**Standard Sanitary Operating Procedure (SSOP)**

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SSOP’s are written protocols that are specified in a food safety plan that define the procedures to be followed to achieve a specific goal or process. An SSOP may define temperatures, type of cleaning chemical, various steps or other practices to be used, and in what order to achieve a clean bottle or bottle cap.

 ***Milking Conditions***

1. Assure that the Fiat Farm Milking Procedures are followed.
2. Assure that milking equipment is clean and well maintained.
3. All milking equipment is cleaned according to SSOP practice as described.
4. Flush machine with potable tepid water to break down calcium deposit buildup.
5. *If using the Delaval Bucket milker*: Flush claw and inflations and milk hose with approximately 2 gallons of Dairy Chlorinated Cleaner in hot water using the CIP for a 6 minute cycle. Bucket, lid, gasket and strainer are thoroughly scrubbed by hand in hot soapy water.
6. *If using the Surge milker*, all parts are taken apart and scrubbed each milking in hot soapy water.
7. Flush machine with hot water to rinse.

3. Machine is allowed to hang and drip dry in a protected area.

4. One time per week, machine is “deep cleaned”. Claw is disassembled and washed in all hard-to-reach places. An Acid Soak is used according to the proper time and dilution. Equipment is properly rinsed after.

5. Any hoses, inflations and other parts that are worn are replaced as needed. Inflations are changed on a regular basis according to the manufacture directions.

6. The machine and parts are monitored for performance. Maintenance checks are regularly performed and tune-ups when needed.

7. The vacuum lines are cleaned periodically to minimize any potential for contamination.

***Bottling Conditions***

1. Assure that containers are clean and sanitary prior to filling with milk.
2. All persons who bottle milk or handle equipment wash their hands first.

***Processing Room Set-Up:***

1. Before entering the milk room, remove dirty boots and use dedicated shoes when possible. Close the door behind to keep out flies, and wash hands before handling any equipment.
2. *If using the Delaval bucket*, assemble the bucket and claw. Inspect to make sure all parts are clean and dry. During warmer months, if needed, pre-sanitizing equipment prior to milking using the CIP system.
3. For pre-sanitizing equipment: Flush milk bucket and claw with cool bleach water using the Clean In Place system (CIP) run cycle for 2 minutes. Run a rinse cycle with clean water. Un-hook the claw from the CIP system and use a clean rag to dry the bucket & Claw.
4. *If using the Surge Belly Milker* inspect milker for cleanliness and all parts are dry. If anything is wet, sanitize with cool water bleach solution for 2 minutes and rinse well so no residue remains.
5. Carry or use clean cart to transport to the milking area.

***Milking Parlor and Udder Preparation:***

1. Prepare feed in stanchion feed pan: Current grain and supplement ration will be posted in feed preparation room.
2. Connect vacuum line to pulsator on the milker.
3. Bring cow in to stanchion
4. Inspect cows for cleanliness and general health. Use currycomb or brush to clean dry debris from cows’ flanks, legs, and udders. (During fly warmer month when flies are present) Tie tail up to the side of the stanchion.
5. If cow’s hooves track in debris, gently sweep away to make sure that the floor under the udder is clear of bedding, mud, or manure.
6. Place tray underneath cows udder in the stanchion.
7. Before touching the udder be sure to wear gloves. Using a dry clean cloth wipe each teat and udder of debris.
8. Express 5-8 squirts of milk out of each teat into the strip cup making sure there are no abnormalities in the milk.
9. At least once a week perform a CMT test. This is done prior to iodine dip.
10. Dip dry teats with iodine-based teat dip and wait at least 30 seconds before removing. Wipe teat dip off with a clean cloth, using a clean side for each teat. Inspect each teat and teat end to make sure there is no lingering debris, if so repeat the dipping process.
11. Start vacuum, attach claw taking care the inflations do not touch ground.
12. Stay attentive during entire milking process to ensure that claw does not fall off.

***After Milking is Complete:***

1. Before turning off the vacuum, release the claw by pulling the plug on the bottom of the claw bowl which releases all suction. Carefully place claw on the hook of the milker without letting it touch the ground. Turn off vacuum. *If using the Surge milker* add plugs back into inflations one at a time while pinching off the air to release the inflation. This will allow you to maintain vacuum pressure in the milker and not have the lid release or leak while transporting.
2. Strip each quarter by hand to ensure total emptying.
3. Dip each teat in post dip solution to disinfect and seal teat orifice.
4. Release cow back to pasture/paddock and bring in next cow following the above process.
5. Re-attach bucket to milker for next cow and complete process.
6. Roll milk into milk processing room.
7. Wash hands.
8. Using a FDA compliant dairy filter to pour milk thru and into the bulk tank that is set to bring the milk to a temperature of 38F within 30-45 min.
9. Record volume of milk.

***Cleaning Milking Machine:***

1. Remove Bulk Tank Filter and inspect for abnormalities. Dispose of filter after use.
2. Remove pulsator
3. *For Delaval Bucket and Claw:*
4. Tepid water is used to flush milk residues prior to flush with hot water and other sanitizers and soaps etc.
5. Fill claw-washing bucket with **TEPID** water (not hot/not cold). Rinse bucket, lid, and gasket. Attach claw to CIP system and turn on vacuum system to flush the water through the inflations and milk hose 2-3 cycles. Drain bucket.
6. Refill claw-washing bucket with **HOT** water and add 2 tsp of powdered Chlorinated Dairy Cleaner. Turn on vacuum system to flush the inflations and milk hose with hot chlorinated water. Run cycle for at least 6 minutes. Clean and scrub the bucket, lid, gasket along with any other utensils used for milking (strip cup or CMT paddle) with **HOT** water and a liquid soap.
7. Rinse bucket, lid, gasket and claw with clean hot water.
8. Refill claw-washing bucket with hot water and flush entire CIP system with clean **HOT** water for ~5 cycles.
9. Rinse bucket lid and gasket with clean **HOT** water.
10. Clean exterior of hoses and bucket with rags and **HOT** soapy water.
11. Hang all milker parts including the claw and bucket to dry.
12. *For Surge Bucket Milker:*
13. Rinse bucket, lid, inflations, gaskets with tepid water to remove milk residue.
14. Fill washing bucket with hot soapy water and wash all parts of the milker with appropriate brushes (inflation brush for small holes, bucket brush for large surface areas)
15. Rinse all parts with warm water
16. Hang all milker parts to dry
17. One time per week, milker is “deep cleaned” by disassembling the entire system and washed in all hard-to-reach places. An acid soak/rinse and scrub is done at this time as well.
18. Dirty rags are hung on a laundry basket to air dry prior to being brought to house for washing. All visibly dirty rags are rinsed with hot water prior to going in the washer.

***Cleaning Milk Processing Room & Milking Parlor***

1. Sanitize counters and sinks in milk room using bleach solution spray.
2. Dry sinks and counters with clean rag
3. Sweep and mop floor with either floor cleaner or bleach solution.
4. Milk processing room exterior door is to remain closed.
5. Cleaning milking parlor –Sweep to remove manure and wash down with water if needed.