

CHAPTER 6287
DEPARTMENT OF NATURAL RESOURCES
QUARANTINE FACILITIES FOR FISH EGGS

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6287.0100 DEFINITIONS.

Subpart 1. **Scope.** For purposes of this chapter, the terms in parts 6287.0100 to 6287.0900 have the meanings given them in Minnesota Statutes, section 17.4982, unless otherwise provided in this part.

Subp. 2. **Applicant.** "Applicant" means an individual, association, partnership, cooperative, public or private corporation or educational institution, or public agency that applies to the department to import fertilized fish eggs into a quarantine facility.

Subp. 3. **Effluent.** "Effluent" means any water discharged from a quarantine facility including fish rearing water, backflush or coolant water, floor drainage, and any potable drainage that does not flow into a sanitary sewer or approved septic system.

Subp. 4. **Heat stress test.** "Heat stress test" means a test for disease in fish as described in this subpart that is conducted for 14 to 21 days at a water temperature between 64 and 68 degrees Fahrenheit. For catfish, the test is conducted for 14 to 21 days at a water temperature above 80 degrees Fahrenheit. All fish are fed or injected with an immunosuppressant at the beginning of the test. At the conclusion of the test, all fish are sampled as provided by Minnesota Statutes, section 17.4982, subdivision 12. The number of fish sampled must be adequate to statistically determine a two percent level of disease prevalence at a 95 percent confidence level.

Subp. 5. **Quarantine unit.** "Quarantine unit" means an enclosed rearing area within a quarantine facility that allows for complete isolation from other quarantine units of fish hatching and rearing tanks, fish culture supplies and equipment, feed, clothing, water supply lines, and drainage lines.

Subp. 6. **Sentinel fish.** "Sentinel fish" means a lot of at least 150 fish obtained from a facility with no history of disease that are known to be sensitive to a particular disease agent.

Statutory Authority: *MS s 17.496*

History: *19 SR 2486*

6287.0200 AUTHORITY, SCOPE, PURPOSE.

Subpart 1. **Authority.** This chapter is adopted under authority granted in Minnesota Statutes, section 17.496.

Subp. 2. **Scope.** This chapter applies to all facilities constructed for the quarantine of fertilized fish eggs.

Subp. 3. **Purpose.** The purpose of parts 6287.0100 to 6287.0900 is to prescribe design criteria, operational procedures, and release protocols to minimize risk of introducing emergency fish diseases to the naturalized fishery resources of Minnesota while providing an opportunity for the importation of fertilized fish eggs from emergency disease-restricted areas and areas with unknown fish health history.

Statutory Authority: *MS s 17.496*

History: *19 SR 2486*

6287.0300 IMPORTATION REQUIREMENTS.

Only fertilized fish eggs may be imported into a quarantine facility.

Statutory Authority: *MS s 17.496*

History: *19 SR 2486*

6287.0400 CONSTRUCTION REQUIREMENTS OF QUARANTINE FACILITY.

Subpart 1. **Siting.** A quarantine facility must be outside of the 100-year floodplain and be physically separated from other fish raising facilities in the same watershed by not less than five miles, except that the commissioner may permit a quarantine facility to be within five miles of other fish raising facilities if there is minimal risk of transferring disease to the other facilities. Criteria used by the commissioner to determine the risk will include: flow rate of the water which would receive the quarantine facility effluent; construction, water source, and siting of potentially affected fish culture facilities; and disease susceptibility of the species being raised by potentially affected fish culture facilities. Siting is prohibited if effluent from the facility will be discharged into designated trout waters or other waters containing or managed for salmonids.

Subp. 2. **Water supply.** The water supply must be from a spring or well groundwater source, free of fish and fish pathogens, and covered. Water supply systems must be constructed to prevent transmission of pathogens among quarantine units.

Subp. 3. **Egg receiving area.** Each facility must have an egg receiving area isolated from quarantine units with respect to equipment, supplies, and clothing.

Subp. 4. **Quarantine facility size.** Each facility must be designed to consist of no more than six quarantine units and an egg receiving area.

