

<b>DEPARTMENT OF HEALTH AND HUMAN SERVICES</b> <b>FOOD AND DRUG ADMINISTRATION</b> <b>MILK LABORATORY EVALUATION RECORD</b>	Laboratory	
	Location	
Laboratory Evaluation Officer	Lab Number	Date (mm/dd/yyyy)

**List of acceptable entries in columns: Blank** = No deviations observed; **RO** = Item has been Reviewed or Observed (this entry is for temporary use only and must be replaced with another entry on final record); **X** = Deviation; **N** = Note; **O** = Not Used; **NA** = Not Applicable; **U** Undetermined

## APPENDIX N BULK MILK TANKER SCREENING PROCEDURES

### GENERAL REQUIREMENTS

(Unless otherwise stated all tolerances are ±5%)

<p><b>1. Work Area</b> .....</p> <p>a. Ample working space and utilities .....</p> <p>b. Clean and well ventilated, test kit used in temperature range specified by manufacturer, reasonably free from dust and drafts .....</p> <p>c. Adequate lighting <b>[NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, &gt; 50 foot-candles at working surface (pref 100)]</b> .....</p> <p>d. Eating and drinking not permitted in immediate testing area .....</p> <p><b>2. Storage Space</b> .....</p> <p>a. Cabinets, drawers and shelves adequate .....</p> <p>b. Areas neat, clean and orderly .....</p> <p><b>3. Temperature Measuring Devices</b> .....</p> <p>a. National Institute of Standards and Testing (NIST) traceable thermometer or other temperature measuring device with certificate. Must be checked annually at ice point .....</p> <p>1. Reference temperature measuring device identity: .....</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Serial #</td> <td style="text-align: center;">Date of Certificate</td> <td style="text-align: center;">Ice Point</td> <td style="text-align: center;">Date</td> </tr> <tr> <td>a: _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>b: _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </table> <p>2. Graduation/recording interval not greater than 1.0°C <b>[NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, 0.5C]</b> .....</p> <p>b. Range of test temperature measuring device appropriate for designated use .....</p> <p>1. Mercury-in-glass (MIG), alcohol/spirit-in-glass (AIG) or electronic/digital thermometers in degrees centigrade .....</p> <p>2. Plastic lamination recommended for mercury thermometers .....</p> <p>3. Graduation/recording interval not greater than 1.0°C <b>[NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, 0.5°C]</b>.....</p> <p>c. Accuracy of all test temperature measuring devices checked before initial use and annually .....</p> <p>1. Checked against NIST traceable thermometer .....</p> <p>2. Accurate to ±1°C when checked at temperature(s) of use .....</p>	Serial #	Date of Certificate	Ice Point	Date	a: _____	_____	_____	_____	b: _____	_____	_____	_____	<p>3. Results recorded/documented and individual devices tagged .....</p> <p>a. Tag includes identification/location, date of check, temperature(s) checked and correction factor(s), as applicable .....</p> <p>d. Temperature measuring devices are to be read to the nearest graduation/recording interval, optionally labs may interpolate between graduations .....</p> <p>e. Temperature Monitoring Systems (wired/wireless)</p> <p>1. The software must record temperature reading from each sensor/probe in the piece of equipment being monitored at the same or greater frequency as stipulated for MIG or AIG thermometers. Optionally, set to register an alert/alarm when out of the acceptable temperature range .....</p> <p>a. When temperature(s) are out of acceptable range for greater than two hours, event must be documented and corrective action taken as necessary; maintain records .....</p> <p>2. Optionally, a minimum two-day backup power source (battery/electrical) for the temperature monitoring system and/or all required sensors/probes, remote signal device and monitor/controller may be employed in case of power failure .....</p> <p>3. Temperature monitoring system records for each piece of equipment must be available/accessible for auditing as described in item 3c above .....</p> <p>f. Automatic temperature recording instruments, if used, compared weekly against an accurate thermometer; maintain records .....</p> <p>g. Temperature measuring device(s) checked for accuracy at another location .....</p> <p>1. Location: .....</p> <p>2. Current and acceptable .....</p> <p>3. Copy of record on-site .....</p> <p>h. Dial thermometers not used in the laboratory .....</p> <p><b>4. Refrigeration (Sample _____ )</b> .....</p> <p style="padding-left: 20px;"><b>(Reagent _____ )</b> .....</p> <p>a. Size adequate for workload .....</p> <p>b. Maintains samples at 0.0-4.5°C .....</p>
Serial #	Date of Certificate	Ice Point	Date										
a: _____	_____	_____	_____										
b: _____	_____	_____	_____										

