

THE MINISTRY OF AGRICULTURE AND
RURAL DEVELOPMENT

**Circular No. 44/2010/TT-BNNPTNT of
July 22, 2010, providing for conditions
on food safety and hygiene-guaranteed
intensive Asian catfish-rearing
establishments and zones**

Pursuant to the Government's Decree No. 01/2008/ND-CP of January 3, 2008, defining the functions, tasks, powers and organizational structure of the Ministry of Agriculture and Rural Development;

Pursuant to the Government's Decree No. 75/2009/ND-CP of September 10, 2009, amending Article 3 of the Government's Decree No. 01/2008/ND-CP of January 3, 2008, defining the functions, tasks, powers and organizational structure of the Ministry of Agriculture and Rural Development;

Pursuant to the Government's Decree No. 59/2005/ND-CP of May 4, 2005, prescribing the conditions on a number of fishery production and business lines;

Pursuant to the Government's Decree No. 33/2005/ND-CP of March 15, 2005, detailing the implementation of a number of articles of the Ordinance on Animal Health,

The Ministry of Agriculture and Rural Development provides for conditions on food safety and hygiene- guaranteed intensive Asian catfish-rearing establishments and zones as follows:

Chapter I

GENERAL PROVISIONS

Article 1. Scope of regulation and subjects of application

1. Scope of regulation: This Circular provides for conditions on food safety and hygiene-guaranteed intensive Asian catfish-rearing establishments and zones.

2. Subjects of application:

This Circular applies to organizations and individuals involved in intensive commercial Asian catfish rearing in Vietnam.

This Circular does not apply to organizations and individuals conducting extensive, modified extensive and semi-intensive commercial Asian catfish rearing.

3. Commercial Asian catfish rearing-establishments comply with the general provisions of this Circular and when being inspected under GAP (SQF, VietGAqP, Global GAP,...) process will be granted Asian catfish rearing certificates of corresponding degree by functional agencies.

Article 2. Interpretation of terms

In this Circular, the terms below are construed as follows:

1. Intensive Asian catfish rearing-establishments (below referred to as Asian catfish-rearing establishments) are places where intensive Asian catfish farming activities are carried out, which are owned by individuals or organizations.

2. Intensive Asian catfish farming zones (below referred to as Asian catfish farming zones) are areas where exist one or many intensive Asian catfish-rearing establishments, with the minimum area of 30 ha each and the common use of supplied water sources.

3. Food safety and hygiene-guaranteed intensive Asian catfish farming means a form of conditional Asian catfish rearing, which satisfies the standards prescribed in Chapter II of this Circular.

Chapter II

CONDITIONS ON REARING ESTABLISHMENTS AND ZONES

Article 3. General conditions

1. Asian catfish-rearing establishments and zones must lie within planned regions; comply with local regulations on Asian catfish farming. Small and separate Asian catfish-rearing establishments lying outside the planned regions before this Circular takes effect shall comply with local regulations on management and supervision.

2. Asian catfish rearing establishments must be numbered and registered under regulations of the Ministry of Agriculture and Rural Development.

3. Water source quality must be guaranteed under the provisions of Appendix 1 to this Circular.

Article 4. Conditions on infrastructure

1. Rearing pond systems

a/ A rearing pond must cover at least 3,000 m² of water surface; the minimum depth from pond bed to water surface must be 3m and the pond banks must be solid and leak-free.

b/ The pond bed must be leak-free. be flat and slant by 8⁰ - 10⁰ to the sluice gates.

c/ Ponds must be built with solid separate water supply and water drainage sluice gates against leaking.

