# Grassway Organics LCC—Standard Sanitary Operating Procedures

### Preparation of the Milking System Prior to Milking

Employee enters the milk the house in clean and tight fitting clothing.

Employee then changings from outside boots to indoor only boots.

Employee then washes hands thoroughly at the designated hand washing station with warm water.

Employee inserts the air stoppers on top of the CIP tank.

Employee then takes out the needed piping out of the CIP tank and puts together over the stainless steel sink.

Employee will then take out the CIP gasket and replace it with a clean one that is located hanging in the CIP tank.

Employee will enter the parlor and remove the filter sock observing the cleanliness of the filter.

Employee will replace the filter with a new one.

Employee will turn the CIP stopper to "open" next to the sock filter.

Employee will take each unit off the CIP cups and hang them on the designated hook.

Employee will get designated cleaning towels and have them hung onto the stainless steel hooks located above head.

#### Preparing the Cows for Milking

All cows are brought to a holding area adjacent to the parlor.

32 cows will enter into the parlor.

The employee will then use the designated green dippers to thoroughly dip every teat on the south side.

Allowing iodine to sit for a minimum of thirty seconds

Employee will then grab a handful of clean towels from the designated bags.

Employee will use a fresh clean towel for each cow.

Employee will visualize each teat and if still soiled then another dip will be applied.

Soiled towels will then be thrown into the designated laundry bag located in the middle of the parlor.

Employee will enter back into the milk house and turn the "chiller" and "milk" switch to on.

Working from left to right employee will grab the unit off the hook and turn upside down allowing no air to be sucked out of the unit.

Employee having unit in hand will use opposite hand to strip test every teat before applying unit.

Once all units are in use employee will turn around and start preparing the North side of the barn repeating the process.

Employee will visualize the site glass of the cows being milk and then take off unit and swing it to the north side repeating from testing before applying units.

Once North side has all units milking, employee will turn around and apply a post dip to each teat on the south side using only the red dippers.

During the summer once post dip is applied employee will open gate to let the cows have access to the outside.

During winter months all units must be hung up before allowing any cows to leave the barn.

If temperature is below fifteen degrees all post dip must be whipped off with a new clean rag.

#### Milk Chilling and Bottling

During collection, milk passes through a micro sock filter directly before entering the plate chiller. The plate chiller lowers the milk temperature to 38 degrees.

The milk in the tank is held at 36 degrees and temperature is verified by gage thermometer.

Employee must visualize temperature located on tanks to ensure proper cold storage.

#### Milk tank preparations

Small tank located closest to the outside door.

Employee will turn the tank to the off position.

Employee will take off top lid and put into sink.

Using the black hose only rinse with hot water till no milk residue is visual.

Turn milk paddle with the dedicated tank brush only. Make sure both sides of paddle are milk residue free.

Turning the valve to off, fill tank with hot water from black hose about quarter full.

Entering the utility room grab the dedicated acid container and pour at least two cups of acid in hot water.

Using the "tank only" brush employee will scrub every inch of the inside of the tank. Rotating paddle multiple times.

Employee will then turn valve to on draining the acid from the tank. While acid is draining take round brush and scrub the inside of the valve and stem on the bottom of the tank.

Employee will then rinse acid with hot water.

Employee will close valve to "off" and fill again with hot water till quarter of the way full.

Entering the utility room employee will grab detergent cleaner and pour two cups into hot water repeating scrubbing process.

Once scrubbed, take dedicated wrench and loosen shut off valve off the stem of tank.

Employee will then grab the dedicated round brush and hand loosen valve till valve disconnects from the tank stem.

Employee using round brush will clean inside stem and outside threads with hot detergent coming out of tank.

Once scrubbed employee will place the shut off valve in the open position and place it in the CIP tank.

Employee will give one final rinse with hot water to remove detergent from tank.

Employee will then start filling the right side of stainless steel sink with hot water. Once sink is half full employee will pour a cup of acid into the hot water.

Employee will take top of tank and set into sink with hot acid water.

Taking the dedicated round brush employee will scrub every inch of the top part of the tank.

Using fresh hot water rinse hot acid water of lid and put back onto tank.

Using dedicated plastic hot glove drain sink.

Grab dedicated stopper and put back onto tank.

Leave tank sit for at least 12 hours before putting milk in.

Large Tank

Employee will connect two hose clamps underneath the wash cycle on wall to the west.

Employee will then loosen acid jar and fill half way full in utility room. Once half full employee will screw down tight back onto wash cycle valve.

