



**OREGON
DEPARTMENT OF
AGRICULTURE**

**FOOD SAFETY PROGRAM
Industry Sampler/Grader
Study Manual**

2023 Version

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I. PURPOSE

The Oregon Department of Agriculture Food Safety Program licenses and inspects all facets of Oregon’s food distribution system, except restaurants, to ensure food is safe for consumption. Education and technical assistance are vital to the prevention, correction, and abatement of food safety violations, and are preferred over regulatory action. However, regulatory action may be necessary to deter violations of food safety laws and rules, to educate persons about the consequences of such violations, and to compel compliance with food safety laws for the protection of consumers. The Department intends to initiate civil penalty actions when educational measures, technical assistance, warning letters, compliance agreements or other remedial measures fail to achieve compliance. (603-024-0900)

II. ABBREVIATIONS

- °C (Degrees Celsius)
- °F (Degrees Fahrenheit)
- + (Positive)
- (Negative)
- +/- (Plus or Minus)

CFR:	Code of Federal Regulations
dSSO:	Delegated Sampling Surveillance Regulatory Official
FDA:	Food and Drug Administration
FSP:	Food Safety Program
NCIMS:	National Conference on Interstate Milk Shipments
OAR:	Oregon Administrative Rules
ODA:	Oregon Department of Agriculture
ORS:	Oregon Revised Statutes
PMO:	Pasteurized Milk Ordinance
SMEDP:	Standard Method for the Evaluation of Dairy Products
SSO:	Sampling Surveillance Regulatory Official
TC:	Temperature Control

III. DEFINITIONS

The following definitions are from the Oregon Revised Statutes (ORS) Chapter 621, the Oregon Administrative Rules (OAR) Division 24, and the Pasteurized Milk Ordinance (PMO).

Dairy Operator: Person licensed by the Department to conduct one or more of the following activities related to the operation of a milk distributor or dairy products plant. A separate license is required for each of these activities conducted by an individual:

- **Sampler-Grader:** Person responsible for the grading of milk received by a milk distributor or dairy products plant, and collecting regulatory samples of raw for pasteurization milk being received.
- **HTST Pasteurizer Operator:** Person responsible for the legal pasteurization of milk and/or dairy products utilizing "high temperature short time" (HTST) pasteurization equipment. This includes HHST and UHT pasteurization equipment.
- **Vat Pasteurizer Operator:** Person responsible for the legal pasteurization of milk and/or dairy products utilizing vat or batch pasteurization equipment.

Dairy products:

- Butter
- All varieties of cheese, frozen desserts and frozen dessert mixes containing milk, cream or nonfat milk solids
- Evaporated, condensed, concentrated, powdered, dried or fermented milk, whey, cream and skimmed milk

Dairy products plant:

- An establishment where milk is received, processed or used in manufacturing dairy products for human consumption
- A place or premises where milk is received or collected
- A bulk tank truck or other mobile equipment used by a milk hauler or other person in the transportation of milk, fluid milk or milk products
- A location operated by a non-processing cooperative, corporation, association or person serving as a marketing agent for producers

Fluid milk: Milk and any other product made by the addition of a substance to milk or to a liquid form of milk product if the milk or other product is produced, processed, distributed, sold or offered or exposed for sale for human consumption. Fluid milk includes sterilized fluid milk products and the fluid milk products for which a standard of identity has been established by the department.

Industry Plant Sampler: A person responsible for the collection of official “Universal” samples that are related to samples collected from direct loaded milk tank trucks, if acceptable to the Regulatory Agency; and/or the collection of Appendix N. samples for regulatory purposes at a milk plant, receiving station or transfer station as outlined in Section 6. and/or Appendix N. of this *Ordinance*. This person is an employee of the milk plant, receiving station or transfer station and is evaluated at least once every twenty-four (24) month period, which includes the remaining days of the month in which the evaluation is due, by a Sampling Surveillance Officer (SSO) or a properly delegated Sampling Surveillance Regulatory Agency Official (dSSO).

Licensed Sampler: A person holding a valid license issued by ODA to collect milk samples and to carry out other authority and duty as set forth by law and regulation.

Milk: Lacteal secretion of cows, sheep, and goats.

Producer: A person who engages in the production of unpasteurized milk on a dairy farm and does not bottle the milk on the premises where production occurs, in pasteurized or unpasteurized form and for human consumption.

