

Friend of the Sea Standard

FOS-Aqua - Inland Standards for the certification of land-based aquaculture

Friend of the Sea Association

Corso Buenos Aires, 37 - 20124 Milano

Tel: +39.02.87075167
info@friendofthesea.org
www.friendofthesea.org

REV	DATE	REASON	VALIDATION	APPROVAL
1	18/01/2013	First issue		
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3	18/10/2016	Second review		

Foreword

Friend of the Sea is a non-governmental organisation established in 2008, whose aim is to safeguard the marine environment and its resources incentivising a sustainable market and implementing specific protection and preservation projects.

The certification diagram of Friend of the Sea assesses according to sustainability criteria and indicators fishing and aquaculture projects. The certification, granted by Independent Certification Bodies following an audit, ensures that a product complies with sustainability requirements.

The Friend of the Sea certification diagram for sustainable aquaculture is structured in order to **comply with "Technical Guidelines on Aquaculture Certification - Version Approved by the 29th Session of Committee on Fisheries (COFI) - held in Rome, Italy from 31 January to 04 February 2011"**. Therefore, all indicators refer to criteria that comply with the "Minimum substantive criteria for addressing environmental and social integrity in aquaculture certification schemes".

"44. Environmental impact assessments should be conducted, according to national legislation, prior to approval of establishment of aquaculture operations.

45. Regular monitoring of on-farm and off-farm environmental quality should be carried out, combined with good record keeping and use of appropriate methodologies.

46. Evaluation and mitigation of the adverse impacts on surrounding natural ecosystems, including fauna, flora and habitats should be carried out.

47. Measures should be adopted to promote efficient water management and use as well as proper management of effluents to reduce impacts on surrounding land and water resources should be adopted.

48. Where possible, hatchery produced seed should be used for culture. When wild seeds are used, they should be collected using responsible practices.

49. Exotic species are to be used only when they pose an acceptable level of risk to the natural environment, biodiversity and ecosystem health.

50. With reference to paragraph 9.3.1 of the Code of Conduct for Responsible Fisheries, where genetic material of an aquatic organism has been altered in a way that does not occur naturally, science-based risk assessment should be used to address possible risks on a case-by-case basis. Induction of polyploidy is not included.

51. Infrastructure construction and waste disposal should be conducted responsibly.

52. Feeds, feed additives, chemicals, veterinary drugs including antimicrobials, manure and fertilizer should be used responsibly to minimize their adverse impacts on the environment and to promote economic viability.

55. Workers should be treated responsibly and in accordance with national labour rules and regulations and, where appropriate, relevant ILO conventions.

56. Workers should be paid wages and provided benefits and working conditions according to national laws and regulations.

57. Child labor should not be used in a manner inconsistent with ILO conventions and international standards."

Friend of the Sea criteria and their compliance with Minimum Substantive Criteria (FAO)

Following the reference Friend of the Sea Criteria used during the audit. For each criterion the respective Minimum Substantive Criterion observed is mentioned in brackets.

1. Management of sustainable aquaculture system (45)
2. Location of the site and environmental footprint Assessment (44,49)
3. Infrastructure (44, 51)
4. Fattening (48)
5. Feeding (52)
6. OGM/GMO and growth hormones (50)
7. Prevention of diseases and use of drugs (30)
8. Management of waters and wastewaters (47)
9. Hazardous substances (45, 51)
10. Management of energy
11. Social Accountability (55, 56, 57)
12. Traceability (126, 33)

Each criterion contains essential or important indicators or recommendations.

Essential indicators: the organization shall be 100% compliant with essential requirements to be recommended for certification by the certification body. Failure to comply with essential requirements is a major nonconformity (NC). To achieve certification, corrective actions shall be implemented within three months from the date of assessment of NCs. The organisation shall provide the certification body with satisfactory evidence of correction of all major NCs, if necessary, with additional audits. Exclusively for requirement 2.3, considering the complexity of possible missing data to be retrieved, the time interval allowed for the correction of NCs is extended to 6 months.

Important Indicators: the organisation shall be 100% compliant with important requirements for the company to be recommended for certification. Failure to comply with important requirements is a minor NC. To achieve certification, proposals to carry out corrective actions shall be submitted to the certification body within maximum three weeks from the date of assessment of the NCs. In the proposal, the company shall include the timeframe for the implementation of each corrective action.

