

**WAC 173-221A-100 Upland finfish facilities. (1) Which types of upland finfish facilities need a wastewater discharge permit?**

(a) A permit is required for:

(i) All facilities which produce more than 20,000 net pounds of finfish a year; or

(ii) Feeds more than 5,000 pounds of fish food during any calendar month; or

(iii) Is designated as a significant contributor of pollution by the department in accordance with 40 C.F.R. 122.24.

(b) Facilities which do not require a permit under (a) of this subsection are conditionally exempt from the requirement to obtain a wastewater discharge permit provided they comply with subsections (2) through (6) of this section.

(2) **Time of compliance.** Each upland finfish rearing facility which requires a wastewater discharge permit in accordance with subsection (1) of this section shall submit a completed application form to the department at least one hundred eighty days in advance of the date when permit coverage is deemed necessary.

(3) **Prevention, control, and treatment.** Each upland finfish facility shall provide treatment prior to discharging to waters of the state regardless of receiving water quality. The minimum acceptable technology-based treatment requirements for upland finfish facilities required to obtain permits including general wastewater discharge permits are:

(a) For facilities that use a vacuum cleaning system, standpipe bottom-drain system or other method to remove solids from the water, raceways or ponds, with treatment in a separate settling basin or treatment system:

(i) All facilities utilizing off-line settling shall incorporate into the pond or raceway design methods to collect settleable solids. Methods such as screened settling zones in the downstream end at raceways shall be used to collect settleable solids prior to periodic removal to off-line settling basins.

(ii) The settling basin shall be designed to minimize short-circuiting and to provide a minimum total suspended solids average monthly percent removal of 85% and an average monthly settleable solids percent removal of 90%.

(iii) Turbulent flow shall be minimized within the cleaning system to avoid homogenization or solids.

(iv) Rearing of fish within the settling basin is not permitted.

(b) For facilities that provide in-line settling for the entire effluent;

(i) The settling basin shall be designed to minimize hydraulic short-circuiting.

(ii) The settling basin shall be designed to provide at least a twenty year sludge decomposition and storage capacity unless provisions are made for periodic sludge removal without interruption in treatment.

(iii) Rearing of fish within the settling basin is prohibited.

(c) For facilities with rearing ponds only, no other form of effluent treatment shall be required, provided the rearing pond has a minimum hydraulic retention time of two hours or more. Rearing vessels with less than two hours hydraulic retention time may be approved by the department in writing without additional treatment provided the applicant can demonstrate to the department, in advance, the ability to continuously comply with effluent limits established in subsection (4) (a) of this section.

(d) Each upland finfish facility that begins construction after September 1, 1990, or expands production by fifty percent over the production on the effective date of this rule shall either:

(i) Line all settling basins or otherwise ensure that the static (i.e., without inflow) seepage rate through the settling basin bottom and sides shall not be greater than a water surface drop of 0.10 inch per day; or

(ii) Demonstrate to the department through hydrogeologic investigation and/or groundwater monitoring that the operation of the facility will not have an adverse impact upon groundwater quality.

(e) Notwithstanding the treatment requirements of this subsection, more stringent or additional conditions may be required by the department as necessary on a case-by-case basis to mitigate adverse water quality impacts or meet water quality standards, groundwater standards, sediment standards or other applicable requirements of federal or state law.

(4) **Effluent standards.** Wastewater from all upland finfish facilities regardless of size shall meet the following effluent discharge standards.

(a) Facility discharges.

(i) The instantaneous maximum total suspended solids concentration in the effluent at the point of discharge to the receiving environment shall not exceed 15 milligrams per liter of effluent.

(ii) The average total suspended solids concentration in the effluent at the point of discharge to the receiving environment shall not exceed 5 milligrams per liter of effluent.

(iii) The average settleable solids concentration in the effluent at the point of discharge to the receiving environment shall not exceed 0.1 milliliter per liter of effluent.

(iv) Effluent limitations shall apply as net values provided the criteria contained in 40 C.F.R. 122.45 (net gross allowance) are met.

(b) Off-line settling basin effluent.

(i) The instantaneous maximum total suspended solids concentration shall not exceed 100 milligrams per liter of effluent.

(ii) The instantaneous maximum settleable solids concentration in off-line settling basin effluent shall not exceed 1.0 milliliter per liter of effluent.

(c) Discharges during rearing pond drawdown for fish release shall meet the following discharge standards. Pond drawdown for purposes other than fish release shall meet the discharger standards in (a) of this subsection.

(i) The instantaneous maximum total suspended solids concentration in the rearing pond effluent shall not exceed 100 milligrams per liter.

(ii) The instantaneous maximum settleable solids concentration in the rearing pond effluent shall not exceed 1.0 milliliter per liter.

(d) Test procedures. All sampling and analytical methods used to determine compliance with standards specified in this subsection shall, unless otherwise approved by the department, conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 C.F.R. Part 136.

(e) Notwithstanding the numerical discharge standards within this subsection, each upland finfish facility shall be operated in the most efficient manner possible. Additional effluent limits and/or more stringent effluent limits may be required as necessary on a case-by-case basis to meet water quality standards, groundwater quality stand-

ards, sediment quality standards, or other applicable requirements of federal or state law.

(5) **General requirements.** The following practices shall be applicable to all upland finfish facilities.

(a) Sand, silt, mud, solids, sludges, filter backwash, debris, or other pollutants deposited or removed in the course of treatment or control of water supply and wastewaters shall be disposed of in a manner so as to prevent such materials from entering waters of the state.

