

**CHAPTER 7050**  
**MINNESOTA POLLUTION CONTROL AGENCY**  
**WATER QUALITY DIVISION**  
**WATERS OF THE STATE**

7050.0216 REQUIREMENTS FOR  
 AQUACULTURE FACILITIES

**7050.0216 REQUIREMENTS FOR AQUACULTURE FACILITIES.**

Subpart 1. **Definitions.** For the purposes of this part, the terms in items A to J have the meanings given them.

A. "Aquaculture therapeutics" means drugs, medications, or disease control chemicals that are approved for concentrated aquatic animal production facility use by the United States Food and Drug Administration or the United States Environmental Protection Agency.

B. "Aquatic animal production" means harvest of unprocessed aquatic animals, including mortalities, where the animals are fed fish food.

C. "Chemical additive" means an aquaculture therapeutic, growth-inducing compound, hormone, or algal control product that is added to a concentrated aquatic animal production facility.

D. "Cold water aquatic animals" means aquatic animals in the Salmonidae family of fish, such as trout and salmon.

E. "Concentrated aquatic animal production facility" means a hatchery, fish farm, or other facility that contains, grows, or holds aquatic animals as described in subitems (1) to (4).

(1) Cold water aquatic animal facilities that produce more than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year or feed more than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.

(2) Warm and cool water aquatic animal facilities that produce more than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.

(3) Case-by-case designation of concentrated aquatic animal production facilities. The commissioner may designate any warm, cool, or cold water aquatic animal production facility as a concentrated aquatic animal facility upon determining that it may cause a violation of an applicable state or federal water quality rule or regulation. In making this designation, the commissioner shall consider the following factors:

(a) the location and quality of the receiving waters;

(b) the holding, feeding, and production capacities of the facility; and

(c) the quantity and nature of the pollutants reaching waters of the state.

A permit application is not required from a concentrated aquatic animal production facility designated under this item until the commissioner has conducted an on-site inspection of the facility and has determined that the facility is required to be regulated under the permit program. A permit will be required under this subitem only after the facility has been given notice of the commissioner's determination and an opportunity to request a hearing as provided in parts 7000.1000 and 7001.0130.

(4) Harvest weight is considered the weight of aquatic animal prod-

uct which leaves a production facility, minus the weight of aquatic animal product which enters the same production facility.

F. "Continuous discharge" means a discharge that occurs without interruption throughout the operating hours of the facility, except for infrequent shut-downs for maintenance, process changes, or other similar activities.

G. "Existing beneficial uses" means the uses that have been made or may be reasonably anticipated to be made during the time of the proposed operations of waters of the state for domestic water supply, tourism and recreational industries, transportation, industrial consumption, wellhead protection, wildlife sustenance, wetland protection, fire protection, fire prevention, assimilation of municipal and industrial wastes and other wastes or other uses within this state, and, at the discretion of the agency, any uses in another state or interstate waters flowing through or originating in this state.

H. "Fish food" means materials including processed feeds, grains and seeds, plants, plant wastes, meat, and dead fish or other dead animal parts, but not including living aquatic animals, for the purposes of sustaining growth, repairing vital processes, or furnishing energy for aquatic animals present in the facility.

I. "Recirculating flow" means wastewater, within a concentrated aquatic animal production facility, which is collected from aquatic animal rearing units, treated, and then returned to aquatic animal rearing units for reuse.

J. "Warm and cool water aquatic animals" means all other aquatic animals not included in the Salmonidae family of fish.

**Subp. 2. Permit required.** No person may construct, operate, or maintain a concentrated aquatic animal production facility until the agency has issued a National Pollutant Discharge Elimination System and State Disposal System (NPDES/SDS) permit for the facility in accordance with chapter 7001. Production levels of multiple projects and multiple stages of a single project that are connected actions or phased actions will be considered in total under subpart 1, item E.

**Subp. 3. Treatment technology discharge requirements.**

A. Collection and treatment. All concentrated aquatic animal production facilities shall collect, remove, treat, and properly dispose of unconsumed fish food and fish wastes.

B. Discharge requirements. All concentrated aquatic animal production facilities that discharge industrial or other wastes to waters of the state shall comply with the requirements of part 7050.0212, subparts 1, 3, 4, 5, and 6.

C. Recirculating flow. The owner or operator of a recirculating flow facility may apply for a variance from the requirements of item B in accordance with parts 7000.0700 and 7050.0190. The variance application shall provide detailed information on the following:

(1) treatment, collection, removal, and disposal of wastes after wastewater flow leaves aquatic animal rearing units and before the wastewater is returned for reuse to rearing units;

(2) the rate of wastewater discharge flow compared to the volume of water in the aquatic animal rearing units;

(3) reduction in the mass discharge of pollutants due to the design, operation, and maintenance of the recirculating system; and

(4) reduction in water appropriation due to the design, operation, and maintenance of the recirculating system.

**Subp. 4. Additional requirements.** Except as expressly excluded in this part, the construction, operation, and maintenance of a concentrated aquatic animal production facility shall comply with the requirements of parts 7050.0110 to 7050.0214 and 7050.0217 to 7050.0220.

**Subp. 5. Interim reversible impacts.**

**A. Variance.** Upon application of the responsible person or persons and in accordance with parts 7000.0700 and 7050.0190, the agency shall grant a variance from subpart 3, item A or B, if the agency also finds that:

(1) the construction, operation, and maintenance of the facility will not impair the existing beneficial uses and the level of water quality necessary to protect the existing beneficial uses;

(2) the economic or social development of concern will not occur due to the standards in subpart 3;

(3) allowing lower water quality is necessary to accommodate important economic or social development in the area in which the receiving waters are located;

(4) the baseline quality of the receiving waters has been established in accordance with item C;

(5) a closure plan for the facility has been submitted in accordance with item E;

(6) financial assurance for the facility has been established and maintained in accordance with item F;

(7) the applicant has submitted a permit application for the facility for which the variance is sought in compliance with subpart 2;

(8) the applicant has submitted a completed variance application in accordance with item B; and

(9) the receiving waters will be restored to baseline quality within three years of initiation of closure.

