

2.6.2. Cross Contamination Control of Subsequent Mixes

Standard

Are precautions taken to prevent cross contamination of subsequent mixes; this may include records of flushing, sequencing and cleaning?

Evidence of documented records such as production sheets.

Purpose

Ensure appropriate procedures are conducted between mixes to prevent risks of cross contamination.

Reason

Contamination in the manufacturing process, present multiple feed safety risks such as:

- Drug carryover into non-target species
- Unsafe concentration/residue in medicated feeds
- RAM contamination into ruminant feeds
- Chemical contamination/residue
- Dust contamination, risk of microorganisms

What is Acceptable?

Three practices discussed below can be used to control cross contamination of subsequent mixes. All equipment uses in the manufacturing process shall be considered. These include but not limited to, mixer, loading equipment, ribbons, paddles, hopper, augers, etc.

Physical Cleanout

A physical cleanout should be conducted as per pre-determined frequency. All equipment used in the mixing, loading and out-loading should be cleaned. The cleaning process shall be clearly documented (refer to Fact Sheet 2.7.1) and validated (refer to Fact Sheet 8.1.2). Examples might be:

1. Dry-type cleaning: includes vacuuming, sweeping or scraping equipment
2. Wet-type cleaning: Convenient where liquid feeds are produced*

*Wet-type cleaning should be risk-based. The correct concentration of chemical and method shall be used to ensure there is no chemical carryover into subsequent feeds.

Flushing

Flushing uses an abrasive-type ingredient run through the mixer or process line at volume that has been validated as effective (See Fact Sheet 8.1.2).

Table 1. SFMCA Flush Volume Guideline.

Flush Volume (%)	Cleaning System
5	Fully self-cleaning system
25	Non-self-cleaning system

Flushing should be used where the operator has identified a high-risk producing feed and sequencing will not ensure risk of cross contamination is eliminated. Flushing can also be part of standard practice in a mill where no high-risk feeds are manufactured to clean out mixers and avoid build up or residues.

Operators shall pick an abrasive-type flush material appropriate to their operation, such as rice hulls.

Sequencing

Operators may preplan their order of production, storage and distribution designed to reduce the risk of cross contamination into subsequent feeds.

Operators shall take into consideration the following factors when designing a sequence:

1. Risks present to both human and animal health.
2. Animal feeds requiring withdrawal periods for slaughter, lactation of laying hens.
3. Category S4 medicated feeds, withdrawal, target species.
4. Medicated feeds: order as per risk of carryover to next batch.
5. RAM Feeds.
6. Species specific sensitivity.

Table 2. Non-exhaustive list of species-specific sensitivities.

Medication	Group	Sensitive Species	Notes
Lasalocid	Ionophore	Horses	Severe to fatal effects
Maduramicin	Ionophore		
Monesin	Ionophore	Horses	Severe to Fatal
Narasin	Ionophore	Swine	
Ractopamine			
Salinomycin	Ionophore	Pre-ruminating calves	
Semduramicin	Ionophore		

Records

All records shall be maintained per cleanout/sanitisation. These shall form part of your manufacturing records (Fact sheet 4.2.1).

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