Universal Sampling Procedures: When bulk milk hauler/samplers collect raw milk samples, the “universal sampling system” shall be employed, whereby samples are collected every time milk is picked up at the dairy farm. This “universal sampling system” shall also be employed whenever industry plant samplers are authorized by the Regulatory Agency to collect samples from direct loaded milk tank trucks at a milk plant, receiving station or transfer station. This system permits the Regulatory Agency, at its discretion, at any given time and without notification to the industry, to analyze samples collected by the bulk milk hauler/sampler and/or industry plant sampler, respectively. The use of the “universal sampler” puts more validity and faith in samples collected by industry personnel.

IV. RULES AND REGULATIONS

The following are from the Oregon Revised Statutes (ORS) Chapter 621, the Oregon Administrative Rules (OAR) Division 24, and the Pasteurized Milk Ordinance (PMO).

OAR 603-024-0490 Qualifications

- Applicants for dairy operators' licenses shall be:
 - Able to read and write legibly
 - At least 18 years of age
 - Free of communicable diseases
 - Pass both written and practical examinations
 - Pay required fees
- Each milk hauler, milk receiver or other person who grades fluid milk must first obtain a license from the department authorizing that person to sample and grade fluid milk
 - Milk is graded as fit or unfit for processing as fluid milk due to:
 - Quality
 - Odor
 - Flavor
 - Wholesomeness
- Each applicant for a milk sampler's and grader's license shall:
 - Demonstrate adequate knowledge of milk sanitation through written and practical examinations as it relates to:
 - Sampling
 - Grading
 - Handling of fluid milk and cream for analysis

OAR 603-024-0492 Examination of Applicant

1. Written examination shall include questions relating to:
 - a. Knowledge of laws and regulations relating to activity for which the license is desired
 - b. Theory and practice involved in the performance of the licensed activity
2. Practical examination shall include demonstration of ability to:
 - a. Make required quality control tests
 - b. Operate required equipment
 - c. Manufacture, grade, test, or pasteurize milk and milk products, as the case may be
 - d. Care, cleaning, and maintenance of equipment and utensils involved in the licensed activity

V. LICENSE AND FEES

- License:
 - Expires on June 30 of each year
 - Renewed by the licensee
 - Online renewals: [ODA Online Services](#)
 - By mail: Oregon Department of Agriculture Food Safety
635 Capitol NE
Salem, OR 97301-2532
 - May be suspended, revoked, or limited
 - May be subject to retraining
 - Belongs to the individual, NOT the employer or equipment
 - Non-transferrable
- Fees:
 - \$27/year. Link to current fee schedule: [Milk Sampler Grader](#)
 - Non-refundable
 - Late fees applied if renewal fee is past due

VI. INTRODUCTION

Milk Sampler/Graders

- Milk sampling, hauling, and transport are integral parts of a modern dairy industry and can be categorized into three separate functions:
 - Dairy or Industry Plant Samplers
 - Employees of dairy plant, receiving station or transfer station
 - Bulk Milk Hauling
 - Sampling and Milk Transport from one (1) milk handling facility to another
- Industry plant sampler is a person responsible for:
 - Collection of official “Universal” samples for regulatory purposes
 - Including samples related to reinstatement/clearing samples at dairy farms
 - Collection of Appendix N. samples for regulatory purposes
 - Quality control of milk (i.e. quality, odor, flavor, wholesomeness)

Training

- All industry plant samplers shall be instructed in the proper procedures of picking up milk and the collection of samples, including techniques for:
 - Including following techniques for milk tank trucks or for farm bulk milk tanks and/or silos
 - Use of an approved in-line sampler
 - Use of approved aseptic samplers

Routine Evaluations/Inspections

- Evaluated every twenty-four (24) month period by ODA’s Sampling Surveillance Officer (SSO) or Delegated Sampling Surveillance Officer (dSSO)
 - Form FDA 2399 – Milk Sample Collector Evaluation Report (Dairy Plant Sampling – Raw and Pasteurized Milk)
- Provides the Regulatory Agency with opportunity to check:
 - Condition of the industry plant sampler’s equipment
 - Degree of conformance with required practices
- Takes place at the location individual typically samples from
 - Silo, milk tank truck, bulk tank, etc.
- Evaluated on procedures of sampling and care of samples
 - Procedures found in the Procedures section of this manual and/or in Appendix B of the PMO

Should be in compliance with the current edition of Standard Methods for the Examination of Dairy Products (SMEDP).