Notes

<p>c. Used for storage of milk or milk products, media and reagents only ..... _____</p> <p>    1. Not to be used to store food or drink for consumption ..... _____</p> <p>d. Record/download temperature (corrected) daily, from two temperature measuring devices with bulbs or sensor/probe immersed in liquid (in sealed containers) <b>[NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, AM and PM]</b> ..... _____</p> <p>e. Temperature measuring devices located on upper and lower shelves of use ..... _____</p> <p><b>5. Freezer ( _____ )</b> ..... _____</p> <p>    a. Size adequate for workload ..... _____</p> <p>    b. Maintains -15°C or below ..... _____</p> <p>    c. Used for storage of frozen milk products, controls, media and reagents only ..... _____</p> <p>        1. Not to be used to store food or drink for consumption ... _____</p> <p>    d. Record/download temperature (corrected) daily, from temperature measuring device with bulb or sensor/probe immersed in liquid (in sealed container) <b>[NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities, AM and PM]</b> ..... _____</p> <p><b>6. Balance, Electronic (if necessary)</b> ..... _____</p> <p>    ( _____ ) ..... _____</p> <p>    a. Weight capability appropriate for intended use ..... _____</p> <p>    b. Appropriate sensitivity for accuracy check of pipetting devices within a tolerance of ±5% (0.001g sensitivity appropriate in most instances) ..... _____</p> <p>    c. Checked monthly with Class S or S1, or equivalent ASTM 1, 2, or 3 weights corresponding to normal use of balance <b>(At a minimum, Appendix N drug residue testing only laboratories must check the balance calibration within 30 days prior to the pipettor accuracy check)</b> ..... _____</p> <p>        1. Certificate or other verification of authenticity ..... _____</p> <p>        2. Free from excessive wear, filth and corrosion ..... _____</p> <p>        3. Weights within class tolerance ..... _____</p> <p>    d. Checked annually by a qualified service representative ..... _____</p> <p>        1. Date of Last Check: _____ ..... _____</p> <p>    e. Maintain records ..... _____</p> <p><b>7. Pipettors, Calibrated, Fixed Volume or Electronic Only [Required for NCIMS Accredited Laboratories and Certified Industry Supervisor Facilities]</b> ..... _____</p> <p>    a. Pipettors etched with identification (imprinted serial numbers acceptable) and tagged with date accuracy checked ..... _____</p> <p>    b. Appropriate tips for pipettor(s) used ..... _____</p> <p>    c. Follow manufacturer's instructions unless otherwise stated regarding proper technique for use ..... _____</p> <p>    d. Pipetting devices accuracy checked on-site ..... _____</p>	<p>e. Pipetting devices accuracy checked at another location ..... _____</p> <p>    1. Location: _____ ..... _____</p> <p>    2. Current and acceptable ..... _____</p> <p>    3. Copy of record on-site ..... _____</p> <p>f. Check accuracy with ten (10) consecutive measurements, by weight or by volume (&gt;1.0 ml using a class A graduated cylinder), using separate tip for each measurement, every 6 months ..... _____</p> <p>g. Average of all 10 measurements must be ±5% of specified delivery volume, maintain records ..... _____</p> <p>h. Or, check accuracy with 10 consecutive readings once every 6 months using the Artel PCS Pipette Calibration System, average of all 10 readings must be ±5% of specified delivery volume, maintain records/printouts ..... _____</p> <p>    1. PCS Calibration System Validation, upon receipt, validate the instrument by following the manufacturer's protocol ..... _____</p> <p>    2. PCS Pipette System Quality Control ..... _____</p> <p>        a. Following manufacturer's Procedure Guide and instrument prompts, perform an instrument calibration every 30 days or just prior to use ..... _____</p> <p>        b. Record results and file Calibration Certificate (printout) ..... _____</p> <p>    3. Store reagent kits and Instrument Calibrator kits at room temperature ..... _____</p> <p>        Lot #: _____ ..... _____</p> <p>        Exp. Date: _____ ..... _____</p> <p>    4. Reagent Blanks and Sample Solutions are the same lot ..... _____</p> <p>    5. PCS Pipette Calibration System Procedure, follow manufacturer's Procedure Guide and instrument prompts ..... _____</p> <p>        i. Maintain records ..... _____</p> <p><b>8. Deionized Water or Equivalent, or as specified by manufacturer</b> ..... _____</p> <p style="text-align: center;"><b>SAMPLES</b></p> <p><b>9. Sample Requirements</b> ..... _____</p> <p>    a. Appendix N tanker sample(s) ..... _____</p> <p>        1. Prevent contamination with disinfectants from hands or other sources ..... _____</p> <p>        2. Ascertain temperature of bulk milk tanker; maintain records ..... _____</p> <p>        3. Secure a representative sample for testing. If sample will not be tested without delay, then a temperature control (TC) sample must be taken at the same time, transported and maintained with the tanker sample(s) until it is tested ..... _____</p>
---	---

