

**FLUSHING GUTTERS IN THE DAIRY BARN****1. PURPOSE**

To describe the schedule and procedures for complete and thorough flushing of gutters.

**2. RESPONSIBILITY**

Trained and qualified personnel

**3. SCHEDULE**

- 5:00 A.M.
- After morning break
- Mid-afternoon
- After evening milking

**4. PROCEDURES**

- 4.1. Gutters should be unblocked as needed throughout the day and checked to ensure they are flowing well every time.
- 4.2. Be sure one of the gutter valves in the barn is open (Figure 1; Gutter Valve Position), using the gutter valve tool (Figure 2; Gutter Valve Tool) before starting the manure pump.
  - 4.2.1 Gutter valves are located along the corridor at north end of the main barn in front of the box stalls (Fig. 3; Gutter Valve Location).
  - 4.2.2 Each valve (1-4) controls the gutter corresponding to its row (1-4).
  - 4.2.3 The switch for Gutter #1 is reversed.



**Figure 1: Gutter Valve Position**

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**Figure 2:** Gutter Valve Tool

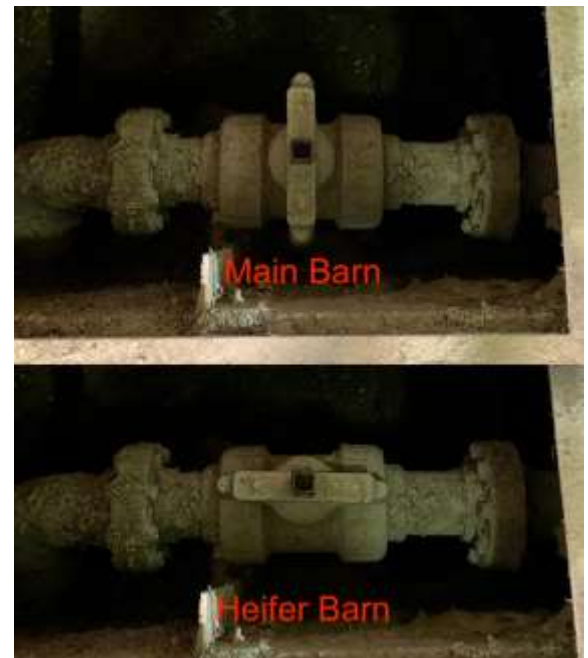


**Figure 3:** Gutter Valve Location



**Figure 4:** Gutter Control (Pre-pit pump timer)

- 4.3. Turn on the agitator in the room behind the Total Mixed Ration (TMR) mixer.
- 4.4. Agitate until the pre-pit is well mixed.
  - 4.2.4 If the pre-pit is full and will not blend: ask someone (usually the feed room person) who knows to empty pre-pit to half, then agitate.
- 4.5. Turn off agitator once manure is blended (usually 2-3 minutes.)
- 4.6. Ensure the position of main valve located in the blue cage in the feed room is set to the main barn. (See Figure 4 Gutter Control (pre-pit pump timer))
- 4.7. Set the timer to 30 minutes to start the circulating pump in the pre-pit.
- 4.8. Turn the main valve in blue the cage in the feed room to flush the dairy barn gutters. When the manure system is properly managed, it should take 5-7 minutes to flush each gutter. (See Figure 5:Gutter Switch Positions)
- 4.9. Flush one gutter at a time.



**Figure 5:** Gutter Switch Positions

**FLUSHING GUTTERS IN THE DAIRY BARN**

- 4.10. The valve of the next gutter must be open before closing the valve of the gutter that was just flushed THERE MUST ALWAYS BE ONE GUTTER VALVE OPEN. If they are all closed, the pressure will burst a pipe.
- 4.11. PAY ATTENTION TO HOW THE GUTTERS ARE FLOWING.
  - 4.2.5 Observe where manure spills over the lip at the center of the barn. If it is backed up, move it along with the steel pole.
  - 4.2.6 If the manure is too thick and not flowing; add water until the proper consistency is attained. Add water at the top end of a gutter as it is flushing. Use the fire hose hung on the wall to the right of the hydro room.
- 4.12. Continue along the barn until all the gutters have been flushed.
- 4.13. When finished, ALWAYS LEAVE ONE GUTTER VALVE OPEN. If they are all closed, the pressure will burst a pipe.
- 4.14. Turn off the circulating pump by gently turning the timer off.

**Document Status and Revision History**

| DATE        | STATUS  |
|-------------|---|
| 7-Nov-2017  | Version 01: MAC FACC approved                 |
| 10-Jul-2023 | Version 02: Reviewed and approved by MAC FACC |