VII. GRADING OF MILK (OAR 603-024-0596)

- Each shipment or pick-up of grade A fluid milk shall be graded as to its acceptable quality by a licensed sampler/grader
- If milk is not acceptable and is rejected as unfit for grade A use, a record (forms supplied by the Department) is to be made showing:
 - Producer’s name and number
 - Market or pooling agent
 - Date and time
 - Quantity
 - Cause for rejection
 - Disposition of the rejected milk
- The original copy of the record is to be forwarded to the Department, Food Safety Program, not later than seven days following the rejection

VIII. SAMPLING PROCEDURES

- Personal Appearance
 - Practice good hygiene
 - Maintain neat and clean appearance
 - Use hairnet and beard net when applicable
 - Not use tobacco in milkhouse, plant, receiving station, or transfer station
- Equipment Requirements:
 - Sample rack and compartment to hold all samples collected (when applicable)
 - Refrigerant to hold temperature of milk samples between 0°C- 4.5°C (32°F- 40°F) (when applicable)
 - Sample dipper or other approved aseptic sampling devices of sanitary design and material approved by the Regulatory Agency; clean and in good repair
 - Single use sample containers; properly stored.
 - Calibrated pocket thermometer; certified for accuracy every six (6) months; accuracy $\pm 1^{\circ}\text{C}$ (2°F)
 - Approved sanitizing agent and sample dipper container
 - Thermometer sensor and dipper shall be immersed in sanitizer for at least 1 minute prior to immersing in milk
 - An accurate device for timing milk agitation
 - Applicable sanitizer test kit
- Milk Quality Checks
 - Examine the milk to determine if it is acceptable. Reject if necessary.
 - Sight – any abnormalities (dirty, red/pink hue, etc.)
 - Smell – any off odor
 - Wash hands thoroughly and dry with a clean individual sanitary towel or other approved hand-drying device immediately prior to measuring and/or sampling the milk
- Universal Sampling Procedures
 - Pick-up and handling practices are conducted to prevent contamination of milk contact surfaces
 - Milk shall be agitated a sufficient time to obtain a homogeneous blend
 - Follow the Regulatory Agency’s and/or manufacturer’s guidelines or when using an approved aseptic sampling device, follow the specified protocol and Standard Operating Procedure (SOP) for the device
 - During agitation:
 - Prepare the sample container, dipper, dipper container and sanitizing agent for the outlet valve, or single-service sampling tubes

- Remove the cap from bulk milk tank and/or silo outlet valve and examine for milk deposits or foreign matter and then sanitize if necessary
- Sample may only be collected after the milk has been properly agitated or when using an approved aseptic sampling device
- Remove dipper or sampling device from sanitizing solution or sterile container and rinse at least twice in the milk
- Collect a representative sample or samples from the farm bulk milk tank and/or silo by using a sample dipper or other approved aseptic sampling device
 - If using a sample dipper, immerse the dipper 6-8 inches into the milk
- When transferring milk from the sampling equipment, caution should be used to assure that milk is not spilled back into the bulk milk tank and/or silo
- Do not fill the sampling container more than three-quarters (3/4) full
- Close the cover on the sample container
- The sample dipper shall be rinsed free of milk and placed in carrying container
- Close the cover or lid of the bulk milk tank
- The sample shall be identified with the producer's number at the point of collection (if applicable)
- A temperature control sample (TC) shall be labeled with:
 - Collection time (optionally, in military time (24-hour clock)),
 - Date
 - Temperature
 - Location (i.e. producer, silo, or tank number)
 - Industry plant sampler identification
 - "TC"
- Place the sample(s) immediately in a refrigerator or a sample storage case (if applicable) to be maintained between 0°C- 4.5°C (32°F- 40°F)

Requirements for using an approved in-line sampler and aseptic sampler for milk tank trucks and bulk milk tanks and/or silos protocol specific to each milk producer who direct loads milk tank trucks (through by-passing the use of farm bulk milk tanks or silos) while utilizing an approved in-line sampler shall be developed by the Regulatory Agency in cooperation with the sampling equipment manufacturer, the milk buyer, the milk producer and FDA. As a minimum, the protocol should include the following:

- In-line sampler
 - A description of how the milk sample is to be collected, identified, handled and stored
 - A description of the means used to refrigerate the sample collection device and milk sample collection container throughout the milk sample collection period.