However, no variances may be granted that would result in noncompliance with applicable federal rules, regulations, or standards for water quality.

**B. Variance application.** In addition to the requirements of part 7000.0700, subpart 2, the written application must contain:

(1) the baseline quality data of the receiving waters collected under commissioner-approved protocol in accordance with item C;

(2) the closure plan in accordance with item E; and

(3) an up-to-date closure cost estimate for the facility prepared under item E and evidence of the financial assurance required in item F.

**C. Baseline quality.** Baseline quality shall be established by no less than two consecutive years, or equivalent, of preoperational data on the receiving waters. The equivalent testing program shall require 12 sampling events for the parameters in item E collected during the months of May through October. Testing programs used to establish baseline quality shall be reviewed and approved by the commissioner before the start of testing. The commissioner shall supply the specific intra-year and inter-year variables.

**D. Closure.** If a variance is granted under item A, the permittee shall restore the receiving waters to baseline quality when:

(1) aquatic animal production from the facility ceases;

(2) any of the control pollutant limits in item G are exceeded;

(3) the permit for the facility expires, and reissuance of the permit is not applied for or is applied for and denied;

(4) the permit for the facility is revoked;

(5) an agency order to cease operation is issued; or

(6) the required financial assurance under item F for closure, post-closure monitoring, or corrective actions is not maintained with the proper payment or substitute instrument.

**E. Closure plan.** The applicant shall submit a closure plan with the vari-

ance application. The closure plan shall demonstrate financial assurance under item F for closure, postclosure monitoring, and corrective actions for restoration of the receiving waters to baseline quality, and shall describe the methods and processes that will be implemented to restore the receiving waters to baseline quality within three years of initiation of closure. The demonstration must show that no additional restoration is needed beyond three years. Restoration to baseline quality of the following parameters is required: dissolved oxygen, total phosphorus, and chlorophyll-a. Restoration to the baseline quality level means that the mean postclosure baseline quality levels shall not be significantly different as determined with the appropriate statistical test from the mean preoperational baseline quality level.

F. Financial assurance. The applicant shall submit to the commissioner for review and approval a closure, postclosure monitoring, and corrective action cost estimate, and evidence of financial assurance, prepared in accordance with parts 7035.2685 to 7035.2805.

G. Control pollutant limits. The following control pollutant limits are established to prevent irreversible pollution and to protect the existing beneficial uses, and apply to the receiving waters at all times:

Substance or Characteristic	Limiting Concentration or Range
Total organic carbon	5 milligrams per liter*
Nitrate nitrogen	10 milligrams per liter**
Chlorophyll-a	30 micrograms per liter***
Dissolved oxygen	Not less than 3 milligrams per liter in the bottom half of the hypolimnion and 5 milligrams per liter in the upper half of the hypolimnion****

\* Annual mean.

\*\* Instantaneous value. "Instantaneous value" means the concentration in one sample.

\*\*\* Monthly mean (May through September).

\*\*\*\* Instantaneous value. If the baseline monitoring shows that the preoperational oxygen concentration for the same time of the year is less than three milligrams per liter for the bottom half of the hypolimnion and five milligrams per liter for the upper half, there shall be no further reduction of the preoperational oxygen concentrations. If the baseline quality of a pollutant is greater than the control pollutant limit, or less in the case of dissolved oxygen, the baseline quality of the pollutant shall be used as the control pollutant limit.

#### Subp. 6. Special conditions.

##### A. Monitoring, testing, and reporting.

(1) In addition to the requirements for monitoring, testing, and reporting under part 7001.0150, subpart 2, item B, the permittee shall report the aquatic animal production and amount of fish food used.

(2) The commissioner may require the permittee to monitor receiving waters to determine natural background levels and baseline quality and to determine compliance with state and federal antidegradation and water quality standard requirements. The monitoring shall consider natural seasonal and year-to-year variations in background levels and baseline quality.

##### B. Collection and disposal of aquatic animal mortalities and blood. The

permittee shall transport aquatic animal mortalities for rendering or disposal at a land-based facility. Aquatic animal mortalities shall not be disposed of in waters of the state. The permittee shall prevent blood produced through harvest of aquatic animals from entering waters of the state untreated. The blood generated shall be transported to a land-based rendering or disposal facility approved by the commissioner, or discharged to a publicly owned treatment works in accordance with the applicable publicly owned treatment works NPDES/SDS permit.

C. Record keeping. The permittee shall maintain an operation record book of daily operations and other occurrences that may affect water quality including addition of fish food, composition of fish food, aquatic animal transfers and harvests, cleaning, mortalities, major weather events, and power failures. The operation record book shall be available at all times for inspection and copying by the commissioner.

D. Annual report. Each year, the permittee shall submit an annual report to the commissioner. The report shall include:

(1) a general description of the operations conducted for the past calendar year;

(2) a summary of the monitoring data;

(3) the mass of aquatic animals currently at the facility;

(4) aquatic animal production at the facility for the past calendar year;

(5) methods, amounts, and locations of the removal and disposal of waste fish food, filter backwash, sludges, sediments, mortalities, and other accumulated solids generated at the facility; and

(6) proposed changes in operation and/or production for the coming year.

E. Water treatment and chemical additives. The discharge of water treatment and chemical additives shall comply with parts 7050.0218 and 7050.0220.

**Statutory Authority:** *MS s 17.498; 116.07*

**History:** *17 SR 230*