Subp. 5. **Quarantine units.** Quarantine units must be isolated with respect to fish tanks, equipment, supplies, feed, water supply lines, drainage lines, and laboratory clothing. The capacity of each unit must not exceed 100,000 eggs.

Subp. 6. **On-site laboratory space.** There must be a minimum of 16 square feet in at least eight linear feet of counter space within each quarantine unit for pathological examination of fish. Each work area must include a sink, running water, adequate lighting, and electrical outlets.

Subp. 7. **Disinfection stations.** Each quarantine unit and egg receiving area must have separate disinfection stations. This station must include disinfectant supplies, hand washes, foot baths (preferably sunken), an emergency shower, and a locker room where clothes can be changed, stored, and disinfected.

Subp. 8. **Effluent treatment.** Effluent water from all quarantine units and egg receiving areas must enter a common collector. The collector must incorporate a primary disinfectant-sterilization system and an automatic backup system to disinfect all pathogens. All pipes into and out of the collector must be designed to prevent backflow.

Subp. 9. **Backup systems.** Every quarantine facility must have installed backups for all systems vital to maintaining the aquatic environment within the facility. A backup generator sized to handle all necessary electrical equipment must be installed to automatically activate during power failures. Each quarantine unit must be monitored with a flow alarm.

Subp. 10. **Contingency plan.** A contingency plan for disease control and accidental escapement must be submitted to and approved by the commissioner prior to the operation of a quarantine facility. The plan must contain maps of the watershed in which the facility is located, locations where sentinel fish will be confined, identification of sufficient personnel to execute the plan, source of chlorine supply for disinfectant procedures, length and flow rates of feeder streams and main branches, and identification of financial resources to mitigate damage that may occur from the accidental release of fish or fish pathogens.

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Subp. 11. **Security.** Minimum security measures must include locking devices on all building entrances and facility gates, and fencing around unenclosed components of the facility.

Statutory Authority: *MS s 17.496*

History: *19 SR 2486*

6287.0500 QUARANTINE FACILITY LICENSING.

Subpart 1. **Quarantine facility licensing and inspection.** No facility may be licensed as a quarantine facility unless the commissioner determines that standards specified in parts 6287.0400 to 6287.0600 are met. The commissioner may conduct an on-site inspection of a quarantine facility at reasonable times.

Subp. 2. **Personnel qualifications.** A quarantine facility must have at least one full-time person with two years of fish culture experience and fish health training from an accredited academic or United States Fish and Wildlife Service program.

Statutory Authority: *MS s 17.496*

History: *19 SR 2486*

6287.0600 OPERATION OF QUARANTINE FACILITY.

Subpart 1. **Egg receiving.** All egg deliveries must have a certified health inspection statement for parental stock from which the eggs were taken. Fish eggs may only be received in the receiving area. A complete disinfection, as described in subpart 5, of the egg receiving area is required before and after each egg delivery. All eggs must be disinfected before transfer into quarantine units. Transfer of disinfected eggs from the egg receiving area shall be done by a person who was not in contact with the incoming eggs before they were disinfected. All packing materials, excess fluids, and other materials related to the shipping of eggs must be incinerated or chlorinated to avoid potential spread of pathogen.

Subp. 2. **Transfer into quarantine.** Eggs from the same lot may be transferred into more than one quarantine unit provided the units remain isolated.

Subp. 3. **Quarantine period.** All fish hatched from quarantined eggs must remain quarantined for a minimum of 12 months, unless they are sold directly to an outlet for processing and human consumption, or unless the fish develop a certifiable disease and must be removed as provided by subpart 6.

Subp. 4. **Facility disinfection.** The following procedure will be considered a complete disinfection when using chlorine.

A. All objects to be disinfected must be cleansed of all organic matter before application of chlorine.

B. A chlorine solution must be maintained on all surfaces at not less than 200 parts per million for the first hour and at not less than 100 parts per million for an additional four hours.

C. All raceways, troughs, drain pipes and lines, and loose equipment, such as buckets, nets, and screens, must be disinfected as specified in item B.

D. All interior surfaces of the quarantine unit must be sprayed with a solution of 1,600 parts per million chlorine. Sufficient quantity and pressure must be applied so that crevices will be penetrated to destroy infectious organisms.