- A means to monitor the sampler device temperature and milk sample temperature, and the milk temperature.
- A description of how and when the sampler is to be cleaned and sanitized, if not of a single use design
- A listing of the licensed bulk milk hauler/samplers who have been trained to maintain, operate, clean and sanitize the sample collection device as well as to collect, identify, handle and store the milk sample
- A description of the method and means that will be used to determine weight of the milk on the milk tank truck

- Aseptic sampler for milk tank truck
 - A description of how the milk sample is to be collected, identified, handled and stored
 - The aseptic sampler fitting shall be installed according to the manufacturer’s recommendations and in a manner that is compatible with its intended use
 - The aseptic sampler septum shall be installed according to the manufacturer’s instructions
 - Transfer of milk is achieved using a SOP specific to the aseptic sampler
 - An appropriate device, i.e., a syringe, shall be used to transfer the milk
 - A description of how and when the aseptic sampler is to be cleaned and sanitized, if not of a single use design, as per the manufacturer’s instructions
 - A listing of the industry plant samplers who have been trained to maintain, operate, clean and sanitize the aseptic sampler as well as to collect, identify, handle and store the milk sample

- Aseptic sampler for bulk tanks and/or silos
 - A description of how the milk sample is to be collected, identified, handled and stored
 - The aseptic sampler fitting shall be installed according to the manufacturer’s recommendations and in a manner that is compatible with its intended use and does not create a dead end
 - The aseptic sampler septum shall be installed according to the manufacturer’s instructions
 - Transfer of milk is achieved using a SOP specific to the aseptic sampler
 - A description of how and when the aseptic sampler is to be cleaned and sanitized, if not of a single use design, as per the manufacturer’s instructions
 - A listing of the milk producer, who transports milk only from his/her own dairy farm, and/or licensed bulk milk hauler/samplers who have been trained to maintain, operate, clean and sanitize the aseptic sampling device as well as collect, identify, handle and store the milk sample

Labeling

- The maintenance of all pertinent information on all shipping documents, shipping invoices, bills of lading or weight tickets is the responsibility of the bulk milk hauler/ sampler. A milk tank truck transporting raw, heat-treated or pasteurized milk and milk products to a milk plant from another milk plant, receiving station or transfer station is required to be marked with the name and address of the milk plant or hauler and the milk tank truck shall be under a proper seal. All shipping documents shall contain the following information
 - Shipper's name, address and permit number. Each milk tank truck load of milk shall include the IMS BTU identification number(s) or the IMS Listed Milk Plant Number, for farm groups listed with a milk plant, on the farm weight ticket or manifest
 - Permit identification of the hauler, if not an employee of the shipper
 - Point of origin of shipment
 - Milk tank truck identification number
 - Name of product
 - Weight of product
 - Temperature of product when loaded
 - Date of shipment
 - Whether the contents are raw, pasteurized, or in the case of cream, low-fat or skim milk, whether it has been heat-treated
 - Seal number on inlet, outlet, wash connections and vents
 - Grade of product
- All information contained on the above described documents shall be verified by the Regulatory Agency and recorded on the appropriate inspection sheet for any bulk milk tank trucks under inspection

IX. GRADE “A” RAW MILK STANDARDS

Federal Limits:

- Bacteria
 - Non-Commingled (single producer): Not to exceed 100,000/mL
 - Commingled: Not to exceed 300,000/mL
- Somatic Cell Count
 - Non-Commingled (single producer): Not to exceed 750,000/mL

Oregon Limits:

- Bacteria
 - Non-Commingled (single producer): Not to exceed 80,000/mL
 - Commingled: Not to exceed 300,000/mL
- Somatic Cell Count
 - Non-Commingled (single producer): Not to exceed 500,000/mL

Grade “A” Raw Goat Milk Standards

- Bacteria: Not to exceed 80,000/mL
- Somatic Cell Count: Not to exceed 1.5mil/mL
- Coliform: Not to exceed 10/mL

Grade “A” Pasteurized Milk Standards

- Bacteria: Not to exceed 20,000/mL
- Coliform: Not to exceed 10/mL

Antibiotic Residue (Appendix N):

- Test result must be **NEGATIVE** for milk to be used in processing

NOTE: It is not allowed to test frozen raw milk samples for bacteria or somatic cells.