Notes

Laboratory	Lab Number
Location	Date (mm/dd/yyyy)

- 4. Tanker sample(s) tested promptly upon arrival at the testing location (date and time recorded) \_\_\_\_\_
  - a. Determine sample temperature by inserting a pre-cooled thermometer (pre-cooling of electronic/digital thermometer probes is not necessary) into temperature control \_\_\_\_\_
  - b. Temperature of bulk milk tanker may be used for temperature as received and tested if sample testing begins without delay \_\_\_\_\_
- b. Appendix N Producer Trace Back Samples (Sample(s) not meeting the conditions outlined below may still be tested. The certified laboratory or CIS will document the condition of the sample(s)) \_\_\_\_\_
  - 1. Samples should be accompanied by a temperature control (TC). If no TC, aliquot sample(s) for testing and measure temperature using one of the producer samples \_\_\_\_\_
  - 2. Sample(s) should not be leaking \_\_\_\_\_
  - 3. Tops of samples should be protected from direct contact with ice \_\_\_\_\_
  - 4. Unprotected samples should not be submerged in water and/or ice or slush \_\_\_\_\_

**PERFORMANCE TESTING**

- 10. Performance Testing \_\_\_\_\_
  - a. Run a positive and negative control before use on each new lot of kits, must give appropriate results; maintain records \_\_\_\_\_
  - b. Run a negative and positive control **DAILY** (on days testing) at each test site, must give appropriate results; if not, re-run controls (may be necessary to prepare new controls); if problem persists, discontinue testing, contact State Regulatory Agency and seek technical assistance; maintain records \_\_\_\_\_
  - c. If available from manufacturer, check instrument calibration with check devices **DAILY** (on days testing), must give appropriate results; if not, discontinue testing and seek technical assistance; maintain records \_\_\_\_\_
  - d. If more than one analyst performs analysis, have different analyst run performance check on rotational basis \_\_\_\_\_

**FOLLOW-UP ON TEST KIT POSITIVE RESULTS  
[Must comply with PMO Appendix N, current revision]**

- 11. Verification of Initial Positive Tanker Samples \_\_\_\_\_
  - a. The **SAME** sample is re-tested by the **SAME** analyst using the **SAME** test in **DUPLICATE** along with a positive and negative control \_\_\_\_\_