Recommended Indicators: it is not compulsory for the organization to comply with recommended indicators to achieve certification. Nonetheless, all the aspects related to these requirements will be reviewed and any NCs will be highlighted in the audit report as a 'recommendation'. The company should consider the necessity of corrective actions and, during the next inspection, inform the certification body about the corrective measures undertaken.

If a requirement is not applicable for the audited organization, it should be marked with N.A.

Description of the organization

Only the Certifying Body and Auditor in charge of the inspection can complete this document. It shall be completed in the Certifying Body or Auditor's mother tongue or in English if spoken fluently.

a) NAME OF THE ORGANISATION TO BE AUDITED:
b) NAME OF THE ORGANIZATION THAT REQUESTED THE AUDIT:
c) IS THE ORGANIZATION TO BE AUDITED PART OF A GROUP?
d) ADDRESS OF THE ORGANIZATION TO BE AUDITED:
e) NAME AND CONTACTS OF THE PERSON RESPONSIBLE FOR THE ORGANIZATION TO BE AUDITED:
f) COMMON NAME OF THE SPECIES BRED: (e.g.: rainbow trout)
g) SCIENTIFIC NAME OF THE SPECIES BRED: (e.g.: <i>Oncorhynchus mykiss</i>)
h) SITES TO BE AUDITED: (please list site names and locations)

i) SITES VISITED BY THE AUDITOR:

(if different from f)

j) DESCRIPTION OF THE AQUACULTURE SYSTEM:

*(E.g.: land, bay, offshore, extensive, intensive, basin, tank, cage, nets, etc.
Geographical extension, other. If available include a map)*

k) DESCRIPTION OF BREEDING TECHNIQUES:

(Summary of breeding techniques from broodstock, to hatching, to the finished product)

l) ACTIVITY OF THE ORGANIZATION TO BE AUDITED:

- breeding**
- pre-transformation**
- final transformation**
- import**
- export**
- distribution**
- other (description):**

m) DESCRIPTION OF THE FINAL PRODUCT:

(e.g.: fresh, frozen, canned, other)

n) BRANDS OF FINISHED PRODUCT:

(List of brands under which the product is sold. If available include images of the brands)

o) DESCRIPTION AND LOCATION OF FREEZERS AND WAREHOUSES, IF ANY:
(For product traceability purposes)

p) TOTAL NUMBER OF EMPLOYEES:
optional

q) ENVIRONMENTAL CERTIFICATIONS AND AWARDS:

r) ADDITIONAL INFORMATION:

- The Friend of the Sea project was introduced** *(If not, the Auditor shall provide a short description)*
- The Organization and the ship owners were informed of the opportunity, in case of approval, of using the Friend of the Sea logo on the certified products**
- The Organization has a document qualifying and confirming the roles of the staff carrying out the audit**
- The duration of the Audit was agreed upon**
- The information included in the Preliminary Information Form (PIF) has been confirmed** (in case of changes to the PIF, an updated version has to be promptly provided):

CERTIFICATION BODY	AUDIT TEAM:	AUDIT START AND END DATE:
SIGNATURE OF AUDITOR:	NAME OF THE RESPONSIBLE PERSON FROM THE ORGANIZATION ACCOMPANYING THE AUDITOR DURING THE AUDIT:	AUDIT CODE:

NOTES TO THE AUDITOR

- 1) The auditor shall fill out all fields in the checklist.
- 2) Checklist compilation guidelines are highlighted in the blue boxes.
- 3) The Auditor shall provide an explanation when requirements are not applicable.
- 4) The Auditor shall write YES when the Organization complies with a requirement and NO when it does not.
- 5) The Auditor shall comment and explain the positive or negative answers. Simple "YES," "NO," or "N.A." are insufficient.
- 6) Each relevant document shall be added to the final Audit Report in a separate and numbered attachment.
- 7) Photographic explanations added to the checklist or attached are appreciated.

1 - MANAGEMENT OF THE AQUACULTURE SYSTEM

No.	Requirement	Level	Parameters and information	Y/N	Comments (State the number of the relevant procedure and the manual, if any, (quality, environment or other) where it is included.)
1.1	A sustainable aquaculture system shall implement management procedures for the following aspects:				
1.1.1	responsibility and authority of the environmental management of the company	Important	The organization shall have appointed at least one employee as responsible of the environmental management of the company.		
1.1.2	control of documents and registers (including the update of the environmental laws to comply with).	Important	The procedure shall require at least one yearly check and update of the environmental laws. Documents and registers shall be kept for at least 6 years.		
1.1.3	control of monitoring systems and measurement of environmental footprint parameters	Important	Control and measurement of environmental footprint shall be carried out at least every six months.		
1.1.4	control and maintenance of infrastructures	Important	Control and maintenance of infrastructures shall be carried out at least every six months.		
1.1.5	readiness for environmental emergencies and capability to address to them	Important	The procedure shall require a simulation of environmental emergency at least once a year.		

