

## TIE STALL SANITATION

### 1. PURPOSE

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Maintaining a clean tie stall is essential in keeping the animal clean and thereby reducing the spread of environmental pathogens to the teat canal and wounds, not only for individual cows, but also for her neighbours.

### 2. RESPONSIBILITY

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- 2.1 Trained personnel
- 2.2 Dairy Barn Manager

### 3. MATERIALS

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- 3.1 Manure scraper
- 3.2 Wheelbarrow
- 3.3 Pitchfork
- 3.4 Shovel
- 3.5 Wood shavings
- 3.6 Chopped straw
- 3.7 Aquasorb® or equivalent absorbent powder
- 3.8 Limestone
- 3.9 Virkon® or equivalent disinfectant
- 3.10 Personnel Protective Equipment (gloves, mask, eye protection)

### 4. GENERAL

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- 4.1 Cleanliness is maintained frequently throughout the day (hourly) by removing soiled bedding.
- 4.2 Assess the cleanliness of the animal and tie stall to determine if sanitation of the stall is adequate. If inadequate, appropriate corrective action must be taken. Refer to SOP [DC-304: Dairy Cow Cleanliness Assessment](#).
- 4.3 Tie stalls which have been exposed to cows with contagious infections (e.g., Staph. aureus, toxic mastitis, diarrhea, Klebsiella, etc.) MUST follow disinfection procedures.

### 5. PROCEDURE

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#### 5.1 CLEANING:

- 5.1.1 Remove all manure and wet bedding by pulling it out onto the manure gutter grates.
- 5.1.2 Replace this bedding with the clean wood shavings or chopped straw next to the cow (front half of the stall).
- 5.1.3 Push the soiled bedding down through the grates and into the gutter.
- 5.1.4 For long chopped straw:
  - 5.1.4.1 Pick up the soiled bedding with a pitchfork or shovel and placing it into the wheelbarrow.
  - 5.1.4.2 Empty the wheelbarrow by dumping it into the solid manure conveyor at the opposite end of the barn.
  - 5.1.4.3 Start the conveyor first, empty the wheelbarrow, and stop the conveyor before walking away.

#### 5.2 BEDDING:

- 5.2.1 The cows are bedded daily, in the morning during milking.

- 5.2.2 Remove all manure and wet bedding by pulling it out onto the manure gutter grates.
- 5.2.3 Move all the clean bedding away from the udder/hind leg.
- 5.2.4 Sprinkle Aquasorb® (or equivalent) on the mat under the udder/hind leg area.
- 5.2.5 Add 1-2 heaping shovels of bedding on each side of the cow/heifer.
- 5.2.6 Add ½-1 shovels of bedding under the cow/heifer, making sure to cover the udder/hind leg area.
- 5.2.7 Repeat the steps above if the tie stall becomes excessively damp or wet throughout the day. (e.g., leaky cow, cow too short for tie stall)

5.3 TIE STALL DISINFECTION:

IMPORTANT
Tie stalls which have been exposed to cows with contagious infections (e.g., Staph aureus, toxic mastitis, diarrhea, Klebsiella, etc.) <u>MUST</u> be disinfected with Virkon® (or equivalent) and limestone.

- 5.3.1 Remove all remaining bedding in the back half of the stall.
- 5.3.2 Scrape any bedding/manure stuck to the mat stall dividers, neck rail and manger curb.
- 5.3.3 Sweep the back half of the stall, removing all remaining bedding.
- 5.3.4 Don mask, eye protection and gloves.
- 5.3.5 Prepare the Virkon® (or equivalent) as per manufacturer instructions.
- 5.3.6 Disinfect the mat stall dividers, neck rail and manger curb with Virkon® (or equivalent).
- 5.3.7 Allow to air dry.
- 5.3.8 Sprinkle limestone.
- 5.3.9 Leave the stall empty for a minimum contact time for Virkon per manufacturer instructions.
- 5.3.10 Add bedding before transferring a cow into the stall.

Document Status and Revision History

DATE	STATUS
2-May-2018	Version 01: Approved by Mac Campus FACC
10-July-2023	Version 02: Reviewed and approved by Macdonald Campus FACC