Example of Dairy Farm SOP's

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A standard operating procedure or SOP is a document consisting of step by step instructions on how to complete a particular job on the dairy farm. In the event of someone falling ill or on leave the following templates would be useful to the persons in charge to keep the business running smoothly. These examples can be tweaked to your own farm situation.

Benefits of a well written SOP

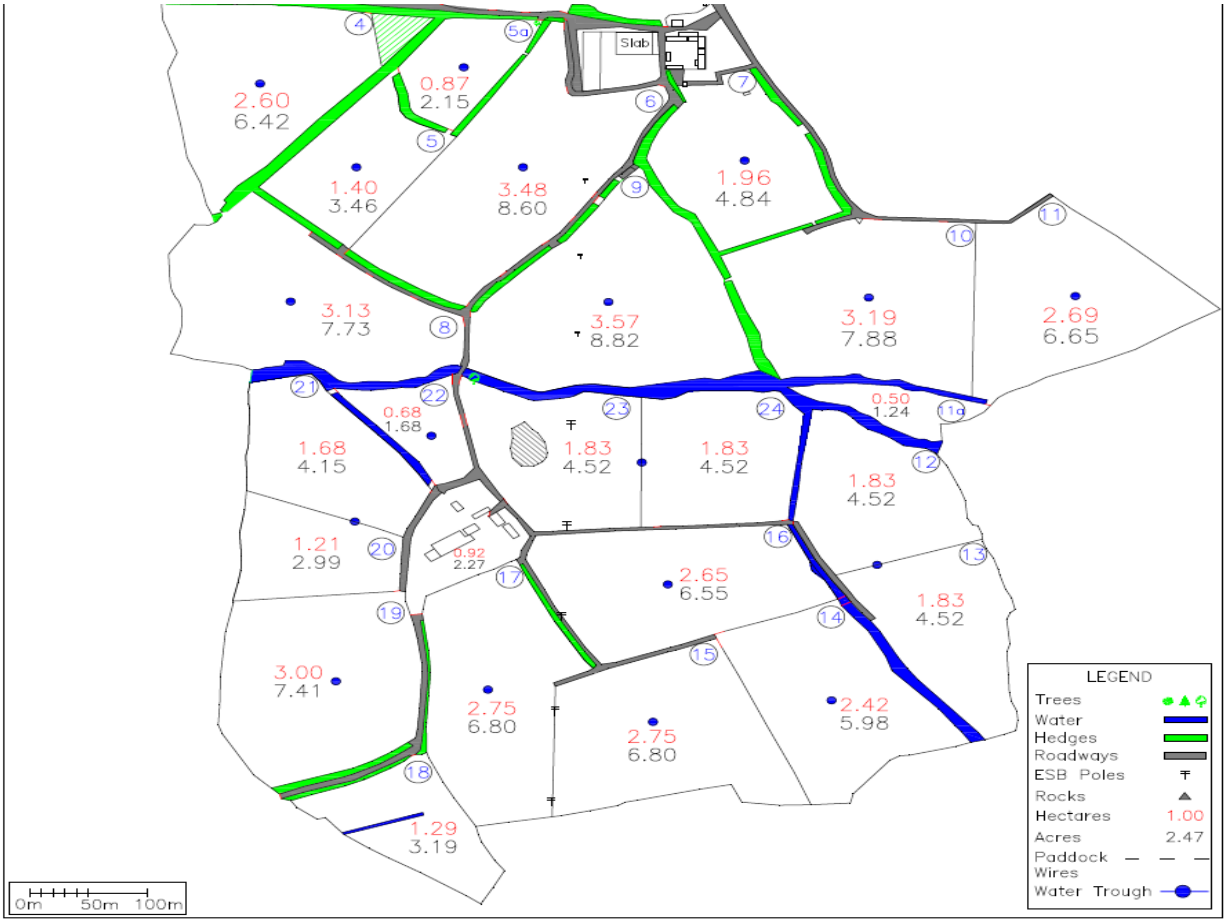
- Provide direction
- Improve communication & reduce conflict
- Reduce training time
- Improve consistency
- Allow somebody to help out in the case of an emergency

