**Standard Sanitary Operating Procedures**

Chapman Family Farms & Dairy

372 S-E Road

Morrill, Nebraska

**Udder Prep**

1. Put rubber gloves on for the milking process to keep hands clean - Change if needed for any reason they get dirty.
2. In the milking order start with first cow
	1. Clean only 2 cows at a time
3. Wash the udder and teats with one soapy rung out rag.
4. Strip out each teat 5-10 squirts of milk
	1. So important - this has high SCC and stale milk that needs expelled out and also an opportunity to screen the milk for issues
5. Dip the clean teats with the “Pre Dip”
	1. **This must stay on the teat for a minimum of 30 seconds**
6. Using a clean, dry towel, wipe the iodine off using a clean place on the towel per teat

After milking, Post Dip the cow with a hefty amount of post dip iodine.

**Milking Machine Cleaning SOP**

“Rules”/Guidelines for washing:

* Do not get the pulsator wet
* ALWAYS HAVE WATER AT OPTIMAL TEMPERATURE or the machine won’t be cleaned properly and bacteria will grow
* Always keep the claw hung up or in the bomgaars bucket - don’t set in the sink
* Do not suck water up into the vacuum pump
* If out of powdered soap, use a hefty amount of dish soap
* If out of the yellow chlorine, use 1 cup of household bleach
* If out of the acid, use 4 cups of vinegar

**Cleaning/Detergent**

1. Rinse off the outside of the machine and the outside of the milk lines
	1. Get any milk residue and manure off
2. Using the bomgaars bucket above the sink, add 1 gallon of lukewarm water (100\*F) to rinse out milk from the lines.
	1. **Must NOT be HOT - that would bake the fat into the lines**
3. Turn on pump, suck up the water, turn pump off
4. Hang the claw back on the bucket
5. Fill the bomgaars bucket with 3 gallons of hot (125\*F) water using the glass measuring cup in the bucket, add 3oz of FC - 710 detergent
6. While the bucket is filling, using that soapy water, wash the outside of your claw and bucket with the short handled white brush labeled Bucket Milker
7. Rinse off brush when done
8. Rinse off the outside of the claw
9. Once water in the bucket is to the desired line:
	1. Put the claw in the bucket
	2. Turn on the vacuum pump, let build pressure
	3. Suck up water
	4. Dunk the claw up and down 3 times to allow air to create friction in the claw
	5. Once all water is sucked up, turn the pump off, hang the claw up on bucket, rinse the bomgaars bucket out, rinse the claw off
10. Add one gallon of plain warm water to the bomgaars bucket
11. Set your claw back into the bucket - rinse the soap out of the lines, suck it all up
12. Take the lid off the bucket milker, take the rubber gasket out from the lid and put it into the stainless steel bucket’s soapy water
13. Using the Bucket Milker brush, scrub the underside of lid
14. Rinse off lid, set on top of claw in the bomgaars bucket
15. Rinse the rubber gasket off and put back onto the lid - the lip faces out, smoother part goes on the metal
16. Scrub bucket milker inside and out
17. Rinse off the brush, hang up
18. Dump the water out and rinse bucket out from all soap
19. Put machine back together
20. AM SHIFT move to acid step
21. PM SHIFT move to sanitizer step

**Acid Wash - AM SHIFT ONLY**

1. Using **HOT** water (160\*F), add 3 gallons of water to the bomgaars bucket with ⅛ tsp (spoon or cap full) of FC - 350 Acid
2. Turn pump on, build pressure, suck up the water and dunk up and down to create friction to loosen up any milk stone inside claw
3. Once all sucked up, turn off pump, hang claw on bucket milker
4. Rinse out bomgaars bucket
5. Set claw back in bucket
6. Add ¼ warm water in bomgaars bucket to rinse out lines
7. Suck up plain water continuously
8. Shut off pump
9. Dump any water left in the bomgaars bucket
10. Take the lid off and set on top of claw in the bucket
11. Dump out the acid water in the bucket milker, dump on one side and then the other so that acid water hits all sides of the bucket going out
12. Move to Sanatizing step

