

SOP for milking a priority.

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Thanks to Covid virus we are now in unprecedented times and actions that we thought might be a good idea before are now becoming a must do. We are all going to see changes to the way we work and it is inevitable that some of us are going to become sick or have to go into isolation over the coming weeks. Having a plan in place for such a situation is important.

Cows are still going to have to be milked, animals will still need to be feed. It is important that you put in place a backup system with a friend or neighbour that might be able to help if you and your family have to go into isolation.

It is important to understand that if your situation changes it will probably happen very quickly and you will not have much time to put plans in place last minute. This coupled with the stress of such a situation will more than likely mean that you will miss out or give poor direction on key tasks. You may also have to give instruction over the phone rather than face to face.

Feeding

In order to make the handover as easy and smooth as possible it is highly recommended to put together a number of SOP's, standard operating procedures, in place. This is simply a list of steps/jobs which need to be done, in a clear and orderly list. It might be simply quantities of feed etc that various animals groups are getting and the numbers of times per day they are feed, once or twice.

If your cows are being feed with a diet feeder, write out your diet on a sheet, if you have a different diet for different groups make sure that each menu is written out individually and identify which shed is getting which mix. How are calves feed, are they getting milk powder or whole milk, what volume of feed is each groups of calves getting.



Milking parlour

A more complex area is going to be the milking parlour. Milking machines have become a lot more complex and the control boxes for the various machines are very different. This is particularly the case with newer machines. The various controls on your Dairy Master parlour is going to be very different to the controls on your neighbours Pearson machine, even if you and your neighbour both have a Delaval parlour he may have very different controls to your machine. The location of isolation switches, water heater controls, taps etc. will all be different in each parlour. The washing procedure that you are using, particularly if you have moved to a chlorine free wash, will most likely be different to your neighbours.

This is where an SOP will be very important to make the task for someone who is coming in to help out easier will be very important. Write out a step by step guide for the various tasks this should include items such as:

- Setting up machine for milking
- Setting up machine for washing, and daily wash procedure
- Turing on the milk tank after a wash
- Washing the milk tank after a collection

If you take some photos of key items around the parlour, such as control boxes, and have them on the phone these might be useful if someone is ringing you for directions. Most farmers will be easily able to explain what buttons to press if they are looking at the box, but you would be surprised how hard it would be to recall which button is where if doing it from memory. You could also make notes on a photo and send it out through a message app or similar, if you have the image to work with. Also if items in the parlour are labelled with a laminate sheet then it might be easier to direct people.

Make sure that controls switches are clearly marked, use a permanent marker and write on the switch what it controls, “water heater”, “feed auger”, “Air compressor” etc.



Caption - Your control units could be very different to your neighbours. Even if you have a photo of the control unit on your phone it might be easier to give someone directions on how to operate it over the phone

Video Guide

It might be also worth asking a family member to record a short video of the steps to set the parlour up for milking, or washing. People might find this easier to do rather than writing everything out. The video can then be shared with whoever needs it. Go out 10mins early today and ask someone to follow you around with a phone and record you as you carryout the procedure to setup the parlour, make sure that your hands can be clearly seen in the video.

Do the same when milking has finished, you will need to take it a little slower than usual so that people can follow what you are doing.

Clearly mark all drums in the parlour so that don't get mixed up. You don't want someone accidentally using acid in the teat sprayers, this has happened in the past and caused a lot of damage to cows teat.



Caption - Bear in mind that although you are very used to operating your milking parlour, someone coming in to help out over the coming weeks might not find it that easy to figure out. Modern parlours are complex pieces of equipment with a lot of controls. Wash procedures have become a lot more complex.

Below are examples of SOPs for a different parlours which might provide useful starting points.

Starting Parlour

- Have rotary program open on the computer in the dairy office

Wet plant room

- Press F3 on Auto Washer
- *PUMP ACTIVE* with a count-down will display on screen, when *SYSTEM CLEARED* appears on screen open taps at the bottom of the milk filter and let water drain out.
- CLOSE TAPS
- Open filter housing cap – Install clean, rinsed filter & make sure filter is right side out
- Close filter housing cap & tighten – make sure filter hosing taps on side not in use are closed
- Take dump-line from wash position and put down drain


Bulk tank room

- Remove milk line pipe from wash position, with pipe on ground pull one-way valve and let water drain out.
- Connect milk pipe to the front of the bulk tank
- Open valve on front of tank by pulling level out and then turning anti-clockwise

Milking parlour

- Unscrew the wash pipe from the side of the milking parlour and hang on bracket on wall- pipe must be placed so pivot bar covers sensor or parlour will not revolve
- Screw on the cap to side of the parlour when pipe is removed

Wet plant room:

- Use  arrows on Auto Plant Washer to select “ready to milk” then press green button to start
- TURN ON PLATE COOLER

Milking Parlour

- Turn off automatic parking on Swift flow Revolver Control Console
- Close auto entry saloon gates
- Press and hold platform reverse button, to reverse platform 3-4 units
- Press platform forward button to move platform forward until the display shows a countdown and machine calls “all systems ready”
- Stop the parlour with unit 1 in line with cow entry
- On commander unit box screen press F100 and then enter
- All clusters will lift
- Close jetter lids, wet down parlour and turn on cluster spray tap
- **Ready to milk**
- **Check bulk tank room and wet room after approximately 30 cows have entered platform to ensure all is operating correctly.**