1.1.6	management of corrective actions (due to non-conformities and recommendations)	Important	The procedure shall require the correction of non-conformities and recommendations within at least 6 months from the detection or notification of the non-conformity.		
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The Auditor shall check the procedures adopted by the Organization, report the number of the relevant procedure and the manual, if any, (quality, environment or other) that includes it.

2 – SITE LOCATION

No.	Requirement	Level	Parameters and information	Y/N	Comments (Provide documental evidence. Specify expiry, validity of permit or licence. Specify title, date, author and relevant conclusions of EFA or footprint study pursuant to point 2.3)
2.1	The organization obtained a licence or permit for the development of the site, if required by the national regulation.	Essential	The Organization provides evidence of valid and up-to-date permit or licence.		
2.2	An Environmental Footprint Assessment (EFA) was carried out with a positive outcome, if required by the national regulation.	Essential	The organization provides evidence of a positive EFA.		
The auditor shall check if prior to the realisation of the system an environmental footprint assessment was carried out. The Auditor shall specify title, date, author and conclusions concerning the EFA examined. Since in many countries an environmental footprint assessment is not mandatory before the realisation of a system, this requirement can be balanced with a full conformity with the requirement 2.3.					
2.3	In case the national regulation does not require an EFA , the organization has arranged a footprint study carried out by a third party and such study shall verify that critical ecosystems, such as mangroves, rivers, lakes, bays, estuaries, wet areas, swamps and morasses have not been altered.	Essential	<p>1.The Organization provides evidence of footprint study carried out by a third party, that shall have kept into consideration at least the following parameters:</p> <p>1.1 technical-scientific data on condition, structure and functioning of the environment;</p> <p>1.2 data on the technological characteristics of the system;</p> <p>1.3 forecast on the behaviour of the environment and interactions between project and environmental components;</p> <p>1.4 summary and comparison of footprint and direct/indirect benefits of the system.</p> <p>The study shall assess and calculate environmental footprint</p>		

No.	Requirement	Level	Parameters and information	Y/N	Comments (Provide documentary evidence. Specify expiry, validity of permit or licence. Specify title, date author and relevant conclusions of EFA or footprint study pursuant to point 2.3)
			<p>direct or indirect, short or long term, permanent or temporary, single or cumulative.</p> <p>2. The study takes into consideration the following environmental factors, also in connection to each other: 2.1 human being, 2.2 fauna, 2.3 flora, 2.4 soil, 2.5 water, 2.6 air, 2.7 2.7 climatic factors and 2.8 landscape; 2.9 cultural heritage.</p>		

The Auditor shall specify title, date, author and conclusions concerning the Environmental Footprint Assessment examined. The Auditor shall confirm that the environmental footprint assessment kept into account all the factors mentioned in the Reference Quantitative Parameters

3 - INFRASTRUCTURES

No.	Requirement	Level	Parameters and information	Y/N	Comments (State the number of the required procedures and the reference Manual. Describe the systems implemented (filters, screens, nets, etc.) and attach technical documents (relevant photos or videos)).
3.1	The average yearly percentage of fish escapes is not higher than 0.5% of the total of farmed fish.	Important	The organization shall provide evidence of the compliance with the maximum limit of 0.5% of fish escape of the total of bred fish and undertakes not to exceed such average.		
3.2	In order to minimize the leakage of eggs, larvae and bred species, the organization implements:				

3.2.1	screens, filters or similar	Essential	The organization shall have a technical declaration of the supplier that certifies the suitability of nets, filters and other structures for the reduction of the leakage of eggs, larvae and bred species.		
3.2.2	control and maintenance procedures	Essential	The procedures shall require control and maintenance to be performed at least every six months.		
3.2.3	procedures and alert systems in case of exceptional weather events	Essential	The procedures shall require at least a yearly simulation.		
3.3	In order to prevent other organisms, such as birds or other predators, from entering the system, the Organization implemented:				
3.3.1	screens, filters, cover-up nets or similar	Essential	The organization shall have a technical declaration of the supplier that certifies the suitability of nets, filters, and other structures for preventing other organisms such as birds or other predators from entering the system.		
3.3.2	control and maintenance procedures	Essential	The procedures shall require control and maintenance to be performed at least every six months.		
3.4	In case of escapes of animals, the organization provided procedures for:				
3.4.1	recording escapes	Essential	The records shall be carried out at least once a week also stating the absence of escapes.		