**Sanitize**

1. Add 3 gallons of hot water (125\*F), using a measuring device, add .5oz of MultiChlor
2. Turn on pump
3. Suck up all the water continuously (No friction needed)
4. Turn off pump
5. Hang up the vacuum line and claw/lid
6. Dump out the chlorine water in the bucket milker, dump on one side and then the other so that Chlorine hits all sides of the bucket going out
7. Hang to dry
8. Put bomgaars bucket back to its place above the sink, upside down to dry

**Milk buckets, funnel and other milking tools washing protocol**

1. Inspect the milk filter for any mastitis - if there is some, let me know
2. Rinse out the filter and throw away the disposable filter
3. Rinse off all buckets and tools with lukewarm water
4. Add 1 gallon of warm/hot water (125\*F), add 1 oz of FC - 710 detergent
5. Using the short handled white milking machine brush
	1. Wash bucket with water in it so your splashing all the water around for a good clean
	2. Dump water into the next bucket and repeat washing all buckets
	3. Wash lids and funnel

\*\*Always set cleaned parts/tools into a clean bucket

* 1. Rinse everything and hang to dry
1. Hang funnel on the hook
2. Put buckets upside down on the shelf and little parts set on shelf to dry
3. To wash the cream separator, submerge all parts and use the small bottle brush above the sink to scrub all parts. Rinse all parts and put into small drying rack

**Tank Cleaning Protocol**

Once tank is empty from milk:

1. Take out the measuring stick and take off top lid - put into sink to wash later
2. Put the bomgaars cleaning bucket (from above the sink) under the valve
3. Open the valve
4. Rinse out the tank with lukewarm water
5. Close valve
6. Dump milky water into the mop sink
7. Add 3 gallons of warm/hot (100 Degree) water to the tank
8. Add 3 oz of FC - 710 detergent
9. Using the round topped extra long handled tank brush, scrub the inside of the tank sides and bottom, the paddle on both sides,the paddle shaft, and the top and sides of the tank
10. Open the valve and dump all the water in the bomgaars bucket dump into the mop sink and put bucket back under the valve
11. Using the small bottle brush hanging above the sink, scrub the outlet hole of the tank
12. Take off the valve to wash in the sink
13. Rinse out the suds
14. Close lid
15. Wash the pitcher, valve cover, valve, gaskets and clamps, lid and measuring stick and put on shelf to dry

**Acid Wash**

1. Put tank valve, gasket and clamp back on and close it
2. Put bomgaars bucket under the valve
3. Add **HOT** water (160 degrees - turn off cold water completely) 3 gallons to the tank
4. Add a spoon/cap full of FC - 350 Acid to the tank
5. Using the long handled white brush (labeled acid and sanitizer located hanging above sink), wash the entire inside of the tank
6. Hang up the brush
7. Open valve
8. Once empty, rinse out the tank with warm water
9. Leave valve open to air dry
10. Dump bucket of acid into the mop sink

**Sanitize - before you go out to milk so it has time to dry**

1. Put bomgaars bucket under the valve
2. Add warm/hot water (100 degrees) to the tank till it reaches the back - 3 gallons
3. Add .5 oz of MultiCholr to the tank
4. Using the long handled white brush (labeled acid/sanitizer located hanging above the sink), make contact on all sides of the tank and paddles with the chlorine water
5. Hang up the brush
6. Open valve to empty tank, dump bucket in mop sink and put bucket back under value to catch any more water
7. Leave open to air dry till your ready to add milk
8. Rinse out the tank right before you add milk
9. Put bucket back on shelf to dry

**Milk Shed Cleaning Protocol**

1. Clean up any milk spills with soap and water
2. Sweep the floor after each milking
3. Vacuum and mop as necessary

**Bottling Milk**

1. Wash hands
2. Inspect customer jars are clean and ready to be filled
3. Once bottled, date and put into cooler
4. Be sure cooler is ready 32-35 degrees

**Milking Barn Cleaning**

1. Sweep ally daily
2. Pick up any manure or solid sawdust and take to compost pile