

# **Arkansas Game and Fish Commission**

## **Code Book**

**The regulations in this Code Book are hereby adopted by the Arkansas State Game and Fish Commission under authority of Amendment 35 to the Constitution of the State of Arkansas. All laws, rules, regulations, or orders in conflict with the regulations in this Code Book are hereby repealed by the Arkansas State Game and Fish Commission.**

## 11.01 Definitions

For purposes of the requirements in this Addendum Chapter, the following definitions shall apply:

**Appropriate Fish Sample**– A number of fish, as described below, must include any fish with lesions or behavioral anomalies.

Facility inspection sample number based on an assumed pathogen prevalence level (APPL). Facility inspections must be conducted at the 2% APPL level.

<b><u>Population Size (Number of fish)</u></b>	<b><u>Number of Fish Required for Sample at 2% APPL</u></b>
50	50
100	75
250	110
500	130
2000	145
>100,000	150

**Facility Inspection:** An inspection of an entire facility that establishes whether or not the facility is free from specific diseases. Critical parts of a facility inspection program are 1) the facility must have biosecurity to prevent the introduction of diseases between inspections, and 2) that any fish introduced onto the facility meet the Commissions inspection requirements, and are free of regulated pathogens. Facility level inspections are the preferred testing method and the model set by international standards (OIE).

**Facility Inspection Requirements:** Fish Farms with over >100,000 fish on the facility must submit 150 fish representing all fish species and culture units present on a farm or facility. The ratio of fish species on the farm or facility should be reflected in the composition of the sample. The sample should not be collected from tanks or raceways used for short-term storage of fish produced in other culture units. Biosecurity must be in place and maintained to prevent a change in health status during the period from sample collection to harvesting and moving of the fish. Sample must be collected during appropriate season by a qualified independent party. Facility inspections must be conducted at least once annually, but twice annually for Viral Hemorrhagic Septicemia Virus (VHSV) positive areas.

**Lot Inspection:** An inspection of a single lot of fish (fish that are of the same age, species, brood stock, facility, and water source). Lot inspections establish only the disease status of a specific group of fish on a particular day. Lot Inspections are valid only for as long as the disease status of the lot is protected by biosecurity measures.

**Lot Inspection Requirements:** – 60 fish per lot of fish of the same age, species, brood stock, facility, and water source; which must not be co-

mingled with other fish populations between sample collection and fish shipment. Biosecurity must be in place and maintained to prevent a change in health status during period from sample collection to harvesting and moving of the fish. A sample must be collected during appropriate season by a qualified independent party and testing should be conducted as close as possible to anticipated fish movement. Facilities holding species listed as threatened, endangered, or of greatest conservation concern may utilize a sentinel species from the same genus which are located in the same water source for a minimum of 30 days prior to sample collection.

**Appropriate Season-** The first day of March until the first day of June solstice, and the first day of September until the first day of December solstice.

**Appropriate Testing Methods-** A screening and confirmatory test conducted as described in the inspection section of the most recent edition of the “American Fisheries Society – Fish Health Section Blue Book,” or the most recent edition of the World Organization for Animal Health “Manual of Diagnostic Tests for Aquatic Animals,” or conducted according to the approved protocols in a laboratory listed by the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service which has been approved to test for aquatic animal pathogens, or in a USDA NAHLN laboratory by an official NAHLN protocol.

### **Biosecurity Required-**

For facilities relying on Facility Inspections:

New aquatic animals must have a health certification status equivalent to, or greater than, that of current health certification status of the facility, or they must be maintained in a biosecure quarantine that protects the main facility from infectious disease introduction. Disinfected eggs from quarantined animals may be moved out of quarantine and the fry moved onto the main facility. Facilities may only use water sources for which the Commission deems there is no evidence that regulated pathogens are present, or must disinfect the water prior to its introduction onto the facility proper.

For facilities relying on Lot Inspections:

A lot of fish (same age, species, water source, broodstock, and facility) must not be co-mingled with other fish on the facility between sample collection and fish shipments. Between sampling and shipping, the fish must be maintained in water sources for which there is no evidence that regulation pathogens are present, or must disinfect the water prior to its introduction into the quarantine area.

**Certificate of Veterinary Inspection (CVI)-** An official document issued by a federal, state, tribal, or accredited veterinarian certifying that the fish identified on the document have been inspected and were found to satisfy the regulations pertaining to their intended movement – within the same state, between states, or internationally. Void 30 days after issuance.

**Certificate of Veterinary Usage-** A CVI documenting no clinical signs of disease and infection will be accepted for health certification for educational display

purposes (e.g. zoos, public aquaria, museums) where individual specimens remain in captivity in a closed system throughout their life.

**Culture Units**- Ponds, raceways, cages or other containments used to rear fish.

**Farm-raised**- Fish that spend their entire life (egg to sale) on a farm or commercial facility.

**Qualified Independent Party**- A veterinarian, a fish health inspector certified by the Fish Health Section of the American Fisheries Society, or an employee of a state agency recognized as a competent authority for fish health and assigned by that agency to collect fish inspection samples and verify biosecurity.

**Qualified Testing Laboratory**- Any state, federal, or private laboratory recognized by the AGFC as competent to conduct fish inspections.

**Pathogens of Concern (list subject to change as new pathogens of concern emerge)**-

**Fish Pathogens: (Required for fish species)**

- Epizootic hematopoietic necrosis (EHN)\*\*
- Infectious hematopoietic necrosis (IHN)
- *Oncorhynchus masou* virus disease\*\*
- Spring viremia of carp
- Viral hemorrhagic septicemia virus (VHSV)
- Infectious pancreatic necrosis (IPN)
- Bacterial kidney disease (*Renibacterium salmoninarum*)\*\*
- Piscirickettsiosis (*Piscirickettsia salmonis*)\*\*
- Whirling disease (*Myxobolus cerebralis*)\*\*

\*\* **not** required for warm water species

**Mollusk Pathogens: (Required for mollusk species)**

- *Bonamia exitiosus*
- *Bonamia ostreae*
- *Marteilia refringens*
- *Marteilia sydneyi*
- *Marteilia chungmuensis*
- *Mikrocytos roughleyi*
- *Perkinsus olsenii* / *atlanticus*
- *Candidatus Xenohaliotis californiensis*
- *Haplosporidium nelsoni*
- *Haplosporidium costale*
- *Pekinsus marinus*
- QPX

**Crustaceans Pathogens: (Required for crustacean species, see Addendum [J1.01](#) for shrimp species)**

- Taura syndrome virus
- Yellowhead disease

- Spherical baculovirus (Penaeus monodon-type)
- Infectious hypodermal and hematopoietic necrosis
- White spot disease
- Tetrahedral baculovirus (*Baculovirus penae*)
- Crayfish plague (*Aphanomyces astaci*)
- Necrotizing hepatopancreas diseases (HPD)

**VHSV-free Water Source**– Water from a well, borehole or spring (the spring must be covered and free of fish), or disinfected water source which does not contain VHSV.

**VHSV-positive State**– Any state in the U.S. or any Canadian province listed by the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service as positive for viral hemorrhagic septicemia virus (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin, Ontario and Quebec).