Closing down the Parlour

Milking Parlour

- Wash and rinse all the units as the cows are coming off the parlour
- When all cows have left the parlour, turn off the cluster spray tap walk around the platform washing down the screens/clusters/bars etc.
- When the whole platform is rinsed, return to milking station and wash all clusters
- On Commander unit box screen press F103 and enter.
- Release the clusters using soft start or button and place in jettors
- Wash all screens
- Wash all dirt from the retention bars
- One final rinse of the platform
- Turn on automatic parking on Swiftflow Revolver Control Console, press platform forward button and let the parlour park itself
- Close auto entry gates, drop scraper to cleaning position on backing gate- switch on side of Swiftflow Revolver Control Console.
- Press scraper reverse button to scrape collecting yard

Wet Plant Room

- Press F£ on Auto Plant Washer to clear the system
- **TURN OFF PLATE COOLER**


Bulk Tank Room

- Close valve on front of tank by pulling lever out and turning clockwise
- Remove milk pipe from the tank and attach it to the wash position
- Rinse away any spilt milk and put wash cap on front of tank

Milking Parlour

- Unscrew the cap from side of the parlour
- Screw on wash pipe to the side of the milking parlour

Wet Plant room

- Press the red button on Auto Plant Washer to close down parlour
- Use  arrows on Auto Plant Washer to select hot wash/acid wash press enter
- See chart in dairy re daily wash selection
- **Parlour shut down**

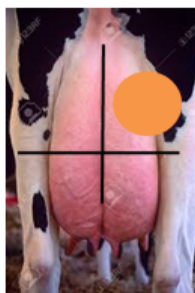
Milking parlour controls

- **Make sure bulk tank tap is closed.**
 - **Turn on bulk tank as soon as one line of cows are milked.**
 - **Check drums for teat dip and detergents regularly, if empty replace.**
 - **Check dairy after first line of cows to ensure milk is not leaking anywhere.**
1. Release excess water from drain on the filter cage in the dairy
 2. Open filter cage and insert filter sock (filter socks found in plant room) and close drain.
 3. Place milk line into bulk tank and dump line into the tank for calves.
 4. Using arrows on the control box select **'Ready to milk'** and press the **green button**.
 5. Enter the pit, turn **on hose taps left and right** over head going down the steps.
 6. Using any unit computer type in **F 1 0 0** and **enter** (clusters will lift automatically).
 7. To feed the cows go to feed box, determine what side by pressing **0**. Determine feed amount by choosing what **number**. Feed full row of cows by pressing **? 0** and **enter**.
 8. To dump milk press **F1** until Dr (dump right) or **DI** (dump left) appears, turn off ACR by pressing ***** button.
 9. Wash liners with water hose after dumping cow and spray teat spray up afterwards.
 10. To prepare units for washing place clusters on jetter's and deactivate ACR by pressing ***** button on each control unit.
 11. Once all clusters are on the wash line, press **F3** in the dairy to purge the milk system. Press the **two green buttons at the dairy door to fill the meal augers**.
 12. Once purges are complete (after 2 min. approx.) turn off machine by pressing the **red button** at the dairy computer.
 13. Release milk in filter cage, remove filter, take milk line and dump line in the bulk tank room and connect to wash line.
 14. Use the arrows on the computer in the dairy to press **hot wash**, press the **green button**.

Milking Routine

1. Wet down area
2. Monitor white board for any changes and or updates.
3. Take **extra care** regarding painted cows.
4. Wear gloves and **stay clean** throughout milking.
5. Feed the required amount to the herd.
6. Pre spray all cows (allow spray work for 30 seconds).
7. Strip all cows in the am (any red or blue cow stripped **disinfect your hands** afterwards).
8. **Do not** strip orange cows blank quarters.
9. Wipe quarters of all cows using paper towel (use new paper after wiping blue or red cows)
10. **Dump antibiotic or waste milk.**
11. **Sterilise clusters** that had a red or blue cow milked. Wash liners with water hose and spray teat spray up afterwards.
12. Post spray all cows.
13. Treat any cows if needed, **spray cow and update the whiteboard.**
14. Clean equipment and yards thoroughly.

Spray Paint	Action Required
RED	Dump milk
GREEN	Milk okay for bulk tank
ORANGE	3 teater cow
BLUE	High SCC – Wash cluster after milking
YELLOW	Once a day milking



Cows marked with an orange spot in one quarter **must not be milked in that quarter.** Double check what quarter by looking at white board.

CMT Blue cows regularly to see if SCC is increasing, if so treat accordingly and **paint cow to red and record on white board.**

Cows milk **must** be dumped. **Check white board to see actions for these cows.** Once withdrawal period is over check quality of milk by CMT test, if clear spray cow green.

KEEP WHITE BOARD UP TO DATE, CLEAR TO READ AND KEEP FRESH PAINT ON AFFECTED COWS.