cleaning and Sanitizing requirements:
- The tanker and all of its appurtenances must be clean in accordance with PMO requirements.
- The tanker shall be cleaned and sanitized prior to its first use.

The Tanker

The sampler/receiver shall be responsible for assuring, before receiving, that the tanker has been properly cleaned and sanitized, by checking for a cleaning and sanitizing tag, more commonly referred to as a “wash tag”.

The wash tag will usually be found attached to the outlet valve, or hanging in the rear compartment.



The Tanker

- Cleaning and Sanitizing requirements:
- The 96 Hour Rule- when the time elapsed after cleaning and sanitizing, and before its first use, exceeds 96 hours, the tanker must be re-sanitized.
- In other words, the wash tag, from the time of issue, cannot be more than 96 hours old before milk is first loaded onto the tanker.

The Tanker

The tanker wash tag must include the following:

- tanker unit or ID number
- date and time of day the tanker was cleaned and sanitized
- location where the tanker was cleaned and sanitized
- initials or signature of the person who cleaned and sanitized the tanker
- Write legibly

The Tanker

If a tanker has a wash tag that is greater than 96 hours old, or, has missing information, contact your supervisor before you proceed with the receiving process.

The Tanker

Remember, it is the responsibility of the plant sampler/receiver to verify a valid wash tag PRIOR to unloading milk from the tanker!!

The Tanker

Remember, when you receive a load of milk, you are required to keep wash tags for 15 days.

The Tanker

If the tanker has met all of the Department of State Health Services Milk Group requirements so far, as well as those mandated by your Plant Management, it is now time to perform Milk Quality Checks on the milk in the tanker.

Milk Quality Checks

Before unloading milk from a farm bulk pickup tanker, you must first determine whether or not the milk is acceptable by evaluating the odor, appearance and temperature of the milk.

Milk Quality Checks

Open the dome assembly, and while the milk is still:

- examine the milk by smell and sight for:
- Odors- no off odors, such as sour, malty or unclean
- Color- normal milk color may range from bluish white to golden yellow. Pink or red color may indicate the presence of blood.

Milk Quality Checks

- While the milk is still, examine the milk by sight for:
- Debris- such as insects, blood specks, straw, trash, oil, excessive butter, ice or other contaminants.



Milk Quality Checks

- If any unacceptable milk is found, contact your supervisor!

Milk Quality Checks

- If the milk passed all quality checks, it is now time to begin the agitation and sampling process.

Agitation and Sampling

- Improper agitation and sampling of milk can cause incorrect test results for Somatic Cell Count, Standard Plate Count, Butterfat, Protein, Drug Inhibitors(Antibiotics) and Aflatoxin.
- The pay the dairy farmer/supplier receives is based on results of these tests. Therefore, it is very important that agitation and sampling be taken seriously.
- Additionally, some of these same test results may be used to purchase the milk products received at your facility.

Agitation and Sampling

- The last, and most important reason for proper agitation and sampling, is to insure that a representative sample is collected for the purpose of testing for Drug Inhibitors, or “Antibiotics.” Some people have potentially severe allergic reactions to antibiotics. Therefore, it is extremely important that milk contaminated with antibiotics is tested and detected BEFORE processing and delivery to consumers.

Agitation and Sampling

- Before checking the temperature or sampling, milk must be agitated by filtered air or mechanical means for 15 minutes.
This will insure a representative temperature and sample.

If using a mechanical agitator, first be sure to properly sanitize it before lowering it into the milk.



If using filtered air on a tanker with an internal wash line system, be sure to properly sanitize the connection before attaching to the wash line. Turn the air on and make sure the milk is “rolling”.



Agitation and Sampling

- The 15 minute agitation time provides a great opportunity to prepare your sampling equipment and properly label your sample containers.

