Date of Approval: March 31, 2003

FREEDOM OF INFORMATION SUMMARY

ANADA 200-355

This approval provides for the combined use of three approved Type A medicated Articles (Pennchlor™-chlortetracycline, Bio-cox® –salinomycin and 3-Nitro®-roxarsone) in Type C Medicated Feeds for use in broiler chickens.

Sponsored by:

Pennfield Oil Company
Omaha, Nebraska 68144

FREEDOM OF INFORMATION SUMMARY

1. GENERAL INFORMATION:

a. **ANADA Number:** **200-355**

b. Generic Sponsor: PennField Oil Company
14040 Industrial Road
Omaha, Nebraska 68144
21 CFR 510.600: Labeler Code: 053389

c. Established Name: Chlortetracycline
Salinomycin sodium
Roxarsone

d. Trade/Proprietary Name: Pennchlor™
Bio-Cox®
3-Nitro®

e. Dosage Form: Type A Medicated Articles

Note: This ANADA provides for the combined use of three approved Type A Medicated Articles Pennchlor™ (chlortetracycline), Bio-Cox® (salinomycin sodium), and 3-Nitro® (roxarsone) in Type C Medicated Feeds, rather than a premix incorporating all three of these compounds.

f. How Supplied: Chlortetracycline: 50-lb bags
Salinomycin sodium: 50-lb bags
Roxarsone: 50-lb bags

g. How Dispensed: OTC

h. Label Claim of Amount of Active Ingredient(s): Chlortetracycline- 50 to 100 g/lb in Type A Medicated Articles
Salinomycin- 30 and 60 g/lb in Type A Medicated Articles
Roxarsone- 10, 20, and 50% (45.4, 90.8, 227 g/lb) in Type A Medicated Articles

i. Route of Administration: These drugs are administered orally by adding the Type A Medicated Articles to complete broiler chicken feed (Type C Medicated Feed)

j. Species/Class: Broiler chickens

k. Recommended Dosage: Chlortetracycline, 500 grams per ton (.055%)

Salinomycin, 40 to 60 grams per ton (.0044-.0066%)
Roxarsone, 45.4 grams per ton (.005%)

l. Pharmacological Category: Antibacterial, anticoccidial

m. Indications for use: For the prevention of coccidiosis in broiler chickens caused by *Eimeria tenella*, *E. necatrix*, *E. acervulina, E. maxima*, *E. brunetti*, and *E. mivati*, including some field strains of *E. tenella* that are more susceptible to roxarsone combined with salinomycin than salinomycin alone, and as an aid in the reduction of mortality due to *E. coli* infections susceptible to chlortetracycline.

n. Equivalent Product:

Pennchlor™
Chlortetracycline
NADA 138-935
Pennfield Oil Company

o. Pioneer Product/ Listed Product:

Aureomycin®
Chlortetracycline
NADA 48-761
Alpharma, Inc.

Bio-Cox®
Salinomycin sodium
NADA 128-686
Alpharma, Inc.

3-Nitro®
Roxarsone (3-nitro-4-hydroxyphenylarsonic acid)
NADA 7-891
Alpharma Inc.

Aureomycin®-Bio-Cox®-3-Nitro®
Chlortetracycline/Salinomycin/Roxarsone
NADA 140-867
Alpharma, Inc.

2. TARGET ANIMAL SAFETY AND DRUG EFFECTIVENESS:

Pennchlor™ and Aureomycin® were both found to comply with the results of NAS/NRC/ DESI evaluation for effectiveness as published in the Federal Register (61 FR 35949-35958; July 9, 1996). These products approved under the DESI process were found to be equivalent at the codified level 21 CFR § 558.128(d)(1)(viii) of 500 g/ton for chickens (61 FR 35949-35958; July 9, 1996).

The Center's fourth generic policy letter dated November 2, 1989, as published in the Federal Register on January 30, 1990 (55 FR 3107), states that the approval of a new generic Type A Medicated Article entitles the sponsor to approval of all the feed combinations for which the pioneer is approved. Bioequivalence and tissue residue studies are not required for approval of the feed use combinations.

Chlortetracycline (Pennchlor-Pennfield) is codified under 21 CFR § 558.128(a)(5). Chlortetracycline (Aureomycin-Alpharma) is codified under 21 CFR § 558.128(a)(1). Salinomycin sodium is codified under 21 CFR § 558.550. Roxarsone is codified under 21 CFR 558.530. The combination is codified under 21 CFR § 558.550(d)(1)(xv).

3. HUMAN SAFETY:

a. Tolerances and Safe Concentrations of Residues

The tolerances established for the pioneer product apply to the generic product.

Tolerances for the sums of residues of the tetracycline, including chlortetracycline in tissues of chickens, are as follows: (a) 2 parts per million (ppm) in muscle; (b) 6 ppm in liver; (c) 12 ppm in fat (21 CFR § 556.150).

The acceptable daily intake for total chlortetracycline residues is 25 micrograms per kilogram of body weight per day.

Under NADA 128-686 a tolerance for salinomycin was not required because residue levels in all three broiler tissues (muscle, liver, and skin/fat) were significantly below the established safe concentration.

Tolerances of arsenic (from roxarsone) are established at 0.5 ppm in uncooked muscle tissue and 2 ppm in uncooked edible by-products of broiler chickens with liver as the target tissue (21 CFR § 556.60).

b. Withdrawal Time

Based on the limitation in 21 CFR § 558.550(d)(1)(xv), a five - day withdrawal time is required for the combination of chlortetracycline, salinomycin and roxarsone.

c. Regulatory Methods for Residues

The regulatory analytical method for the determination of residue of chlortetracycline is a microbiological test using *Bacillus cereus* var. *mycoides* (ATCC 11778). The method is found in Antibiotic Residues in Milk, Dairy Products, and Animal Tissues: Methods, Reports and Protocols, Revised October 1968, Reprinted December 1974, National Center for Antibiotic and Insulin Analysis, FDA, Washington, DC 20204.

Under NADA 128-686 a regulatory method for salinomycin was not required because residue levels in all three broiler tissues (muscle, liver and skin/fat) were significantly below the established safe concentration for total residues.

The analytical method for the determination of roxarsone in tissues is a spectrophotometric method. The method, entitled "Arsenic (Total) Residues in Animal Tissues, Spectrophotometric Method," is published in the Official Methods of Analysis of AOAC International, 16th edition.

4. AGENCY CONCLUSIONS:

This ANADA submitted under section 512(b) of the Federal Food, Drug, and Cosmetic Act satisfies the requirements of section 512 (n) of the act and demonstrates that the combination of chlortetracycline, salinomycin and roxarsone, when used under its proposed conditions of use, is safe and effective for its labeled indications.

5. ATTACHMENTS:

Attached labeling: Type C Medicated Feed (Blue Bird) – Generic and Pioneer

Copies of applicable labels may be obtained by writing to the:

Food and Drug Administration
Freedom of Information Staff (HFI-35)
5600 Fishers Lane
Rockville, MD 20857

Or requests may be sent via fax to: (301) 443-1726. If there area problems sending a fax, call (301) 827-6567.