2. Supplied water, wastewater and waste treatment systems

a/ Storage (sediment) areas: With water sources prone to pollution, rearing establishments and zones must build storage (sediment) areas for water treatment before supply into rearing ponds; ponds must be built with solid banks and bed against leaking.

b/ Wastewater treatment systems: Asian

catfish-rearing establishments and zones are encouraged to build areas for treatment of wastewater from rearing ponds before discharge into the environment,

c/ Waste mud storage areas: Asian catfish-rearing establishments and zones must build waste mud storage areas for treatment of all waste mud volumes in the farming process and mud must be dredged before the ponds are stocked with breeds for farming; waste mud storage areas must be built with walls to prevent mud and mud water from penetrating into the surrounding environment.

3. Water supply and water drainage canal systems: Asian catfish-rearing establishments and zones must build separate and solid water supply canals and water drainage canals against leaking, ensuring adequate water supply and drainage when necessary.

4. Support infrastructure systems: Asian catfish rearing establishments and zones must be built with lodging houses, working offices, warehouses for storage and preservation of machinery, instruments, raw materials and materials and other support facilities, depending on each establishment or zone; support facilities must be separate from rearing pond systems and must be solid, dry and well-ventilated, be structured with raw material and material-shelves of at least 15 cm above the floor, with separate compartments for preservation of machinery, fishing gears, feed, fishery veterinary drugs, environment treatment and improvement products and fuel.

Article 5. Conditions on special-use equipment, machinery and instruments

Asian catfish rearing establishments must be adequately furnished with the following production equipment and instruments:

1. Equipment and instruments for the inspection of a number of environmental elements (temperature, pH, dissolving oxygen,

BOD, COD, H₂S, NH₃) and fishing gears used in production.

2. Mechanical pumps for periodical or necessary water supply and drainage for rearing establishments.

3. Oxygen supply equipment, mud suckers (siphons), which will be furnished, depending on the reared fish density.

Article 6. Conditions on Asian catfish rearing technological process

1. Rearing pond preparation

a/ Before stocking ponds with breeds, Asian catfish rearing establishments must improve the pond bed foundation and treat solid wastes, potential disease-causing agents, with proper measures in order to ensure hygiene for the farming pond environment and the minimum break time of one month after each farming drive.

b/ Water supplied into Asian catfish ponds must be treated and filtered to get rid of harmful animals and treat disease germs. The quality of supplied water and Asian catfish rearing water must comply with Appendix 1 to this Circular.

2. Selection of breeds and breed stocking

a/ Asian catfish breeds for commercial farming must have clear origin and satisfy the quality requirements defined in Branch Standard 28 TCN 170: 2001 Freshwater Fishes- *Batfish, Asian Catfish and Ba sa Fish Breeds - Technical requirements*; accompanied with quarantine certificates issued by specialized management bodies.

b/ Stocking density: 20-40 fry/m².

c/ Stocking seasons: To comply with annual stocking seasons of each locality.

3. Feeds and feed supplements

a/ Feeds and feed supplements must be on the list of those permitted for circulation in Vietnam.

b/ If establishments produce Asian catfish

feeds by themselves, the feed quality must comply with Branch Standard 28 TCN 188 : 2004 Mixed Feeds in Pill for Asian Catfish and Basa Fish.

4. Drugs, bio-preparations and products for aquaculture environment treatment and improvement must be on the list of those permitted for circulation in Vietnam.

5. Tending and management

a/ Rearing pond water level: To be maintained at 2- 4.5 m.

b/ Rearing pond environment: Asian catfish rearing establishment owners shall periodically test the water environment of the pond and pond bed mud as provided for in Section I of Appendix 4 to this Circular (*not printed herein*).

c/ Feeding Asian catfish: Feed rations will be 3-5% of fish weight/day; however, catfish farmers should inspect the level of feed eaten by fish for appropriate adjustment; fish will be fed 1- 2 times/day.

d/ Wastewater and wastes

- Before being discharged into the environment, wastewater from Asian catfish ponds must be treated up to the quality standards prescribed in Appendix 2 to this Circular.