Bacteria, Coliform, Somatic Cell, and Temperature Test Violations (OAR 603-024-0582)

- One test in exceeding grade limit
 - Firm notified of violative sample
 - No action taken
- Two of last four consecutive tests taken on separate days exceed limits:
 - Written notice to person concerned
 - In effect as long as last two of four tests in violation
 - Additional sample taken between 3 and 21 days following written notice

- Three of last five consecutive tests in violation
 - Immediate suspension of product
 - Clearance sample when facility is ready
 - Product taken off suspension if all tests are within grade limit
 - Accelerated sampling following lifting of suspension
 - Three samples taken within 21 days

X. MOBILE MILK TANKERS AND WASH TAGS

- Cleaning and Sanitizing tags (wash tags) for Mobile Milk Tankers shall include the following information
 - Identification of milk tank truck
 - Date and time of day the milk tank truck was cleaned and sanitized
 - Location truck was cleaned and sanitized
 - Signature or initials of person who cleaned and sanitized milk tank truck
- Wash tags on incoming tankers of milk should be retained for 15 days

XI. APPENDIX N. DRUG RESIDUE TESTING

- Monitoring and Surveillance
 - Industry shall screen all bulk milk pickup tankers and/or all raw milk supplies that have not been transported in bulk milk pickup tankers, regardless of final use, for Beta lactam drug residues
 - Other drug residues shall be tested for by employing a random sampling program
 - bulk milk pickup tanker shall be sampled after the last producer has been picked up and before any additional commingling
 - Sample shall be representative
 - Bulk milk pickup tanker testing shall be completed prior to processing the milk
 - Bulk milk pickup tanker samples confirmed positive for drug residues using approved test methods and/or verified screening positive using test methods not evaluated by FDA and accepted by the National Conference of Interstate Milk Shipments (NCIMS) without additional confirmation required shall be retained as determined necessary by the Regulatory Agency
 - All raw milk supplies that have not been transported in bulk milk pickup tankers shall be sampled prior to processing the milk

- The sample(s) shall be representative of each farm bulk milk tank(s)/silo(s), milk plant raw milk tank(s) and/or silo(s), other raw milk storage container(s), etc.
- Testing of all raw milk supplies that have not been transported in bulk milk pickup tankers shall be completed prior to processing the milk

NOTE: On-farm producer/processors that plan to store or ship their raw sheep milk frozen, shall sample their raw sheep milk prior to freezing. The sample shall be obtained by a bulk milk hauler/sampler permitted by the Regulatory Agency where the dairy farm is located. The raw sheep milk sample shall then be tested in a certified laboratory or screening facility. If this is the on-farm producer/processor's only raw sheep milk supply, this testing would suffice for the required Appendix N. testing for all raw milk supplies that have not been transported in bulk milk pickup tankers, which are required to be completed prior to processing the milk. In the case of sheep milk dairy farms, the raw milk sample may be frozen in accordance with a sample protocol approved by the Regulatory Agency in which the dairy farm is located as specified in Appendix B. of this *Ordinance* and transported to a certified laboratory for testing. The test results, or raw milk samples, shall clearly distinguish the lot number of the frozen raw sheep milk and accompany the frozen raw sheep milk to the plant.

- Reporting and Trace Back
 - All presumptive positive test results on milk and/or milk products shall be reported to the Department
 - If test result is confirmed positive
 - Further use of the violative individual producer's milk shall be immediately discontinued
 - Timely notification to the Department of the positive result and subsequent disposition of milk
 - Milk use reinstated when subsequent tests are no longer positive for drug residues
 - Any milk previously received prior to the official notification to the Regulatory Agency and milk producer, shall not be deemed violative provided the milk tests negative
- Record Requirements
 - Identity of person doing the test
 - Identity of tanker/silo/bulk milk tank/storage container, etc. used for storage of all raw milk supplies that have not been transported in bulk milk tankers being tested
 - Date/time the test was performed (time, day, month, and year)
 - Identity of the test performed/lot #/any and all controls (+/-)
 - Results of the test

- Follow-up testing if the initial test was positive/any and all controls (+/-)
- Site where test was performed
- Prior test documentation shall be provided for a presumptive positive load using approved test methods or verified screening positive load using test methods not evaluated by FDA and accepted by the NCIMS

Note: Records of all sample test results shall be maintained for a minimum of six (6) months by the industry at the location where the test methods were run. For the laboratory survey, two (2) years of records shall be available at the facility at the time of the survey.