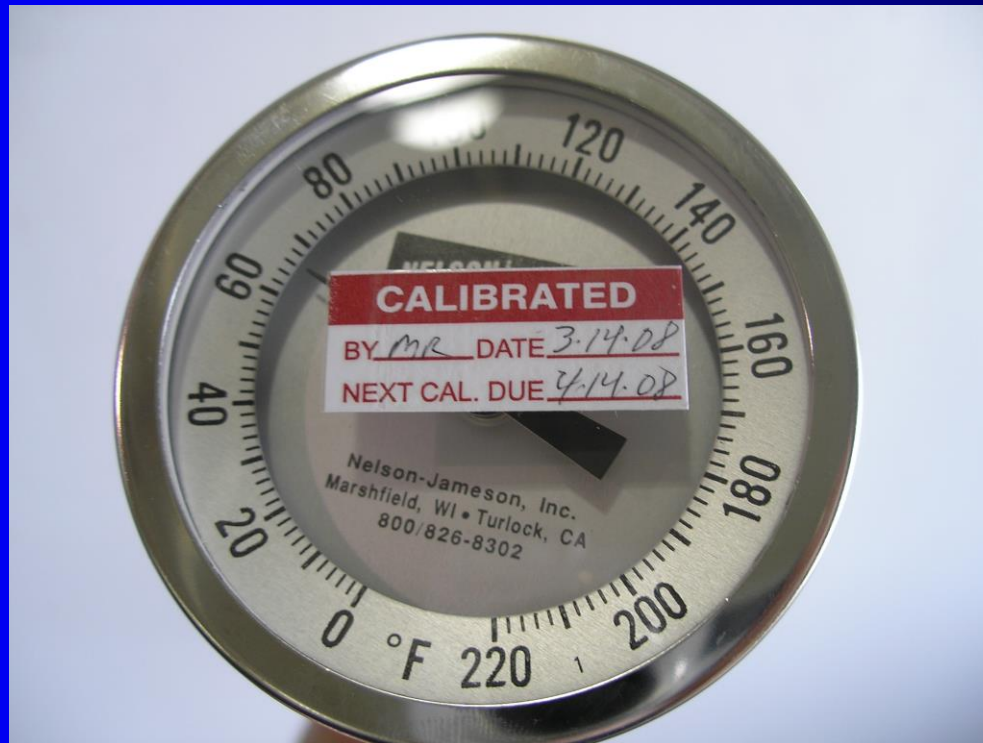
Equipment and Supplies

- Watch or clock for timing agitation
- Sanitary gaskets and wrenches
- Indelible marker or pen
- Paper towels
- Spray hose, bottle or brush with approved sanitizer for sanitizing valves and fittings

Equipment and Supplies

- Sufficient number of sample containers, properly stored and handled
- Approved sanitizing agent, such as chlorine or iodine. Many others are available
- Test kit or strips specific to your sanitizer, for checking sanitizer strength
- Sampler/receiver card

- Thermometer should be calibrated against a standard thermometer at least one time every 6 months.
- If a sticker is not on thermometer, there should be documentation to verify the thermometer was checked accordingly and referenced to actual thermometer in use.



Equipment and Supplies

Approved dipper and container for sanitizer. Clean and in good repair, with no pits or rust spots.



Wash your hands often!



Agitation and Sampling

- The first container labeled should be for the temperature control sample. This sample must contain at least the following information:

TC

Plant name & number

Date & Time (12 or 24 hour)

Milk Temperature

Receiver ID # (Drivers license)

Tanker/Route number

Product (raw milk)

TC
Plant Name
Plant #
Date
Time
Temp
Tanker#
DL#
Product

Plant Name
Plant #
Date
Time
Temp
Tanker#
DL#
Product

Agitation and Sampling

- All other samples collected must contain at least the following information.

Plant name & number

Date & Time (12 or 24 hour)

Milk Temperature

Tanker/Route number

Product (raw milk)

Agitation and Sampling

- After the 15 minute agitation period, you must take the temperature of the milk.

Agitation and Sampling

- For safety reasons, if a mechanical agitator is used, it should carefully be removed from the tanker prior to measuring the milk temperature or sampling. The temperature and sample should be taken promptly after the removal of a mechanical agitator.

Agitation and Sampling

If filtered air is used for agitation, it should remain on while measuring the milk temperature and sampling the milk.

Remember to wash your hands thoroughly before beginning the sampling process!



Check sanitizer strength.



Insert the properly sanitized thermometer into the milk and take a reading. The temperature of the milk must not exceed 45 degrees Fahrenheit. Note: Your Plant may require that milk be colder than 45 degrees.



Remove the dipper from the sanitizing solution and rinse at least 3 times in the milk to remove any trace of sanitizer solution. This milk may be poured back into the tanker, or over the side.



Collect the sample from a depth of at least 8 inches below the surface of the milk.



Don't transfer the milk into the sample container over the manhole, because this could allow contaminated milk to spill back into the tanker!



Agitation and Sampling

- Transfer the milk to the pre-identified sample containers.
- Take care not to contaminate the containers when transferring the sample.
- Fill the sample container to the proper level or fill line (no more than $\frac{3}{4}$ full).

Agitation and Sampling

- Lower the dome assembly OR place dust cover over the manhole.
- Rinse the dipper and replace in sanitizer solution.

Transport the samples immediately to the lab for testing.



Pump Out Procedures

- If the milk passed all quality checks, you have completed your agitation and sampling, and the laboratory has confirmed the **ABSENCE** of drug inhibitors(antibiotics), the milk may now be unloaded from the tanker.
- NOTE: Follow the rules set forth by your plant management on receiving final approval for unloading a tanker!

Sanitize the tanker outlet valve, using a spray bottle, hose, or brush, and an approved sanitizer.



Sanitize the end of the milk transfer hose, and connect to the tanker outlet valve.

Open the outlet valve, and pump the milk from the tanker.



Tanker CIP

When all of the milk is pumped from the tanker, it is time to place the drop-in wash unit into the tanker if your plant is so equipped, or:

Connect the CIP hose to the tanker wash line, if the tanker is equipped with an internal wash system.



