A Biosecurity Plan

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Biosecurity

- Refers to the policies and measures taken for protecting a nation’s food supply and agricultural resources from both accidental contamination and deliberate attack of bioterrorism.
- Protection from biological harm
- Safety of living things or freedom of concern for sickness or disease

- Farm management practices designed to protect both food animals and their human consumers from disease-causing agents
- ????
Goals of a Biosecurity Plan

- Specific to your farm
- Specific for your type of aquaculture business
- Cover the needs for your farm
- Must be feasible
- Easily implemented
- Offer sound protection

Biosecurity Plan Development

- Joint effort
  - Management
  - Workers
  - Veterinarian

An overall trust and understanding of the plan by all three are essential to succeed

Establishing a Plan

- Management
  - Implements plan, willingness to commit
  - Explains to workers, etc.
  - Gives feedback and adjusts goals
Establishing a Plan

- Veterinarian
  - Must have a veterinarian – client relationship
  - Must construct a workable plan with scientific merit and reason
  - Simple to follow by management
    - Meets the farms’ needs
  - Purpose must be shared by all
  - Feasible

Wisconsin commercial bait farm

- Buy and sell bait
  - Retail
  - Wholesale
- Harvest wild bait
- Hold and raise bait
- Import and export live bait
- Multiple families and workers

Proactive in preserving their business and guarding against unwanted pathogens or diseases…

with VHS within the borders of the state, this is a reality not a possibility!!!
Biosecurity Agreement

Biosecurity plans are developed and followed in an attempt to minimize the risk of foreign exposure to biological/organic entities which can have an adverse effect on the commerce and operations of this aquaculture facility.

All efforts by all parties involved with the daily operations of this facility shall adhere to this established plan.

Additions and revisions can and will be dealt with by the management and Clayton Veterinary Care for the benefit of this facility.

Risk Levels

- Assess the varying risk levels of the farm
- Identify the areas associated with each level of risk
- Universal agreement of different levels
  - Description of each level
  - Categorization of all levels
Equipment

- Identify risk level on the equipment
  - Permanently label equipment
- Establish disinfection schedules and protocols for the different risk levels
- Establish assignment of equipment
  - Enforce disposition with workers

No piece of equipment can be reassigned to a different area!!

For Example:
- Once red always red
- Once blue always blue

Acceptable Chemical Disinfection

- Chlorine – recommended levels
- Virkon – recommended levels
- Rocal-D – recommended levels
- Iodine /Iodophors – recommended levels
- Chlorhexidine – recommended levels
Acceptable Sanitation

- Drying equipment/sunlight

*Disinfection by this method is very difficult and risky due to porous surfaces and the need of direct sunlight contact for extended periods.

Additions/Purchases of Bait

- All new additions with a current FHA will go directly to an isolation tank/pond for quarantine
- All new additions without a current FHA will go directly to an isolation pond/tank for quarantine
Deliveries off the Facility

- Only facility equipment (farm risk level) will be used. All water used in transfer will come from the truck.
- Each truck will have an approved disinfectant spray and current copies of FHA for fish being transported.

Quarantine

- All new entries must go through a quarantine process
  - Designated tank/pond for isolation
  - Specially designated equipment to handle isolation operations
- Length of time for each load
- Requirements needed for removal from isolation
  - inspection
  - identification of the risk level

Management will determine the end deposition.
Wild Bait Harvesting

- Trucks (equipment/workers) returning shall immediately be drained into an isolation area, chemically disinfected and allowed to dry. (unknown risk level)
- Record keeping
  - Harvest location
  - Date
  - Volume

Human Traffic

- All personnel will utilize a working disinfection mat.
  - Upon entering the facility for the first time daily
  - Leaving isolation area - within 10 feet (splash distance) of isolation tank/pond
  - Upon arrival of a truck, occupants of the truck

Analysis

- Are the goals met?
  - Management’s concerns
  - Veterinarian’s concerns