- Enforcement
 - Permit Suspension
 - If test is positive for drug residue, milk shall be disposed of in a manner that removes it from the human or animal food chain
 - Following a positive test result, the producer's Grade "A" permit is immediately suspended and future use of the milk supply is halted
 - Permit reinstatement
 - Permit reinstated after confirmed negative drug residue test
 - Permit Revocation
 - Grade "A" permit revoked after third violation for drug residue using an approved test in a twelve (12) month period

XII. ADDITIONAL RESOURCES

DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION MILK SAMPLE COLLECTOR EVALUATION REPORT DAIRY PLANT SAMPLING – RAW AND PASTEURIZED MILK	SAMPLE COLLECTOR AND TITLE LOCATION DATE
EVALUATION BY AGENCY	X = DEVIATION N/A = NOT APPLICABLE
<p style="text-align: center;">EQUIPMENT</p> <p>1. Thermometer – Approved Type</p> <p>a. Accuracy – Checked against reference thermometer every 6 months (±1°C (2°F)); adjustment made; correction factor recorded</p> <p>b. Date checked and checker's initials attached to case</p> <p>2. Agitation</p> <p>a. Use odor-free, pressurized filtered air or electrically driven stirring or recirculatory equipment as required; all equipment sanitized before use in each successive tank (where applicable).....</p> <p>3. Sample Transfer Instrument</p> <p>a. Clean, sanitized, or sterilized</p> <p>b. Seamless metal tube</p> <p>c. Or metal dipper with long handle; capacity at least 100 ml (4 oz.)</p> <p>d. Or single-service paper or plastic sampling tube</p> <p>e. Or sanitized sampling cock</p> <p>f. Or from an approved in-line sampler</p> <p>g. Or other means for removing sample aseptically</p> <p>4. Sampling Instrument Case</p> <p>a. Proper design, construction and repair</p> <p>5. Sample Containers</p> <p>a. Clean, properly sanitized, or sterilized</p> <p>b. Adequate supply, properly stored and handled</p> <p>6. Sample Storage Case</p> <p>a. Rigid construction, suitable design to maintain samples at 0°C - 4.4°C (32°F - 40°F); protected from contamination; racks provided.....</p> <p>7. Cleaning and Sanitizing of Equipment</p> <p>a. Sampling instruments, clean and dry</p> <p>b. For sanitizing stirrer, sampling tube, or dipper between samples:</p> <p>1. Rinse first in one container of clean cold water connected with a continuous flowing source</p> <p>2. Then submerge in water maintained at 82°C (180°F) for at least 1 min.</p> <p>3. Or submerge in a hypochlorite solution at 200 ppm for at least 1 min. (or other bactericidally equivalent solution)</p> <p>4. Strength of sanitizing solution determined with applicable test kit</p>	<p>h. Fill sample container not more than ¾ full</p> <p>i. Immediately place samples into sample case containing ice</p> <p>9. Raw Milk for Pasteurization – Milk Tank Trucks and Plant Storage Tanks (Refer to Item 8 for applicable procedures)</p> <p>a. Agitation time determined as required</p> <p>b. Collect sample aseptically from tank opening (manhole).....</p> <p>c. Or from pipeline</p> <p>d. Or from balance tank prior to pasteurization</p> <p>e. Or from sanitized sampling cock</p> <p>f. Or from an approved in-line sampler</p> <p>g. Manual hand-disc agitator not used to mix milk in large storage tanks or trucks</p> <p>h. Sample dipper, when used, rinsed at least two times before transferring sample</p> <p>i. Dipper should extend 6 to 8 inches into milk to obtain a representative sample</p> <p>j. Sample dipper rinsed in safe tap water after each use and replaced in sanitizing solution</p> <p>10. Pasteurized Milk and Milk Product Samples (Refer to Item 8 for applicable procedures)</p> <p>a. Samples collected while product still in possession of processor</p> <p>b. Representative samples, randomly selected</p> <p>c. After thoroughly mixing product, aseptically transfer representative portion to sterile sample container</p> <p>d. Collect sample directly from milk dispenser spigot without sanitizing or flushing</p> <p>11. Pasteurized Milk and Milk Product Containers and Closures (Refer to Item 8 for applicable procedures)</p> <p>a. In the case of single-service containers and/or closures used for packaging milk and milk products, collect a randomly selected sample set from each manufacturing line (process).....</p> <p style="text-align: center;">-OR-</p> <p>In the case of multi-use containers used for packaging milk and milk products, collect at least four randomly selected containers</p> <p>Regarding both of the above cases:</p> <p>1. Lip or interior of bottles or containers not contaminated</p> <p>2. Milk or water prevented from dripping into empty milk containers: filler valves by-passed</p> <p>3. Containers sealed or capped with line equipment</p> <p>4. Laboratory sterilized closures, when used, aseptically applied to containers</p> <p>5. Containers delivered to laboratory without rinse solution, properly protected from crushing or damage</p> <p>6. Single-service containers not stored or shipped in refrigerated cases</p> <p>12. Sample Storage and Transportation</p> <p>a. Ice or other refrigerant maintained slightly above milk level in sample container; sample not frozen</p> <p>b. Sample protected against contamination; ice water no higher than milk level in sample containers; do not bury tops of containers in ice.....</p> <p>c. Samples and sample data promptly submitted to laboratory</p> <p>d. Use tamper proof shipping case with top labeled "This Side Up" (when using common carrier shipping)</p>
<p style="text-align: center;">SAMPLING PROCEDURES</p> <p>8. General Sampling Procedures – Plants, Raw and Pasteurized Milk Sampling</p> <p>a. Hands washed, clean, and dry during sampling</p> <p>b. Milk temperature determined and recorded at all sampling locations</p> <p>c. Temperature control sample provided at first sampling location and labeled with time, date, temperature, and collector identification</p> <p>d. Sample containers legibly identified at collection point</p> <p>e. Sample containers and closures handled aseptically</p> <p>f. Sample container not held over milk when transferring sample into container</p> <p>g. Sampling instrument protected from contamination before and during sampling</p>	
REMARKS (If additional space is required, please place information on the back of this Form or on a separate page.)	

