

FINDING OF NO SIGNIFICANT IMPACT

for

**CYGRO (maduramicin ammonium) 1% Premix
for use in Broiler Chickens**

**American Cyanamid Company
Princeton, NJ**

The Center for Veterinary Medicine has carefully considered the potential environmental impact of this action and has concluded that this action will not have a significant effect on the quality of the human environment and that an environmental impact statement therefore will not be prepared.

American Cyanamid Company requested approval of NADA 139-075 for the use of CYGRO (maduramicin ammonium) 1% Premix in broiler chickens. The product is to be mixed in complete broiler feed to provide 5-7 ppm maduramicin from day one of age to 3 days before slaughter to control coccidiosis caused by specified organisms.

American Cyanamid submitted the attached environmental assessment (EA) signed by Joyce Yates on January 23, 1987, in support of the approval of the NADA. The EA indicates that the product will be entirely manufactured in Catania, Italy, and Resende, Brazil. American Cyanamid has certified that they comply with the environmental requirements of each of these countries.

American Cyanamid has calculated that the maximum possible concentration of maduramicin which could be found in agricultural soils following the application of fresh broiler litter from broilers fed CYGRO 1% Premix could be 0.059 ppm maduramicin. Runoff from these soils could contain a maximum of 0.29 ppm maduramicin. It is noted that the actual soil and runoff concentrations would be expected to be appreciably lower than these calculated maximum concentrations for two reasons. First, data in the EA indicate that only 21.3% of metabolized maduramicin was actually detected in litter from broilers. The maximum concentration was calculated based on 100% maduramicin being contained in broiler litter. If the concentration is calculated based on the 21.3% parent remaining in litter, then the concentration expected in agricultural fields and runoff would be expected to be appreciably lower than the calculated maximum concentration. Second, maduramicin has been found to degrade relatively rapidly in both manure and agricultural soils. Because broiler litter would be expected to remain in broiler houses for approximately six months before spreading onto agricultural fields, the concentration of maduramicin remaining in the litter would be expected to be appreciably less than the concentration used in calculating the maximum concentration.

Data in the EA also indicate that maduramicin is moderately sorbed to three different soil types. Soil sorption reduces the likelihood that a chemical will be found in runoff water, ground water, or the atmosphere. Therefore, maduramicin would be expected to be relatively non-mobile once it is spread and mixed with agricultural soils as a source of fertilizer.

Data contained in the EA indicates that even at the maximum soil and runoff concentrations toxicity to environmental organisms is not expected. Additional data indicate that adverse occupational effects to humans are also not expected from the use of CYGRO 1% Premix.

5/8/67
Date

[Signature]
Preparer, HPV-152

Date

Adrian R. Gabuter
Primary Action Officer, HPV-135

5/8/67
Date

[Signature]
Chief, Environmental Staff, HPV-152

Attachment

cc: Orig. & Dup., (N139-075 C009)
Office File, HPV-150
Office File, HPV-152 ✓
Reading Board, HPV-152

CEBirkson:cbm:5/6/67(N#35)