E. All disinfected objects must be thoroughly rinsed with clean water and neutralized with a solution of three parts sodium thiosulfate to one part chlorine upon completion of the disinfection.

F. Other disinfection methods and procedures must be approved by the commissioner.

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Subp. 5. **Effluent disinfection.** Effluent treatment methods must be approved by the commissioner and must comply with chapter 7050. If chlorine disinfectant is used, a measurable residual level of 1.0 part per million active chlorine must be maintained for one hour of retention time. The design must include a backup system that ensures noninterrupted treatment of effluent. Concentration of the disinfectant must be monitored by a recording-sensing device that is functional at all times.

Subp. 6. **Inspection and disposal of diseased fish.** Daily mortalities may be inspected by the commissioner. Mortalities not required for inspection must remain in the quarantine unit and be placed in disinfectant until they are properly disposed.

If a certifiable disease is detected, a confirmational test must be done. Upon confirmation of a certifiable disease, the commissioner may order that fish be destroyed, sold for human consumption, or otherwise disposed.

Each quarantine facility must dispose of fish mortalities by use of a gas- or oil-fired incinerator or by other disposal methods approved by the commissioner. Equipment and solid waste materials that are potentially contaminated with fish pathogens must be treated by chlorination or an alternate method approved by the commissioner.

Subp. 7. **Disinfection required.** A complete disinfection of the quarantine unit, as described in subpart 5, is required after fish are released from quarantine or after the discovery of a certifiable disease.

If a certifiable disease is detected, sentinel fish must be kept in the affected quarantine unit after disinfection to verify the effectiveness of disinfections, and held for at least 120 days following disinfection. All mortalities of sentinel fish must be monitored and inspected for disease. Surviving sentinel fish must be subjected to a heat stress test.

Subp. 8. **Personnel movement.** Access to quarantine facilities must be limited to designated personnel only. Personnel entering or exiting an egg receiving area or quarantine unit must use a disinfection station. Personnel must disinfect themselves using foot baths and hand washes, and wear protective clothing prior to entering or exiting a quarantine unit or an egg receiving area. Used outer clothing must be disposed of or laundered with disinfectants.

Statutory Authority: *MS s 17.496*

History: *19 SR 2486*

6287.0700 RECORD KEEPING AND REPORTING.

A daily log must be kept on mortality, transfers, feeding, approved chemical use, treatments, assessments, water quality, inspections, disinfectant levels in effluent, and personnel movement. Any signs of disease must be reported to the commissioner within 24 hours. Chemical use to treat disease requires prior confirmation of a diagnosed fish health problem by the commissioner. Mortality reports for each quarantine unit must be submitted to the commissioner weekly. Approved chemical usage and effluent disinfectant operation must be reported and submitted to the commissioner monthly.

Statutory Authority: *MS s 17.496*

History: *19 SR 2486*

6287.0800 INSPECTION REQUIREMENTS.

Fish in quarantine must be monitored and inspected for certifiable disease agents at monthly intervals by a fish health inspector. If requested, the commissioner will conduct fish health inspections for a fee as provided in Minnesota Statutes, section 17.4988, subdivision 3.

Statutory Authority: *MS s 17.496*

History: *19 SR 2486*

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6287.0900 RELEASE FROM QUARANTINE.

Subpart 1. **Final testing.** A final inspection must be conducted after fish have been in quarantine and have been feeding for 12 to 16 months. This inspection must include the use of a heat stress test on all sampled fish. Results of the inspection must be reviewed and approved by the commissioner.

Subp. 2. **Quarantine report.** A completed quarantine report on forms provided by the commissioner must accompany each lot of fish to be released from quarantine.

Subp. 3. **Release of fish.** Fish released from a quarantine facility cannot be released into the wild and must be processed for use as food or kept in a facility licensed by the commissioner under part 6250.0300, subpart 1, or Minnesota Statutes, section 17.4984, subdivision 1, or 97A.401, subdivision 3.

Statutory Authority: *MS s 17.496*

History: *19 SR 2486*