Table 1. Chemical, Physical, Bacteriological, and Temperature Standards (Refer to M-a-98, latest revision, for FDA Validated and NCIMS Accepted Tests Methods.)

<p>GRADE “A” RAW MILK AND MILK PRODUCTS FOR PASTEURIZATION, ULTRA-PASTEURIZATION, ASEPTIC PROCESSING AND PACKAGING, OR RETORT PROCESSED AFTER PACKAGING</p>	<p>Temperature*****</p>	<p>Cooled to 10°C (50°F) or less within four (4) hours or less, of the commencement of the first milking, and to 7°C (45°F) or less within two (2) hours after the completion of milking. Provided that the blend temperature after the first milking and subsequent milkings does not exceed 10°C (50°F). NOTE: Milk sample submitted for testing cooled and maintained at 0°C (32°F) to 4.5°C (40°F), where sample temperature is >4.5°C (40°F), but ≤7.0°C (45°F) and less than three (3) hours after collection has not increased in temperature.</p>
	<p>Bacterial Limits</p>	<p>Individual producer milk not to exceed 100,000 per mL prior to commingling with other producer milk. Not to exceed 300,000 per mL as commingled milk prior to pasteurization. NOTE: Tested in conjunction with the drug residue/inhibitory substance test.</p>
	<p>Drugs*****</p>	<p>No positive results on drug residue detection methods as referenced in Section 6. – Laboratory Techniques of this Ordinance.</p>
	<p>Somatic Cell Count*</p>	<p>Individual producer milk not to exceed 750,000 per mL.</p>
<p>GRADE “A” PASTEURIZED MILK AND/OR MILK PRODUCTS</p>	<p>Temperature</p>	<p>Cooled to 7°C (45°F) or less and maintained thereat. NOTE: Milk sample submitted for testing cooled and maintained at 0°C (32°F) to 4.5°C (40°F), where sample temperature is >4.5°C (40°F), but ≤7.0°C (45°F) and less</p>