Top 10 tips for writing SOPs

1. Write in a clear and readable style
2. Logical
3. Locate beside the workstation where they are needed
4. Laminate
5. Visual- Photos can be included
6. Keep to a single page
7. Build on feedback from internal and external personnel
8. Measurable
9. Test the SOP – Preferably somebody unfamiliar with the task
10. Update and review regularly

Contents

Map of the farm



List of suppliers, land owners and staff

Farm contacts Eircode-	
Name	**Mobile**
Farm owner	
Farm staff	
Milking:	
Vaccinations, general repairs:	
Farm Team	**Mobile**
Advisor:	
Electrician:	
Milk Lorry Driver:	
Milk Quality Co-op:	
Milking Machine technician:	
Mechanic:	
Milk Recording:	
Vet:	
Hoof care:	
AI technician:	
AI company for straws:	
Builder:	
Animal collection:	
Contractor	**Mobile**
Pit:	
Bales:	
Slurry:	
Reseeding:	
Drainage:	

General outline of a day in spring

6.00 am: Milk cows	**1 pm** Lunch
8.30 am: Feed calves milk & meal	**2 pm:** Grassland management (Fertiliser/lime, Slurry, FYM and soiled water, silage, Strip fencing)
9.30 am: Breakfast	**3.30 pm:** Milking (herding, milking, wash-up, herding post-milking
10.15 am: Calf care (Cleaning, bedding, tagging, weighing and veterinary)	**4.30 pm:** Calf care
11.15 am: Heifer care (All tasks relating to the upkeep of yearling heifers)	**5.30 pm:** Finish
12 pm: Paper work	**10pm** Final check on cows calving

Milking procedure (before milking):

1 Turn the three handles on the bulk tank into the milking position

2 In the plant room press **2 green** buttons (1&2) for feeders

3 In the dairy turn blue handle **down** under plate cooler for milking

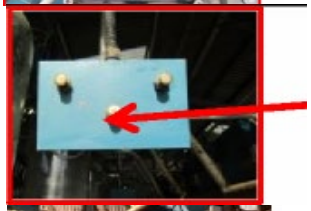
4 Take clean milk sock from box beside filter and place new milk sock into filter

5 In the dairy, press **start** button(2nd from top) to start machine

6 In the parlour turn **down** black handle to milking position

7 Press **remove**. Lift up all clusters from the top to the bottom of the parlour and press the **start** button to start cluster for milking

8 To operate meal press button in the pit. One press is 0.6kg.



9 Pull rope to open front gate when each row of cows are finished milking

Milking procedure (during milking)

1	Wet concrete floors
2	Monitor white board for cow tag numbers that are not going into the tank
3	Take **extra care** regarding painted cows
4	Wear gloves and milking apron and **stay clean** throughout milking
5	Feed the required amount of concentrate to the herd
6	Pre spray all cows (allow spray work for 30 seconds)
7	Strip all cows in the am. Disinfect your hands after stripping any cows with red or blue marks
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 with peracetic acid solution. Wash liners with water hose first and then spray peracetic acid solution afterwards.
12	Post spray all cows (15mls/cow /milking)
13	Treat any cows if needed, **spray cow and update the whiteboard**

Red = dump milk
Orange = 3 teater
Yellow = Once a day milking

Milking procedure (after milking)

1 Hand wash all clusters

2 Put clusters on jetters and attach with claw piece facing upwards

3 In the parlour turn **up** black handle to washing position

4 Turn milk pump switch (inside the door of dairy) to drain position

5 Go to bulk tank, turn all 3 levers to wash position at the bottom of the bulk tank

6 In the dairy, turn off machine (1st button) & turn on wash button (3rd button)

7 In the dairy, turn blue handle under plate cooler to the off position

8 Take out the milk filter sock after the first rinse

9 Check the temp of the bulk tank

Californian Mastitis Test (CMT)

