Feedyard Floor Pen Management

Feedyard pen floor management can have a significant impact on a feedyard's profitability. Excessive mud in the pen has been shown to decrease cattle ADG (25 to 37%), DMI (15 to 30%) and FE (20 to 33%)[1,2]. Respiratory problems occur more frequently and treatment costs increase under very dusty conditions. Thus, it often becomes a balancing act between conditions that are too wet and those that are too dry.

Protocol for Feedyard Pen Floor Management

1. Cattle Manager will be responsible for ensuring that pen floor conditions are at acceptable levels.
2. Feedyard Manager will be responsible for ensuring that every pen is cleaned at least twice per year, and if applicable each pen will be cleaned after each "turn" of cattle.
3. Feedyard R & M crew will monitor the areas where the larger equipment cannot reach around the water tanks, bunks, shades and other structures to prevent excessive build-up of manure and dirt.
4. Feedyard R & M crew will use front end loader and box scraper to clean pens and they will not be used for feed handling unless thoroughly cleaned and disinfected prior to handling feed.
5. General guidelines for pen floor management are:
   A. Mud depth should not consistently be deeper than the ankles of cattle in pens.
   B. Slopes of pens should be maintained to allow water to run off away from the feed bunks and not pool excessively in the pens.
   C. If slope is not sufficient to allow for proper drainage, a mound should be constructed in each pen to allow cattle to have a dry place to lie down. This means the slope of the mound should be steep enough to allow water runoff but not too steep that cattle will not lay on it.
   D. Pens should be thoroughly cleaned after each "turn" of cattle and as often as conditions warrant. Each pen will be thoroughly cleaned twice per year.
   E. All bunk aprons should be cleaned as needed so cattle do not have to stand in mud to eat from the bunk.
   F. The pen floor- bunk apron interface should be maintained so that cattle do not have to step up to the apron.
6. During periods of excessive snowfall:
   All feed alleys will be cleaned as soon as possible with the maintainer blade. All bunks will then be cleaned out using the blower on the 4030 John Deere. All pens will then have at least one path cleared along the perimeter of the fence and along the bunk to be allowed areas to walk and lay down free of excessively deep snow. This will be cleared out using the pen maintenance loader. Cattle will have access to fresh feed and water as soon as possible.
7. During periods of excessive rainfall:
   All pens will be monitored to ensure that mud is minimized as much as possible. In pens where drainage is inadequate the cattle should be moved to a pen with better drainage and/or a mound. All cattle will have access fresh feed and water. All feed alleys will be groomed to allow for maximum water runoff.
8. During periods of excessive heat:
   Sprinklers will be turned on in every other pen for 30 minutes every 4 hours and rotated until all pens receive a sprinkler treatment. Dust will be controlled in the pens through the use of the sprinklers in the pen and around the yard with the use of the water truck. The cowboy crew will monitor cattle for heat stress by observing respiration rates and intensity of the cattle and will notify management if the heat stress plan needs to be altered. All shades will be installed so that there is a maximum amount of shade provided to the animals. Cattle water intake will increase dramatically and sprinklers will be running so the water system must be closely monitored by the feedyard R & M crew to ensure adequate flow and pressure to the sprinklers, water tanks and feedmill.
9. During periods of excessive cold:
   Pens will be bedded with cornstalks and cattle allowed access to fresh feed and water. Water tanks will be closely monitored by both the cowboy crew and the feedyard R & M crew to ensure water tanks/lines are not frozen. Cattle will be moved to the pens that provide the best protection from the prevailing wind.

[1]Bond, T.E., W.N. Garrett, R.L. Givens and S.R. Morrison. 1970. Comparative effects of mud, wind and rain on beef catte performance. Paper No. 70-406. Annu. Meeting A.S.A.E.
[2]National Research Council. 1981. Effect of environment on nutrient requirements of domestic animals. National Academy Press, Washington, DC.