(b) Discharging untreated cleaning wastes (e.g., obtained from a vacuum or standpipe bottom drain system) to waters of the state is prohibited.

(c) Sweeping or intentionally discharging accumulated solids from raceways or ponds to waters of the state without prior treatment is prohibited.

(d) Practices such as removing dam boards in raceways or ponds, that allow accumulated solids to discharge to waters of the state are prohibited.

(e) The discharge of any drugs or chemicals in toxic amounts or in violation of water quality standards to waters of the state is prohibited.

(f) Disease control chemical use practices. The following requirements only apply to those drugs and chemicals included in feed or administered by a bath or dip treatment which results or may result in those materials being discharged to waters of the state. These requirements do not apply to drugs and chemicals administered by injections or by dip treatments which results in no discharge to waters of the state.

(i) Disease control chemicals and drugs approved for hatchery use by the United States Food and Drug Administration (USFDA) or the United States Environmental Protection Agency (USEPA) may be used.

(ii) USFDA approved Investigational New Animal Drugs (INADs) may also be used at a facility, provided the conditions detailed in a facility's INAD permit application are met.

(iii) All disease control drug and chemical use must be done in conformance with product label instructions, approved INAD protocols, or be administered by or under the supervision of a licensed veterinarian.

(iv) Disease control drugs and chemicals which are not used in accordance with product label instructions, or under USFDA approved INAD protocols must:

(A) Be administered by or under the supervision of a licensed veterinarian; and

(B) Be approved in advance by the department.

(v) The department may require disease control drug and chemical use reports from each facility.

(g) Fish mortalities, kill spawning, processing wastes, and any leachate from these materials shall be disposed of in a manner so as to prevent such materials from entering the waters of the state.

(h) Right of entry.

(i) Authorized representatives of the department, upon presentation of identification shall be allowed to:

(A) Enter in or upon the facility at all reasonable times;

(B) Have access to and copy at all reasonable times any records relative to information that must be kept or provided the department under the terms of, as applicable: The conditional exemption or wastewater discharge permit;

(C) Inspect, investigate, and photograph at all reasonable times any production, collection, treatment, pollution management, monitoring, or discharge equipment or facilities, or any conditions relating to pollution or possible pollution of any waters of the state;

(D) Sample and make tests at all reasonable times; and

(E) The term "reasonable times" shall include normal business hours, hours during which production, prevention, control, or treatment occurs or times when the department reasonably suspects a violation of this chapter is or may be occurring.

(6) **Receiving water quality studies.** Receiving water quality studies shall be required as follows for each upland finfish facility which begins construction after September 1, 1990, or expands production by fifty percent over the production on the effective date of this rule. Existing facilities may be required to do receiving water studies on a case-by-case basis. Dilution shall be evaluated by the department using total facility effluent at maximum production at the lowest seven-day average receiving stream flow with a 10-year recurrence interval (7Q10).

(a) For facilities with a discharge of one part upland finfish facility effluent to ten parts or more of receiving water, receiving water studies are not required unless significant data indicates water quality standards would be violated.

(b) For facilities with an effluent dilution of between one part upland finfish facility effluent to three parts receiving water and one part effluent to ten parts receiving water, receiving water studies may be required by the department. The department shall provide the upland finfish operator or permit applicant with written documentation on the need for receiving water studies upon request. Factors to be considered by the department in determining the need for and objectives of special receiving water studies may include, but are limited to, the following:

(i) The water quality classification of the receiving water of the state;

(ii) The potential water quality impacts of surrounding land use practices and/or existing and proposed discharges including the proposed upland finfish hatching and rearing facility;

(iii) The likelihood that the proposed discharge will have an effect on existing water quality and/or present or future beneficial uses;

(iv) The proximity of the discharge to a quiescent water body such as a lake or a reservoir;

(v) On-site inspection;

(vi) The potential of the discharge to have an adverse impact on receiving water quality such that water quality standards would be violated; and

(vii) Possible beneficial impacts of upland finfish discharges on existing water quality such as flow augmentation.

(c) For facilities with an effluent dilution of one part upland finfish facility effluent to three parts or less of receiving waters, receiving water quality studies will generally be required for new facilities and may be required on a case-by-case basis for existing facilities.

(d) Receiving water quality studies content and scope shall include, as required by the department an analysis of the proposed facilities discharge and any impacts upon the receiving water of the state, including, but not limited to, the following:

(i) Identification of existing and potential beneficial uses of the receiving water of the state and an evaluation of the impact on those beneficial uses of the proposed discharge;

(ii) Hydraulic impacts;

(iii) The impacts of both nitrogen and phosphorous compounds and the potential for eutrophication of the receiving waters;

(iv) The use of chemicals and medications within the facility, their toxicity, and the impacts on the receiving waters;

(v) The effect of the facilities on receiving water temperature and dissolved oxygen concentrations; and

(vi) The potential for impacting any specified identified water use.

(vii) Possible beneficial impact of upland finfish discharges on existing water quality such as flow augmentation.

[Statutory Authority: RCW 90.48.220. WSR 95-22-079 (Order 93-26), § 173-221A-100, filed 10/31/95, effective 12/1/95. Statutory Authority: Chapter 90.48 RCW. WSR 90-14-078 (Order 90-11), § 173-221A-100, filed 7/3/90, effective 8/3/90.]