Employee will loosen detergent jar and fill half way full in utility room. Once half way full employee will screw back on wash cycle valve.

Employee will then connect the wash valve to the bottom of the large tank and tighten by hand.

Employee will pull open the stopper allowing wash water to enter the tank.

Employee will open the top of the tank and take the gasket and set it on the dedicated hook located inside the large tank.

Employee will close lid and lock tight.

Employee will then turn valve to "wash" and turn switch to "on"

Employee will wait to make sure no water is leaking before leaving milk house.

# Cleaning the Milking System

Employee will follow all cows out of the barn once gates are lifted.

Doors will be closed immediately after the last cow has left the barn.

Employee will then wash bottom of boots before entering the milk house.

Employee will grab the designated half gallon mason jar from the CIP tank.

Employee will run the cold water from the stainless steel tank for a minimum of one minute or when water reaches well temperature.

Employee will fill mason jar to the top and turn off water.

Employee will enter the parlor switching the pump to manual.

Entering into the pit employee will visualize the site glass until the milk has disappeared or milk pump starts to make a high pitch sound.

Employee will then disconnect the last unit and use hose to drain water from mason jar into the site glass.

Once water is drained employee will reconnect the unit.

With mason jar in one hand employee will then turn the pump to off.

Entering the milk house employee will put glass jar back into the CIP tank and turn the milk pump and chiller to "off"

Employee will turn "on" large pump for wash water tank.

Employee will use only dedicated red fire hoses and start on the West end of the barn working to the East.

Employee will finish spraying down in the East end of the pit making sure all manure is removed.

Employee will then wash boots with hose next to milk house door and enter to wash hands thoroughly.

Employee will then break down pipeline needed to get to tank and hook back up for CIP mode.

Employee will then take out the air stoppers above the CIP tank and reconnect with the provided clamps.

Employee will then loosen clamp and turn CIP valve back to off.

Employee will then loosen clamp and pull out the sock filter. Notes will be taken if any mastitis or manure is on sock. Notes will be stored in office.

Employee will use hose on wall to wash out the sock housing.

Employee will take sock off and spray with hose on wall.

Employee will apply a new sock and return to housing firmly tightening the clamp.

Employee will take off both site glasses and wash in stainless steel sink in milk house.

Employee will take the hose on wall and wash out the site glass stainless steel body.

Employee will take clean site glasses and clamp back onto the body.

Employee will enter the pit and starting from left to right will thoroughly wash each unit with emphasis on black cups that will enter the CIP cups. Only using green dedicated hoses.

Once all units are washed each unit will be flipped over and put into CIP cups.

Hose to each unit will need to be hung on dedicated hooks so hose is straight with no low spots collecting water.

Once all units are placed in CIP cups then dedicated green hoses will be used to spray each unit down removing any visual milk from cups or ground.

Employee will then wash boots before entering the milk house. Once in milk house employee will look at chemical levels to ensure chemicals are not empty.

Double checking all steps are complete employee will then push the start button to run wash cycle.

Employee will stay to ensure water is filling in the CIP tank.

Employee will then take off boots and put back into the dedicated area before turning off lights.

# Milk Bottling

Employee will enter milk house through the store entrance.

Employee will change into milk house boots before entering milk house.

Employee will then wash hand thoroughly with warm water for at least thirty seconds in dedicated wash handing station.

Employee will set us sitting stool and fresh clean towels.

Employee will take the filling "S" out of the CIP tank and attach to the proper tank. Using the dedicated wrenches employee with tighten snuggly so no leaking from threads.

Employee will then take the dedicated jar located on shelving and run at least five seconds of milk out of the "S" fill spout before shutting off.

If filling for customer's jars, employee will visualize each container to ensure cleanliness.

Employee has every right to refuse filling a container if broken, soiled or worn.

Employee will then place container on milk house floor and open valve to start filling container.

Once filled, shut valve off.

Employee will then tighten container down and wipe clean. If milk is spilled on container employee can use the stainless steel tank to wash with cold water only, then wiped dry.

At no time will customers be allowed in the milk house. Employees are the only people allowed to fill containers.

If packaging milk for deliveries same rules apply above.

Employee will be required to put on disposable gloves.

Employee will grab a new bag of plastic jugs and place them standing up, leaning on the tank.

Only the corner can be cut to grab jugs.

Caps can be put on shelving close to employee.

Once jug is filled, white cap can be grabbed from the bag on the corners only. No grabbing the bottom of the cap.

Once cap is tightened each jug needs to be washed with cold water and put in the dedicated coolers for delivery.