Medical Separation

Required Minimum Standards for Biosecurity

November 11, 2008

s. ATCP 10.61 Wis. Admin. Code, ch.95, Wis. Stats.

Personnel

☐ Require everyone to perform complete disinfection procedures for all coming or going to sites (see Disinfection Guidelines)

Equipment

☐ Properly clean and disinfect all equipment after each use (see Disinfection Guidelines)

☐ Do not share equipment between sites

☐ All surfaces that have contact with tissues and fluids of dead or moribund fish should be subject to strict disinfection (see Disinfection Guidelines)

Physical Barrier

☐ Floor to ceiling water impermeable barrier

Water Inflow

☐ Fish free ground water

Foot Bathes

☐ Disinfectant water bathes

Hand Washing

☐ Soap and water

Record log of all the above items

Additional Information
Further details contact DATCP Aquaculture Program at 608-224-4876.

Appendix: Disinfection Guidelines
APPENDIX : DATCP DISINFECTION GUIDELINES

All Farms should develop site-specific disinfection programs. Site specific disinfection programs must address all three phases involved in disinfection procedures; cleaning, disinfection and isolation;

- Wherever possible, site specific disinfection programs should address all current known transmission and infection risks;

- Any disinfection procedure can be rendered ineffective by poor quality control or implementation. All site specific disinfection programs should include components that demonstrate that Farms continuously strive to ensure all employees recognize the importance of proper disinfection procedures;

- Site specific disinfection programs must include adequate documentation components in order to verify consistent implementation and identify employees responsible for their implementation;

- All disinfection procedures should only use cleaning agents and disinfectants approved for use by the EPA and USDA;

- Disinfection procedures should not include any off label use of cleaning agents and disinfectants;

- All disinfection procedures should be consistent with manufacturers recommendations with respect to worker health and safety;

- All disinfection procedures should comply with EPA regulations pertaining to the discharge into the environment of the cleaning agents and disinfectants;

- All site specific disinfection programs and procedures should be consistent with the guidelines established by the Wisconsin DATCP Aquaculture Program. These Guidelines are as follows:

Effective Disinfectants

The effectiveness of most disinfectants is greatly reduced by organic material. All objects must be thoroughly cleaned prior to disinfecting.

The following is a list of disinfectants that are effective against VHS:

- Virkon S (1% solution) for 20 minutes;
- sodium hypochlorite (100-1,000mg/l water for minimum of 10 minutes);
- iodophor (100-250mg/l for 10 minutes) *for equipment not eggs*;
- formaldehyde (1.0% for 16 hours);
- formic acid (pH <4 for 24 hours);
- sodium hydroxide (pH > 12 for 7 hours);
- heat (>55C for > 5 minutes);
- ozone (8 mg/l/min for three minutes – corresponding to a Redox potential of 600-750mV);
- UV radiation (120mJ/cm2) ; and
- Sodium thiosulfate can be used to neutralize chlorine or iodine disinfectants.

Note: The choice of a particular disinfectant should be based on it's efficacy in a particular application, whether it is approved by EPA and USDA for that application, and what, if any, environmental or worker safety risks may be associated with it's use.

Egg Disinfection

- Contamination of gametes with urine, feces, blood or other organic matter should be avoided during spawning;

- Fertilized eggs should be rinsed thoroughly with fresh water;
- Disinfection of pre-hardened eggs should occur as soon after fertilization as possible, using a buffered iodophor at a concentration of 100ppm for 10 minutes;
- Great care must be taken to separate pre-disinfection activities (dirty area) from fertilized disinfected eggs (clean area). No equipment or personnel should be allowed to cross these areas; and
- Disinfection of eyed eggs should be conducted using iodophor solution to give 100ppm prior to hatch or movement to another location.

Equipment

To achieve maximum efficacy of disinfectant, all objects prior to disinfection must be thoroughly cleaned and free of all organic material.

- Remove debris and organic fouling with brush and/or high pressure hose;
- Clean equipment using a detergent prior to disinfecting;
- All other equipment used in the cages must be cleaned and disinfected before being used in another cage;
- Use separate equipment for separate sites.