Items Needed

- Disposable Nitrile Gloves
- CMT test tray
- Mastitis test reagent

Procedure

1. Discard the first squirts of foremilk
2. Squirt milk from each quarter into a different well on the CMT test tray (approx 2 mls from each quarter)
3. Mix each sample with an equal volume of reagent
4. Swirl the mixture vigorously for maximum of 20 seconds.
5. Examine the degree of thickening/gelling in each sample.
6. The thicker the solution gets in any one of the samples the higher the SCC levels are in that particular quarter.

Click on the link below to view a video on carrying out a Californian Mastitis Test

https://www.youtube.com/watch?v=OW56-5OhnRs

Treating high SCC lactating cow

Items Needed

- Marker, ankle strap or tail tape
- Disposable Nitrile Gloves
- Methylated / surgical spirits and cotton wool or disinfecting wipes
- Lactating intramammary tubes.

Method

1. Wear appropriate PPE and follows safety and hygiene guidelines.
2. Milk out the quarter completely.
3. Identify the cow with a strap or a marker or tail tape
4. Completely disinfect the teat end thoroughly with cotton wool and methylated / surgical spirits by vigorously rubbing the teat end opening for a minimum of 10 seconds.
5. Check the teat wipe – if there is any dirty colour, repeat the scrub using a new cotton ball or wipe until no more dirt is seen.
6. Keep the nozzle of the tube sterile.
7. Insert the tip of the nozzle into the teat opening and squeeze the contents gently into the quarter - it is not necessary or recommended to insert the tube nozzle to its full depth as this may damage the teat canal.
8. When the tube is emptied into the teat, work the antibiotic up into the quarter by holding the tip of the teat between the thumb and forefinger and massage the antibiotic up the teat into the udder with the thumb and forefinger of your other hand.
9. Spray or dip the quarter.
10. Record the antibiotic used.
11. Make note of the following

✓ Cows number
✓ Treatment used
✓ Withholding period
✓ Date
✓ Mark the cow

Drying off

Items Needed

- Marker, ankle strap or tail tape
- Milking apron / parlour suit and disposable nitrile gloves
- Methylated / surgical spirits and cotton wool or disinfecting wipes
- Dry cow intramammary tubes

Procedure

1. Wear milking apron / parlour suit and nitrile disposable gloves
2. Milk out the cow completely.
3. Identify the cow and clearly mark with an ankle strap, tail tape or marker.
4. Completely disinfect the teat ends thoroughly with cotton wool and methylated / surgical spirits by vigorously rubbing the teat end opening for a minimum of 10 seconds. **This step is critical.**
5. **Disinfect** the teats furthest away first followed by the teats nearest to you.
6. **Treat** the teats nearest you first followed by the more distant teats.
7. Keep the nozzle of the tube sterile.
8. Insert the tip of the nozzle into the teat opening and squeeze the contents gently into the quarter - it is not necessary or recommended to insert the tube nozzle to its full depth as this may damage the teat end.
9. When the tube is emptied into the teat, work the antibiotic up into the quarter by holding the tip of the teat between the thumb and forefinger and massage the antibiotic up the teat into the udder with the thumb and forefinger of your other hand.
10. Spray or dip the quarters.
11. Record the antibiotic used.
12. Make note of the cows number, product used, withholding period & date
13. Keep cows standing for 2 hours after DCT
14. Keep the number of cows to be treated to a manageable number i.e. 20 per person

Click this link below for a short video on drying off cows

https://www.bing.com/videos/search?q=drying+off+a+cow+Teagasc&&view=detail&mid=2CADBA82E3317C1DF69F2CADBA82E3317C1DF69F&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Ddrying%2Boff%2Ba%2Bcow%2BTeagasc%26FORM%3DHDRSC3

