CIP Wash Systems

**Reference:** “Keep the Clean…Clean”, CL-24 to CL-29

**Monitor and Recording Method:** ProAct web-based monitor, record and alert system by Milk Barn.

**Risk Reduction:** We and the technicians are alerted instantly via ProAct if any CCP limit is crossed. This allows us to address any issues proactively before the safety of our raw milk is compromised.

**Frequency:** Alarm System is on 24/7 but specifically every time either of the CIP wash systems is sent through a wash cycle.

**Remediation:** AllCIPalerts are taken seriously and any issues are addressed promptly.

**Procedures:**

1. Milk Barn technicians maintain all system sensors to top-notch working order.
2. Daily graphs and records are regularly scanned for irregularity by us and by Milk Barn professionals.
3. All email alerts are sent to multiple persons and to smartphones to assure that an alert is not missed.
4. We never assume than a ProAct alert is false or a malfunction. Each alert is addressed as real.

Hot Water Heaters

**Reference:** “Keep the Hot…Hot”, HT-1 to HT-9

**Monitor and Recording Method:** ProAct web-based monitor, record and alert system by Milk Barn.

**Risk Reduction:** We and the technicians are alerted instantly via ProAct if any CCP limit is crossed. This allows us to address any issues proactively before the safety of our raw milk is compromised.

**Frequency:** Alarm System is on 24/7 but specifically every time either of the CIP wash systems is sent through a wash cycle.

**Remediation:** AllCIPalerts are taken seriously and any issues are addressed promptly.

**Procedures:**

1. Milk Barn technicians maintain all system sensors to top-notch working order.
2. Daily graphs and records are regularly scanned for irregularity by us and by Milk Barn professionals.
3. All email alerts are sent to multiple persons and to smartphones to assure that an alert is not missed.
4. We never assume than a ProAct alert is false or a malfunction. Each alert is addressed as real.

 Milk Cooling Systems

**Reference:** “Keep the Cold…Cold”, CO-1 to CO-3

**Monitor and Recording Method:** ProAct web-based monitor, record and alert system by Milk Barn.

**Risk Reduction:** We and the technicians are alerted instantly via ProAct if any CCP limit is crossed. This allows us to address any issues proactively before the safety of our raw milk is compromised.

**Frequency:** Alarm System is on 24/7 but specifically during every milking and when milk is in the bulk tank

**Remediation:** AllCIPalerts are taken seriously and any issues are addressed promptly.

**Procedures:**

1. Milk Barn technicians maintain all system sensors to top-notch working order.
2. Daily graphs and records are regularly scanned for irregularity by us and by Milk Barn professionals.
3. All email alerts are sent to multiple persons and to smartphones to assure that an alert is not missed.
4. We never assume than a ProAct alert is false or a malfunction. Each alert is addressed as real.

Miscellaneous CCP Monitoring and Recording

**Reference:** “Monitor Measure and Record”, MR-8 to MR-12

**Monitor and Recording Method:** Visual, physical inspection by The Family Cow personnel with observations entered into daily spreadsheet log. These CCPs (MR-8 to MR-12) are visually monitored and recorded because of the impracticality of electronic monitoring of these CCPs.

**Risk Reduction:** Constant monitoring and recording these CCPs allows us to address any issues proactively before the safety of our raw milk is compromised.

**Frequency:** Twice daily at every milking shift

**Remediation:** Any deviation from accepted norms is taken seriously and any issues are addressed promptly.

**Procedures:**

1. The Family Cow crew observes and evaluates each of these CCPs at each milking shift.
2. The results are entered in the designated line in milking data spreadsheet in the barn office.
3. Any deviations are promptly addressed by the farm crew or communicated directly to Edwin, Rodrick or Winfred.
4. Every deviation from acceptable norm is addressed immediately.

Water Testing

**Reference:** “Keep the Clean…Clean”, CL-22 & CL-23

**Monitor and Recording Method:** Water softness (for optimum CIP cleaning effectiveness) is tested and recorded by The Family Cow personnel. Water purity is tested at ALS Environmental and also by PDA. All tests are kept on file.

**Risk Reduction:** Constant monitoring and recording of water purity and softness allows us to address any water quality issues proactively before the safety of our raw milk is compromised.

**Frequency:** Once a week by The Family Cow. Every quarter by ALS. Every six months by PDA.

**Remediation:** Water must pass PDA regulations for PA permitted raw milk dairies. If ever the water does not pass, by law, corrective action would need to be taken.

**Procedures:**

1. Follow all PDA water testing regulations.
2. Follow The Family Cow water testing protocol.
3. Use ALS Environmental tests for extra surveillance and information.

