

[BFAR FISHERIES ADMINISTRATIVE ORDER NO. 225-1, January 08, 2007]

GUIDELINES FOR THE IMPORTATION AND CULTURE OF THE PACIFIC WHITE SHRIMP (PENAEUS VANNAMEI)

Pursuant to the provisions of Fisheries Administrative Order No. 225, Series of 2007 entitled "**Allowing the importation of the broodstock of Pacific White Shrimp (*Penaeus vannamei*) and culture of the offspring thereof**" the following rules and regulations are hereby issued:

SECTION 1. Shrimp Broodstock Importation - the following measures shall be observed in the importation of *P. vannamei* broodstock:

a. Pre-border Biosecurity Measures

1. Prior to the issuance of special import permit to accredited shrimp hatchery for importation of SPF/SPR *P. vannamei* broodstock, Proponent shall submit a CERTIFICATE OF COMPLIANCE duly signed by the National BFAR Director. The issuance of the Certificate shall be based on the results of the inspection of hatchery facilities that shall be authorized to breed *P. vannamei*. Inspection and accreditation shall be undertaken by National Fisheries Research and Development Institute (NFRDI) to be assisted by concerned BFAR Regional Offices.
2. The broodstock to be imported must only come from the following Pacific White Shrimp broodstock facilities originating from the United States of America known to have the capacity in producing broodstock that are Specific Pathogen Free (SPF) and/or Specific Pathogen Resistant (SPR).
 - i. High Health Aquaculture, Incorporated (Hawaii)
 - ii. Kona Bay Marine Resources (Hawaii)
 - iii. Molokai Sea Farms International (Hawaii)
 - iv. Rainbow Hawaii Farms (Hawaii)
 - v. Shrimp Production Hawaii Inc. (Hawaii)
 - vi. Shrimp Improvement Systems, Incorporated (Florida)
 - vii. Harlingen Shrimp Farms, Ltd. (Texas)
 - viii. SyAqua USA (Kentucky)

The SPF/SPR facilities verified list is subject to change periodically depending on the updated list provided by the Oceanic Institute or the United States Marine Shrimp Farming Program Consortium.

3. The broodstock facility selected by the importer must have a minimum two (2) years disease free status as certified by competent authority from the country of origin. In addition, the broodstock facility shall likewise submit its disease history for the period covering its commercial establishment to the present.
4. The broodstock facility shall submit samples taken from the lot where the intended stock for shipment shall be drawn. Said samples shall be forwarded to the USMSFP Shrimp Disease Reference Laboratory, the Aquaculture Pathology Laboratory, Department of Veterinary Science and Microbiology, University of Arizona, for diagnostic as to their SPF status on the following pathogens:
 - a. Taura Syndrome Virus (TSV)
 - b. White Spot Syndrome Virus (WSSV)
 - c. Infectious Hypodermal and Haematopoietic Necrosis Virus (IHHNV)
 - d. Yellow Head Virus Disease (YHVD)
 - e. Baculovirus Penaeid (BP)
 - f. Hepatopancreatic Parvo-like Virus (HPV)
 - g. Necrotizing Hepatopancreatitis (NHP)
 - h. Monodon Baculo Virus (MBV)
 - i. Baculoviral Mid-gut Gland Necrosis Virus (BMN)
 - j. Infectious Myo-Necrosis Virus (IMNV)
5. No import permit shall be issued unless the documents specified in the pre-border Biosecurity measures shall have been complied with.
6. The imported broodstock shall be allowed entry into the country only at the Ninoy Aquino International Airport (NAIA), the broodstock shipment should take the most direct route from its origin to the Philippines. No trans-shipment will be allowed. Should there be an interruption in the transport (delayed or cancelled flights), any competent authority within the area shall be notified immediately. Said authority shall issue a certification relating to the interruption and certify that the shipment was not co-mingled with other shipment and that the intended shipment was not exposed or subjected to any risk of contamination. In case of broodstock shipment using chartered or special flights to other Philippine international airports other than NAIA, an advances notice shall be given to BFAR Central Office, to enable designated Fisheries Quarantine Officers and Fish Health Officers to be present at the port of entry.

b. Border Inspection Measures

1. Upon arrival, the imported broodstock shall be presented for documentary inspection at the Fisheries Inspection and Quarantine Service (FIQS) at the NAIA.
2. After documentary inspection and verification, the imported broodstock shall be transported directly to the BFAR accredited shrimp hatchery facility. The importer, or its designated representative, together with representative from the Fisheries Regulatory and Quarantine Division (FRQD) will accompany

transfer to the facility.

