

AFIA SAFE FEED/SAFE FOOD HAZARD GUIDELINES

Class	Potential Hazards	Potential Sources
Chemical	Dioxin/PCBs¹ Medicated Feed Additives² Feed Additives³ Heavy Metals⁴ Mycotoxins⁵ Pesticides⁶ Industrial Contaminants⁷	Cross contamination in feed mill, batching error, weighing error during batching, ingredient, intentional or unintentional contamination.
Biological	BSE⁸ Pathogenic enteric microbes⁹	Contaminated feed ingredients, animal feces or urine, contamination during transport, contamination on farm

¹Dioxin/PCB tolerance levels have not been established for feed. Generally, any levels 2 parts per trillion of dioxin (including PCBs) or higher in finished feed should result in consideration of sampling for the source of the dioxin. The government is attempting to establish baselines of dioxin in various ingredients.

^{2,3}Feed additives and medicated feed additives are defined as hazardous if used in an unapproved manner and exceed the mineral feed tolerances established by the National Research Council’s *Mineral Tolerance of Domestic Animals* (NRC, 1980) or unapproved animal drug levels as defined by 21 CFR, Part 558 *et. seq.*, as applicable.

⁴Heavy metals are deemed hazardous if the levels in feed exceed the feed tolerances established by the National Research Council’s *Mineral Tolerance of Domestic Animals* (NRC, 1980).

⁵Mycotoxin action levels have been established by FDA for aflatoxins, vomitoxin (DON) and fumonisin in several ingredients and finished feed. Feed and feed ingredients above these levels can be considered hazardous. Other mycotoxins may be considered contaminants at levels reasonably likely to cause harm to animals or humans based on scientific research.

⁶Pesticide tolerances for feed ingredients are established in 40 CFR, Part 180. If no tolerance is established, then the tolerance is zero and any feed ingredient, except a raw agricultural commodity (RAC), can be considered contaminated and hazardous if it contains a pesticide tolerance not established by regulation.

⁷Industrial contaminants are hazardous if they are reasonably likely to cause harm to animals or humans based on scientific research.

⁸Compliance with the FDA “BSE Feed Rule” (21 CFR § 589.2000/2001) indicates adherence to these guidelines.

⁹Pathogenic enteric microbes are any microbes that are reasonably likely to cause harm to animals or humans based on scientific research. Elimination or reduction of these risks indicates adherence to these guidelines.