Pre-Consumptive Test and Hold Laboratory

**Reference:** “ The Family Cow Raw Milk Laboratory”, LB-1 & LB-5

**Monitor and Recording Method:** On farm Laboratory with trained technicians.

**Risk Reduction:** Testing every single lot of retail ready product in real time with a test and hold protocol coupled with a ‘divert-to-pasteurizer’ policy if the milk ever tests higher bacteria than allowed for pasteurized milk reduces risk from *The Family Cow* raw milk to an extraordinarily low level.

**Frequency:** Every single bottling lot.

**Remediation:** Divert the milk to the pasteurizer if a lot fails to pass.

**Procedures:**

1. Wipe the laboratory counter top with Disinfecting wipes provided.
2. Use gloves provided.
3. Retrieve a random pint for milk sample and remove seal.
4. Retrieve 99ml of buffered water and remove seal
5. Retrieve 3 Pipettes/ 1 Coliform Petrifilm /1 APC Petrifilm / Petri-Spreader
6. Open the first pipette package
7. Draw 1ml of milk from the sample bottle.
8. Discharge the 1 ml of milk onto the Coliform Petrifilm.
9. Place spreader on top of the film and apply slight pressure to distribute the milk evenly
10. Open 2nd pipette
11. Draw 1ml of milk from sample bottle.
12. Discharge the 1 ml of milk into the 99ml of buffered water bottle
13. Gently invert water bottle several times to mix.
14. Open 3rd pipette and draw 1ml of the water/milk solution.
15. Discharge the water/milk solution onto the APC Petrifilm
16. Place spreader on the plastic film and apply slight pressure to distribute solution evenly
17. Label each sample with the ‘Best By’ date code from the raw milk pint cap.
18. Place the two Petrifilms in the incubator.
19. Fill out the lab report chart with the starting information
20. Hold that date code of milk aside in the cooler and do not sell.
21. When the test is finished, read the lab results using the provided 3M interpretation guide.
22. Record the results in the lab report chart and then into the computer data base.
23. Release the milk for sale only if the coliform and APC both test cleaner than pasteurized milk standards.
24. Send the milk for pasteurization if the lab results are substandard. Contact Edwin immediately.

PDA Required Tests, Regulations, Inspections and Permits

**Reference:** “ PA Department of Ag Regulations”, PT-1 to PT -13

**Monitor and Recording Method:** Conducted and Recorded by PDA

**Risk Reduction:** Regular, entireherd testing, milk testing and dairy inspections by third party food safety experts reduce risk by providing official evaluation to assure top notch operation procedures.

**Frequency:** Milk test bi-weekly, dairy inspections quarterly, blood testing for entire herd annually

**Remediation:** Any regulatory issue is addressed immediately in full co-operation with PA law.

**Procedures:**

1. **Bovine Tuberculosis:** The Family Cow herd is tested annually for by a licensed veterinarian and reports are sent to PDA. The Family Cow cows have always been 100% negative.
2. **Bovine Brucellosis:** The Family Cow herd is blood tested annually for by a licensed veterinarian and reports are sent to PDA. The Family Cow cows have always been 100% negative.
3. **E.Coli 0157:H7:** Random sample taken by PDA from final packaged bottle of raw milk - zero tolerance.
4. **Listeria Monocytogenes:** Random sample taken by PDA from final packaged bottle of raw milk - zero tolerance.
5. **Salmonella:** Random sample taken by PDA from final packaged bottle of raw milk - zero tolerance.
6. **Campylobacter:** Random sample taken by PDA from final packaged bottle of raw milk - zero tolerance.
7. **SPC:** Standard Plate Count test is a hygiene indicator test. PA raw milk regulations require us to meet the same standards as pasteurized milk. Random sample taken bi-weekly from final packaged bottle.
8. **Coliform:** Must be <10 coliform/ml.  This is the same standard that public drinking water, bottled spring water, or any other for-sale-to-the-public drink must pass. (sample taken bi-weekly from final packaged bottle)
9. **SSC:** Somatic Cell Count is an indicator test which is reflective of the health and well-being of the cows and the strength of their immune system. (random sample taken bi-weekly from final packaged bottle)
10. **Barn and Bottling room Inspection:** The milk barn is inspected for Grade A pasteurized milk standards plus the milking barn and bottling facilities are also inspected quarterly by PDA for raw milk sales.
11. **Water Testing**: PDA samples and tests the wells on our organic farm bi-annually for coliform (Zero tolerance)
12. **Warning Message on Label**: Every container of Family Cow raw milk has a PDA required warning on the label which explains the potential risks of consuming raw products. There is also a sign posted in our store bearing the same raw product warning message.
13. **Recall:** In the event of a recall, The Family Cow will work closely with PA Department of Ag. officials and adhere to the recall requirements issued by the PDA. We will notify all customers to recall product and work with the PDA to resolve the issue.