3. One percent (1%) but not more than ten (10) pieces of representative broodstock sample will be turned over to BFAR Fish Health Central Laboratory for verification of the laboratory results given prior to shipping and accompanying Health Certificate.

c. Post-border Biosecurity Measures

Upon arrival at the facility, the broodstock shall be confined in designated holding tanks for quarantine and subsequent maturation and breeding purposes.

d. Testing and Disease Detection

1. At PL1-PL3, samples shall be taken from the larval rearing tanks for testing. As per OIE Diagnostic Manual for Aquatic Animal Disease (2006).
2. All samples shall be subjected for analysis for Taura Syndrome Virus (TSV), Baculovirus Penaeid (BP), Necrotizing Hepatopancreatitis (NHP) and Infectious Myo-Necrosis Virus (IMNV) at their respective BFAR Regional Fish Health Laboratories or any accredited laboratory.
3. Regular monitoring for the four (4) above mentioned OIE reportable diseases of *P. vannamei* will be conducted by their respective BFAR Regional Fish Health Laboratories, as per OIE Manual of Diagnostic Tests for Aquatic Animal (2006).
4. In case of conflict on results, verification shall be done solely by BFAR Central Fish Health Laboratory in Quezon City. Results issued by BFAR Central Fish Health Laboratory shall be final.

e. Certifying the broodstock

1. To keep the integrity and Quality of Postlarvae used for commercial production in different farming systems, only the original certified SPF/SPR broodstock from BFAR verified and recognized broodstock facilities and stocked at accredited shrimp hatcheries shall be the only source of the shrimp postlarvae. The selling of shrimp eggs and nauplii by accredited hatchery to other shrimp hatcheries is strictly prohibited.
2. Replacement for spent broodstock shall always originate from verified SPF/SPR shrimp stock only. No Philippine island-born broodstock shall be returned to the accredited hatcheries to produce the postlarvae. Violation of this regulations will warrant outright cancellation of hatchery accreditation. This shall be strictly implemented.

f. Minimum Biosecurity Standards for Controlled Hatchery Facility - The importer shall comply with the minimum biosecurity standards for broodstock

maturation, larval rearing and production of F1 offspring, prior to the issuance of an import permit. The following standards shall be used in evaluation of each application of proponent shrimp hatchery for accreditation.

1. Water Treatment - The water treatment system should ensure that provision of high quality water. The following protocol is prescribed:
 - a. Incoming water filtration. Initial filtering through sub-sand well points, sand filters (gravity and pressure) or mesh bag filters into the first reservoir for settling tank. After disinfection, final filtration using fine mesh filter bags or membrane filters.
 - b. Water disinfection and sedimentation. Initial disinfection through is done through chlorination. Then disinfection using UV lights (or ozone) did after the final filtration.
 - c. Water conditioning. Through the use of activated charcoal filters and use of Ethylene Diamine Tetra Acetic Acid (EDTA) to chelate remaining heavy metals impurities.
2. Effluent Water Treatment Hatchery and Growout - All water discharged from the hatchery should be temporarily stored in a catching pond and treated with hypochlorite solution (>20 ppm active chlorine for not less than 60 minutes) or other effective disinfectant prior to discharge.
3. Physical Isolation - The different production facilities shall be physically Isolated from one another, specifically, maturation, spawning and hatching, larval and nursery rearing, indoor and outdoor algal culture and live food production.
4. Aeration - Air flow should be controlled between sections of the facility. Glass wool filters should be installed in the main aeration line servicing all sections.
5. Sanitation and Disinfection:
 - a. Worker sanitation - washing/bathing routines.
 - b. Installation of foot baths and hand washing stations at entry into each separate culture area (all entrance points)
 - c. Traffic flow control in sections within the facility-one way: entrance to exit areas.
 - d. Control movement of potential disease carriers near the testing area.
 - e. Disinfection of equipment and materials in multiple points of use
 - f. Restrict visitors.