Using soap, water and a brush, thoroughly hand clean the manhole gasket.



The vent assembly must also be disassembled and thoroughly hand cleaned with soap, water and a brush. Pay special attention to make sure the threads are clean.



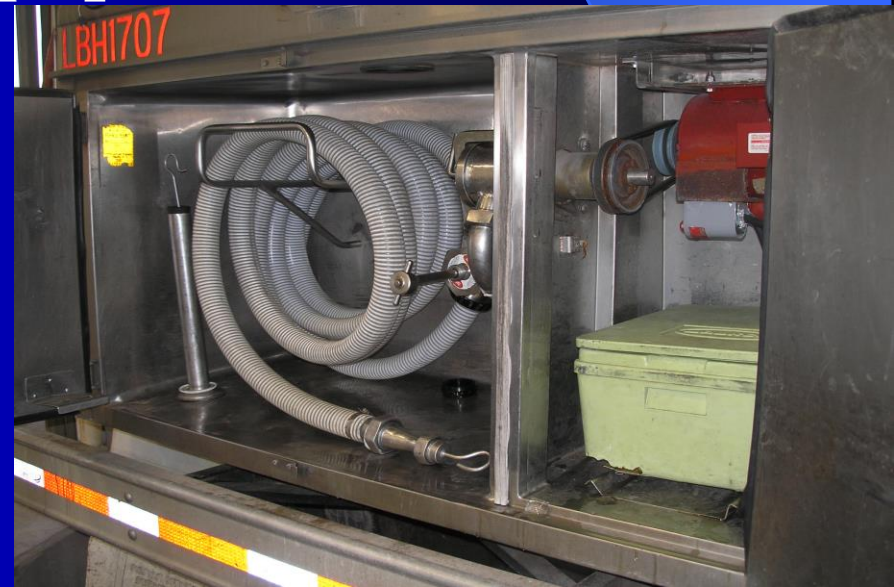
Tanker CIP

- You may choose to use a clean out of place(COP) vat to clean the manhole gasket and vent assembly.

Wash, and then sanitize the tanker according to the guidelines set forth by your plant management.

The Tanker

- Hoses, pumps, and fittings must be smooth, non-toxic, cleanable and in good repair.
- Cabinets, if applicable, must prevent contamination of the equipment and be in good repair.



The Tanker

If the tanker is equipped with a pump, transfer hose or other fittings, check to see that they have been cleaned and sanitized by the hauler.

The Tanker

If the pump, transfer hose and other fittings are not clean, and your plant does not allow drivers in the receiving area to wash their own pumps, it becomes your responsibility to wash and sanitize all of these items.

The Tanker

- At this time, it is your responsibility to break-down, wash, and sanitize the milk pump, transfer hose and other fittings.

The Tanker

After the tanker, manhole gasket, vent assembly, pump, transfer hoses and fittings have all been properly cleaned and sanitized, you should now fill out the wash tag.

The Tanker

The tanker wash tag must include the following:

- tanker unit or ID number
- date and time of day the tanker was cleaned and sanitized
- location where the tanker was cleaned and sanitized
- initials or signature of the person who cleaned and sanitized the tanker

The Tanker

- Additionally, the numbers on the seals that will be used to seal the tanker should also be recorded on the wash tag.

The Tanker

- Attach the wash tag to the outlet valve of the tanker, or hang in a conspicuous place inside the rear compartment, where it will be easy to locate.

The Tanker

- If for any reason you are UNABLE to CIP a tanker after unloading, DO NOT attach a wash tag to the tanker. Make sure the driver and your supervisor know that a wash tag will not be attached to the tanker.

Security

In addition to your duties as a milk sampler/receiver, you also play an important role in the protection of our milk supply.

Security

- After attaching the wash tag, you must seal all points of access to the interior of the tanker before releasing it.

It's a good idea to keep your plant's wash tags and seals under lock and key, so that they are not misused, or even stolen, by unauthorized personnel.



- Seal all points of access to the interior of the tanker, to insure that the next milk loaded onto the tanker will be protected.
- Seals should be pulled completely snug after the wash is completed.



Inlet/outlet valves

Manhole cover

Vent tube

CIP connections

Rear-compartment doors

Security

- If the manhole has a removable hinge, be sure to attach seals in such a way that the cover cannot be removed or tampered with, even if the hinge were to be removed.

Security

- These points of access should be sealed at all times, except when the tanker is being loaded/unloaded/washed, or in immediate control of plant personnel.
- Seals should be tamper-evident plastic ties, pressed metal, or wire cable.
- Seals should be numbered.

Security

- If a security seal is broken without your knowledge, contact your supervisor immediately!

Security

- Be sure to watch for any suspicious activity at or near tankers parked on plant property.
- Thanks for helping to keep our milk supply safe!!

Information

- If you have any questions, please contact your local Texas Department of State Health Services Milk Group Inspector. They will be glad to answer any questions you may have.

Milk Group
Austin, Texas
(512) 834- 6758