		than three (3) hours after collection has not increased in temperature.
	Bacterial Limits**	Not to exceed 20,000 per mL, or gm.*** NOTE: Tested in conjunction with the drug residue/inhibitory substance test
	Coliform	Not to exceed 10 per mL. Provided, that in the case of bulk milk transport tank shipments, shall not exceed 100 per mL. NOTE: Tested in conjunction with the drug residue/inhibitory substance test.
	Phosphatase**	Less than 350 milliunits/L for fluid products and other milk products by approved electronic phosphatase procedures.
	Drugs****	No positive results on drug residue detection methods as referenced in Section 6. – Laboratory Techniques of this <i>Ordinance</i> which have been found to be acceptable for use with Pasteurized Milk and/or Milk Products. (Refer to M-a-98. Latest revision.)
GRADE “A” ULTRA-PASTEURIZED (UP) MILK AND/OR MILK PRODUCTS	Temperature	Cooled to 7°C (45°F) or less and maintained thereat.
	Bacterial Limits**	Not to exceed 20,000 per mL, or gm.*** NOTE: Tested in conjunction with the drug residue/inhibitory substance test.
	Coliform	Not to exceed 10 per mL. Provided, that in the case of bulk milk transport tank shipments, shall not exceed 100 per mL.
	Drugs****	No positive results on drug residue detection methods as referenced in Section 6.- Laboratory Techniques of this <i>Ordinance</i> which have been found to be acceptable for use with Ultra-Pasteurized Milk and/or Milk Products. (Refer to M-a-98, latest revision)
GRADE “A” PASTEURIZED CONCENTRATED (CONDENSED) MILK AND/OR MILK PRODUCTS	Temperature	Cooled to 7°C (45°F) or less and maintained thereat unless drying to commenced immediately after condensing.
	Coliform	Not to exceed 10 per gram. Provided, that in the case of bulk milk transport tank shipments shall not exceed 100 per gram.

<p>GRADE “A” NONFAT DRY MILK AND DRY MILK AND/OR MILK PRODUCTS</p>	<p>Bacterial Estimate Coliform</p>	<p>Not to Exceed: 10,000 per gram (Bacterial Estimate) 10 per gram (Coliform)</p>
<p>GRADE “A” WHEY FOR CONDENSING AND/OR DRYING</p>	<p>Temperature</p>	<p>Maintained at a temperature of 7°C (45°F) or less, or 57°C (135°F) or greater, except for acid-type whey with a titratable acidity of 0.40% or above, or a pH of 4.6 or below.</p>
<p>GRADE “A” PASTEURIZED CONDENSED WHEY AND/OR WHEY PRODUCTS</p>	<p>Temperature</p>	<p>Cooled to 10°C (50°F) or less during crystallization, within 72 hours of condensing.</p>
	<p>Coliform Limit</p>	<p>Not to exceed 10 per gram. <i>Provided</i>, that in the case of bulk milk transport tank shipments shall not exceed 100 per gram.</p>
<p>GRADE “A” DRY WHEY, GRADE “A” DRY WHEY PRODUCTS, GRADE “A” DRY BUTTERMILK, AND GRADE “A” DRY BUTTERMILK PRODUCTS</p>	<p>Coliform Limit</p>	<p>Not to exceed 10 per gram.</p>

* Goat Milk 1,500,000/mL.

** Not applicable to acidified or cultured milk and/or milk products, eggnog, cottage cheese, and other milk and/or milk products as identified in the latest revision of M-a-98.

*** Results of the analysis of milk and/or milk products which are weighed in order to be analyzed shall be reported in # per gm. (Refer to the current edition of the *SMEDP*.)

**** Not applicable to acidified or cultured milk and/or milk products, eggnog, cottage cheese, pasteurized and ultra- pasteurized flavored (non-chocolate) milk and/or milk products and other milk and/or milk products as identified in the latest revision of M-a-98.

***** Raw sheep milk samples that have previously been frozen may be tested for Appendix N. drug residue if the samples meet the sampling requirements cited in Appendix B. of this *Ordinance*.

ADDITIONAL RESOURCES (Continued):

- [PMO](#) Appendix B. Milk Sampling, Hauling and Transportation (Pg. 138)
- [PMO](#) Appendix N. Drug Residue Testing and Farm Surveillance (Pg. 359)
- [OAR 603-024](#): Definitions and Standards of Identity, Labeling and Other Regulations Relating to Fluid Milk and Dairy Products
- [ORS CHAPTER 621](#): Milk, Dairy Products, and Substitutes
- [M-a-98](#): Official Grade “A” Pasteurized Milk Ordinance(PMO) Regulatory Laboratory Tests for Grade “A” Milk and Milk Products and Grade “A” Dairy Farm and Milk Plant Water