

Quick Reference for Required Elements in Food Safety and Animal Care SOPs for AMS farms

All Standard Operating Procedures (SOP) must contain enough information for staff, a relief milker or an experienced dairy person to carry out the procedure.

SOP 1: SOP for Pre-Milking These required elements move into the SOP for Cleaning and Maintaining an Automatic Milking System (AMS).

SOP 2: SOP for Milking These required elements move into the SOP for Cleaning and Maintaining an AMS.

SOP 3: SOP for Milking Cattle with Abnormal or Treated Milk (Chapter 6, Section 6.2, and Chapter 12, Sections 12.2 and 12.3) Purpose: explains how the AMS identifies and milks animals with abnormal milk or treated animals and keeps the abnormal or treated milk out of the bulk tank. This SOP should be very clear so staff can find the information that they need.

Required Elements:

- Discard the milk from those quarters that have abnormal milk (e.g. mastitic milk, bloody milk) and for the first 3 days in milk (colostrum).
- Check the treatment records to ensure a treated animal has met the appropriate withdrawal times for milk before shipping her milk.
- When an animal calves, check treatment records to make sure the withdrawal times for any dry cow treatments have been met before shipping her milk.
- For new animals purchased [e.g. springing heifers (less than 60 days before calving), lactating cattle, or dry cows]
 - Test their milk, record the results, ensure it passes the official provincial regulatory test before shipping the milk; OR, obtain a letter of guarantee from previous owner stating that the animal is free from chemical residues or outlines the treatment(s) administered and the withdrawal times.
 - Explain how residual milk remaining in equipment after milking a treated animal is not shipped (e.g. automatic rinse between each animal milked).
 - State how the AMS unit checks for abnormal milk. - Include clear directions describing how staff should enter data in the computer to keep treated milk out of the bulk tank and how staff can access treated cattle information should they need to confirm treatments, or state that a trained person must always be available.

SOP 4: SOP for Cleaning and Maintaining an AMS (Chapter 12, Section 12.5) The post-milking SOP becomes your SOP for cleaning and maintaining an AMS. Purpose: contains enough information to ensure someone doing maintenance on the AMS units will not cause a hazard to milk or meat.

Required Elements:

- If the electronic milk monitoring device (e.g. TTR or AMS) has alarms, check to ensure there were no cleaning or milk temperature alarms in both the main and buffer tank (TTR, etc.) or attention lists (slow cooling of milk, too long between washes, abnormal milk, etc.) or exception reports.

- If the electronic milk monitoring device does not have alarms, check the milk temperature a minimum of twice a day, with at least 8 hours between each check, and review the history of the milk temperature since your last check, and record the milk temperature.
- Check and record the temperature of the hot water or wash water (monthly) on each AMS or washing system (this can be done automatically with some TTRs or electronic monitoring devices).
- Check and record the cleanliness of milking equipment regularly for each AMS or washing system (e.g. each AMS, each CIP system sink, and each bulk tank) (minimum acceptable frequency is monthly, weekly is recommended).
- Post a milk pick-up/cleaning procedure for the milk truck drivers. The instructions should include how to switch diversion from the main tank to the buffer tank, how to start the wash for the main tank and how to start the cooler for the buffer tank.

SOP 5: SOP for Treating Cattle (Chapter 5, Section 5.6, and Chapter 12, Section 12.1) Purpose: contains enough information to ensure someone treating animals would not cause a milk or meat hazard (i.e. prevent chemical residues through proper administration of medicines).

Required Elements:

- All treatments must be entered into the AMS software prior to treating the animal. This will ensure that treated animals are appropriately “marked” as treated via the software and the milk is diverted from the bulk tank, as applicable.
- Read and follow label directions to determine proper dosage and ensure livestock medicines are administered properly.
- Use products approved in Canada for use in dairy cattle, unless written veterinary directions indicate otherwise.
- Obtain written veterinary directions for all treatments given extra-label. In Quebec, all medications purchased for dairy animals must be accompanied by a written veterinary prescription.
- Record the identity of any animals carrying broken needles and record the site. - Record the treatment and the appropriate withdrawal dates for both milk and meat.
- Record treatments for all cattle on the farm, including pesticides