Milk fever

1. Is the cow showing signs of muscle tremor, unsteady on feet? If the answer is yes, then
2. Administer one 400ml bottle of injectable calcium subcutaneously behind the shoulder using a flutter valve.
3. If the cow is standing, a long-acting calcium bolus can also be administered.
4. After 1 hour if the cow is still showing signs of milk fever contact the vet
5. Record all treatments in the medicine book
6. Leave this cow in the calving pen for at least the next 48hrs and only partially milk at next milking

Retained placenta

1. The placenta is visibly hanging from the cows bearing 24 hours after calving or the cow has failed to expulse the placenta 24 hours after calving.
2. If subclinical milk fever is suspected as a cause, treat with subcutaneous calcium and/or a calcium bolus.
3. If the placenta is still retained 48 hours after calving, antibiotics prescribed by the vet can be administered to prevent uterine infection.
4. If cow becomes systemically unwell contact the vet.

Calf milk feeding procedure

1. Heat water to 37°C
2. Weigh out milk replacer (3 jugs feeds 5 calves)
3. Pour warmed water into the bucket up to the 1st black mark
4. Add weighed out milk replacer to the water
5. Mix using a whisk
6. Once there are no lumps left add more warm water to the 2nd black mark
7. Place feeder on the gate and add milk
8. Ensure that all calves are drinking
9. Observe calves while drinking
10. Remove the feeder when the milk is gone and rinse with cold water first and squeeze each of the teats to remove any milk
11. Wash the feeder using warm soapy water and ensure all traces of milk and salvia are removed from the feeder and teats
12. Finally rinse feeder with cold water
13. Give calves concentrate (1kg per calf) and straw

Vaccination plan

Example: Dairy Herd Vaccination and Dosing protocol

Vaccination	Timing
Cows	
BVD	1st April
Lepto	1st April
Salmonella	10th Jan
IBR	20 Dec + 20th June
Rotavirus	Last 30 cows 1st March
Calves	
Blackleg	1st April + booster 1st May
IBR	20th June + booster 20th July + 20th Dec
Heifers	
Blackleg	At turnout
IBR	20th June + 20th Dec
Lepto	1st March + 1st April
Cows	
Liver Fluke	At drying off (20th Dec)
Worms	At drying off (20th Dec)
Calves	
Coccidiosis	At 3 weeks old in batches
Cryptosporidia	All calves born after 10th March
Worms	At turnout (may) (4 months cover)
Worms	Mid-Sept & at housing
Fluke & Lice	At housing (November)

2020 Vaccination Planner — Red=Cows Green=0-1 heifers Blue=1-2 heifers

	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEPT	OCT	DEC
TUE						2		1		1
WED	1			1 Bovidec, leptavoid H Tribovax T, bovidec, Leptavoid H		3	1	2		2
THU	2			2		4	2	3	1	3
FRI	3			3	1	5	3	4	2	4
SAT	4			4	2	6	4	5	3	5
SUN	5		1	5	3	7	5	6	4	6
MON	6 Rotave c	Rotavec	2 Bovidec, leptavoid H	6	4	8	6	7	5	7
TUE	7		3	7	5	9	7	8	6	8
WE	8		4	8	6	10	8	9	7	9
THU	9		5	9	7	11	9	10 Salmonella Bovivac S Salmonella Bovivac S	8	10
FRI	10		6	10	8	12	10	11	9	11
SAT	11		7	11	9	13	11	12	10	12
SUN	12		8	12	10	14	12	13	11	13
MON	13		9	13	11	15	13	14	12 Salmonella Bovivac S	14
TUE	14		10	14	12	16	14	15	13	15
WE	15		11	15	13	17	15	16	14	16
THU	16		12	16	14	18	16	17	15	17
FRI	17		13	17	15	19	17	18	16	18
SAT	18		14	18	16	20	18	19	17	19
SUN	19		15	19	17	21	19	20	18	20
MON	20		16	20	18	22 Rispoval Rispoval Rispoval	20 Rispoval	21	19	21 IBR Rispoval Rispoval Rispoval