- b. Positive and negative controls give the appropriate result(s) \_\_\_\_\_
  - 1. If positive and/or negative controls do not give appropriate results, re-run controls and samples. If problem persists, seek technical assistance \_\_\_\_\_
- c. If one or both duplicates are positive, the tanker sample is **PRESUMPTIVE POSITIVE** and the sample is referred to the designated certified laboratory or Certified Industry Supervisor (CIS) as specified by the facility's protocol as per Agreement with the State Regulatory Agency \_\_\_\_\_
- d. Presumptive positive samples must be forwarded to a certified laboratory, not tested by screening facility; producer samples must be tested by a certified laboratory \_\_\_\_\_
- e. If both duplicates are negative, milk may be received and processed; record and report as **NOT FOUND** \_\_\_\_\_
- f. Complete applicable section of Positive Report form and maintain records of all analyses \_\_\_\_\_
  - 1. For Presumptive Positive samples, maintain a copy of the Positive Report form and forward the original to the certified laboratory or CIS \_\_\_\_\_

**12. Confirmation of Presumptive Positive Tanker Samples [Only in an accredited laboratory or by a CIS (refer to M-a-85 current revision for listing of test kits to assure equivalence)] \_\_\_\_\_**

- a. The **SAME** sample [or if it can be demonstrated that the original sample is suspect, a re-sample may be used at the State's discretion] is tested in **DUPLICATE** along with a positive and negative control \_\_\_\_\_
- b. Positive and negative controls give the appropriate result(s) \_\_\_\_\_
  - 1. If positive and/or negative controls do not give appropriate results, re-run controls and samples; if problem persists, seek technical assistance \_\_\_\_\_
- c. If one or both duplicates are positive, the tanker sample is **CONFIRMED POSITIVE**; milk may not be processed; contact State Regulatory Agency \_\_\_\_\_
- d. Producer trace back performed on all producer samples from the load, see item 13 \_\_\_\_\_
- e. If both duplicates are negative, milk may be received and processed; record and report as **NOT FOUND**; producer trace back is not performed \_\_\_\_\_
- f. Complete applicable section of Positive Report form and maintain records of all analyses \_\_\_\_\_
  - 1. For Confirmed Positive samples, maintain a copy of the Positive Report form and forward the original to the State Regulatory Agency \_\_\_\_\_

Notes \_\_\_\_\_

Laboratory	Lab Number
Location	Date (mm/dd/yyyy)

- 13. Trace back of Producers on a Confirmed Positive Tanker**  
**[Only performed in an accredited laboratory or by a CIS**  
**(refer to M-a-85 current revision for listing of test kits to**  
**assure equivalence)]** .....
- a. Samples must be between 0.0 and 4.5°C; maintain records .....
  - b. Perform an initial single test on each producer sample .....
  - c. Any producer sample that is positive must be re-tested .....
  - d. The **SAME** sample is re-tested by the **SAME** analyst using the **SAME** test in **DUPLICATE** along with a positive and negative control .....
  - e. Positive and negative controls give the appropriate result(s) .....
  - 1. If positive and/or negative controls do not give appropriate results, re-run controls and samples. If problem persists, seek technical assistance .....
  - f. If one or both duplicates are positive, the producer sample(s) are **POSITIVE** .....
  - g. If both duplicates are negative, record and report the appropriate producer sample(s) **NOT FOUND** .....
  - h. Complete applicable section of Positive Report form and maintain records of all analyses .....
  - 1. For Confirmed Producer Positive samples, maintain a copy of the Positive Report form and forward the original to the State Regulatory Agency .....

- REPORTING AND RECORDS**
- 14. Reporting and Records** .....
- a. Report as **Positive (+)** for beta-lactam, specific drug or inhibitor (when a non-specific microbial inhibitor test used without beta-lactamase) when demonstrated .....
  - b. Report as **Not Found (NF)** when demonstrated .....
  - c. Record test performed, interpretation of unknowns (samples) and controls .....
  - d. Records, including all printouts, maintained for 2 years .....

- MISCELLANEOUS**
- 15. Miscellaneous** .....
- a. Current Safety Data Sheets (SDS) accessible to analysts .....
  - b. Current, applicable survey forms available in laboratory .....
  - c. Positive Report forms available with instructions .....
  - d. Personnel adequately trained .....
  - e. Required split/check sample participation .....

Notes