DEPARTMENT OF HEALTH & HUMAN SERVICES **Public Health Service**

Food and Drug Administration
Rockville MD 20857

I-011236-P-0080-TS
I-011236-P-0082-TS

U.S. Fish & Wildlife Service
Aquatic Animal Drug Approval Partnership Program
Attention: David Erdahl, Ph.D.
Branch Chief, AADAP
4050 Bridger Canyon Road
Bozeman, MT 59715

Re: Study Number 17MT-09-TAS.1-01 and Target Animal Safety technical section

Dear Dr. Erdahl:

Based upon the information you submitted on November 8, 2011 (P-0080), and December 1, 2011 (P-0082) and amended on December 5, 2011 (T-0083) and the information contained in investigational new animal drug file (INAD) 011236, we consider the Target Animal Safety technical section to be complete. The technical section is complete for the use of 17 alpha-methyltestosterone (17MT) medicated feed for the production of predominantly (>80%) male populations of tilapia at a dose of 9 mg 17MT/kg body weight/day for 28 consecutive days when administration begins prior to the fish reaching 14 days post hatch.

TARGET ANIMAL SAFETY

This technical section complete letter represents our finding that the studies and other information essential to determining target animal safety are complete and accepted. We also evaluate target animal safety in our review of other technical sections, particularly the Effectiveness and All Other Information technical sections.

LABELING

We reviewed the draft label language related to target animal safety. The submitted information is acceptable.

ALL OTHER INFORMATION (AOI)

Thank you for submitting AOI pertinent to the Target Animal Safety Technical section. Please include any additional information that becomes available in the AOI technical section.

GENERAL COMMENT

The study protocol states that if microscopic lesions or changes are observed in a particular 17MT dose group, tissues will be examined in the next lower 17MT dose group. The protocol further states that if microscopic lesions or changes are observed in any tissue, then that tissue will be examined in all fish in that 17MT dose group and in the next lower dose group until the lesion or change is no longer observed. During the study, lesions or changes were observed in the heart of fish in the 5X dose group.

However, the hearts were examined in only 8 of the 30 fish collected from the 5X dose group and in only 8 of the 30 fish collected from the 3X and 1X dose groups. The heart should have been examined in all 30 fish in all three dose groups. This protocol deviation should have been identified and the deviation's impact on the study outcome discussed. We do not believe that the deviation impacted the interpretation of the study results because the number of hearts examined was adequate to characterize the cardiac lesions and changes in each 17MT dose group. While there was no impact on this study, a similar deviation may impact a future study where similar tissue examination procedures are used.

Include a copy of this technical section complete letter when you submit your new animal drug application. Please contact us if there are changes in the product development plan (e.g., indication, dosage, duration of use) or you become aware of any issues that may impact the status of this technical section or your application. We will make a final decision on whether we can approve your application after we have reviewed all of the data for all applicable technical sections and any other information available to us, as a whole, and determined whether the requirements for approval described in the Federal Food, Drug, and Cosmetic Act have been met.

If you submit correspondence relating to this letter, your correspondence should reference the date and the principal submission identifiers found at the top of this letter. If you have any questions or comments, please contact me at 240-276-8341. You may also contact Jennifer Matysczak, Leader, Aquaculture Drugs Team, at 240-276-8338.

Sincerely,

{see appended electronic signature page}
Cindy L. Burnsteel, DVM Director,
Division of Therapeutic
Drugs for Food Animals
Office of New Animal Drug Evaluation
Center for Veterinary Medicine

Enclosure:
Draft Section of the Freedom of Information Summary: Target Animal Safety