- Solid wastes and pond bed mud must be stored in separate areas and not be discharged into the surrounding environment when they are not yet treated.

e/ Disease prevention for fish

- Asian catfish rearing establishments shall formulate and strictly comply with plans to supervise the health of reared fish under the guidance in Appendix 3 to this Circular (*not printed herein*).

- People, tools and equipment in direct contact with mud and water, when being moved from one pond to another, must be cleansed to prevent spread of germs.

-Diseased fish, dead fish and wastes from diseased ponds must be promptly gathered and treated.

6. Requirements on product harvesting

Asian catfish rearing establishments must stop using antibiotics and chemicals before harvesting fish under the guidance of producers.

Article 7. Conditions on personnel

Asian catfish-rearing establishments of less than 5 ha shall each send at least 1 person to training and refresher courses on conditions on food safety and hygiene-guaranteed intensive Asian catfish-rearing establishments and zones or to aquaculture training courses.

Asian catfish-rearing establishments of 5-20 ha must be staffed each with at least one intermediate-level aquaculture staff.

Asian catfish-rearing establishment of over 20 ha must be staffed each with at least one aquaculture engineer.

Article 8. Conditions on file management

Asian catfish-rearing establishments shall open and keep records on Asian catfish farming activities, made according to forms defined in Section II of Appendix 4 to this Circular (*not printed herein*).

Chapter III

ORGANIZATION OF IMPLEMENTATION

Article 9. Responsibilities of agencies

1. The Fishery Directorate shall guide, supervise and inspect the implementation of this Circular nationwide.

2. Provincial-level Departments of Agriculture and Rural Development shall organize the implementation of this Circular in their respective provinces or cities.

Article 10. Effect

1. This Circular takes effect 45 days from the date of its signing.

2. This Circular replaces Decision No. 70/2008/QĐ-BNN of June 5, 2008, of the Ministry of Agriculture and Rural Development, promulgating the Regulation on Management of Asian Catfish Rearing Zones and Establishments.

Any difficulties and problems arising in the

course of implementing this Circular shall be promptly reported to the Ministry of Agriculture and Rural Development for study and settlement.-

*For the Minister of
Agriculture and Rural Development
Deputy Minister
VU VAN TAM*

Appendix 1. Requirements on fish rearing water quality

(*To Circular No. 44/2010/TT-BNNPTNT of July 22, 2010, of the Minister of
Agriculture and Rural Development*)

No.	Norm	Unit	Optimum level	Permitted limit	Note
1	BOD ₅	mg/l	≤ 20	< 30	
2	NH ₃	mg/l	≤ 0.1	≤ 0.3	More poisonous when pH and temperature are high
3	H ₂ S	mg/l	< 0.02	≤ 0.05	More poisonous when pH is lower
4	pH		7.0 ÷ 8.5	7 ÷ 9	Fluctuating not more than 0.5 in the day
5	DO	mg/l	≥ 3.0	≥ 2.0	
6	Alkaline degree	mg/CaCO ₃ /l	80 ÷ 120	60 ÷ 180	

Appendix 2. Requirements on quality of post-treatment wastewater from ASIAN catfish ponds

(*To Circular No. 44/2010/TT-BNNPTNT of July 22, 2010, of the Minister of
Agriculture and Rural Development*)

No.	Permitted parameters	Sign/ Formula	Unit	Permitted limit
1	Amoniac Ammonia	NH ₃	mg/l	≤ 0.3
2	Phosphate	PO ₄ ³⁻	mg/l	< 10
3	Carbondioxide	CO ₂	mg/l	< 12
4	Sulfur Hydrogen sulfide	H ₂ S	mg/l	≤ 0.05
5	Suspended solid substances	SS	mg/l	< 100
6	Bio-chemical oxygen	BOD ₅	mg/l	< 30
7	Dissolving oxygen	DO	mg/l	≥ 2.0
8	pH	pH	-	5-9
9	Mineral oil and grease	-	-	Emulsion not observed
10	Smell, sense	-	-	No had smells