## Yeast Derivatives, Pathogen Inhibitors

## ITEM A

SYNTHETIC ? substances allowed for use in organic livestock production

## ITEM B

1. The substance's common name.

Mannon Oligosaaccharides, Oligosaaccharides, MOS 3. The intended or current use of the substance such as use as a pesticide, animal feed additive, processing aid, nonagricultural ingredient, sanitizer or disinfectant.

Used as an alternative livestock medication for treatment and prevention of toxemia. 4. A list of the crop, livestock or handling activities for which the substance will be used. If used for crops or livestock, the substance's rate and method of application must be described. If used for handling (including processing), the substance's mode of action must be described.

Blended with botanicals and biologics into powder, capsules and boluses for use primarily in bovines and poultry, suitable for other livestock. A digestive aid where there is a need to inhibit pathogen growth in the digestive tract. Used to relieve Winter Dysentary, Johne's Dysentary and other digestive upsets. Typical dosage levels of MOS as part of a blended product would be 1/8 -1/2 oz per day in Cattle mixed into the daily ration. Poultry use is typically 0.05-0.1% in feed ration. Research indicates that there is no realistic maximum limit on intake.

12. A ``Petition Justification Statement" which provides justification for one of the following actions requested in the petition:

Mannan Oligosaccharides is a yeast derived natural sugar complex, which contains a small number of similar glucose, fructose and mannose monosaccharide units, arranged in either a linear or branched structure. Mannan Oligosaccharides is a natural dry powder supplement added to livestock feed rations as an effective substitute for feed grade antibiotics. The yeast source for the mannan oligosaccharides are non-irradiated and are non-GMO yeasts.

Mannan Oligosaccharides are used to control pathogenic scours of all kinds in livestock, i.e. calf and cow diarrhea caused by salmonella, E. coli, clostridium and enteritis for example. Mannan oligosaccharides prevent bacterial infections via mechanisms that are different from those of antibiotics, and therefore circumvent the pathogens ability to develop resistance.

Mannan Oligosaccharides also are an immune modulator that increases IgA bile antibody production by 25%. This is a highly effective alternative to feed grade antibiotics.