3.4.2	promptly notify the competent local authorities	Essential	The procedure shall include telephone numbers and email addresses of the competent authorities to be contacted in case of fish escape. The procedure shall require that the competent authorities are alerted within a maximum of 30 minutes from detecting the escape		
3.4.3	implement corrective measures addressed to reduce future risks of further escapes due to similar causes	Essential	The procedure shall require the implementation of corrective actions within 6 months from the detection of notification of the issue.		

The auditor shall state the number of the required procedures and the reference Manual. The Auditor shall describe the systems implemented (filters, screens, nets, etc.) and attach technical documents (relevant photos or videos).

3.5	The Organization does not use toxic anti-vegetative paint.	Essential	The organisation shall provide an independent scientific assessment that proves non-toxicity.		
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In case the Organisation declares they use anti-vegetative paint, the Auditor shall request a copy of the technical characteristic of the paint used, proving their non-toxicity. In case the Organization declares they do not use anti-vegetative paint, the Auditor shall request evidence of the alternative methods used.

4 - FATTENING

No.	Requirement	Level	Parameters and information	Y/N	Comments
4.1	Species fished for fattening shall originate from fishing activities approved by Friend of the Sea. http://www.friendofthesea.org/fisheries.asp	Essential	The updated list of the fleet approved by Friend of the Sea is available on http://www.friendofthesea.org/fisheries.asp		

Fattening refers to the aquaculture method that involves feeding and breeding of individuals fished in nature (e.g.: Red tuna and Eel). The Auditor shall describe the origins (area of fishing, fishing method, flag of the fleet) of the fished species.

5 - FEEDING

No.	Requirement	Level	Parameters and information	Y/N	Comments (refer the name of the supplier, name of the product and formulation of the food. Include conversion index analysis).
5.1	The organization uses animal feed certified by Friend of the Sea, when available on the market for the species farmed. http://www.friendofthesea.org/certified-products.asp Alternatively, the Organization uses trimmings from processing of edible products.	Recommendation	The updated list is available on the Friend of the Sea website		
5.2	The organisation uses animal feed produced by IFFO certified plants such as Responsible Sourcing / Responsible Production.	Essential	The updated list of the plants certified by IFFO is available on http://www.iffco.net/default.asp?contentID=742		
The Auditor shall provide a list of all the animal feeds used by the Organization, stating name of supplier, name of product and formulation.					
5.3	The organization collects and maintain records of feed conversion index.	Important:	The data shall be collected at least every six months		

6 – GMO AND GROWTH HORMONES

No.	Requirement	Level	Parameters and information	Y/N	Comments (verify drug purchase register and related documents)
6.1	The use of GMO fish species is not allowed.	Essential	Absence of GMO fish species		
6.2	The use of growth hormones is not allowed.	Essential	Absence of growth hormones		

7 - DISEASE PREVENTION AND USE OF DRUGS

No.	Requirement	Level	Parameters and information	Y/N	Comments (report on the control of drug use register)
7.1	The organization does not use drugs as preventive measures.	Essential	Such commitment shall be formally specified in the company policies		

7.2	The organization uses only legal drugs and chemical compounds, as permitted by the local, national or international regulation and only when justified by the occurrence of specific issues.	Essential	Refer to http://www.fao.org/fishery/nalo/search/en		
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The Auditor shall request to see drug use procedures and registers.

'Preventive drugs' are those use to prevent the onset of a disease, and not when a disease appears.

8 - MANAGEMENT OF WATERS AND WASTEWATERS

No.	Requirement	Level	Parameters and information	Y/N	Comments (Attach a copy of the latest analysis of the effluents performed by the Competent National Bodies, completed with official declaration of conformity with the regulation)
The Auditor encloses a copy of the latest analyses of the effluents carried out by the competent national bodies completed with official declaration of conformity with the regulation.					
8.1	The water quality parameters of the effluents shall comply with the national regulations. When national regulations are not in place, water quality parameters shall comply with the following parameters:				
8.1.1	Ammonium (NH ₄)	Essential	≤1 mg/L		
8.1.2	Nitrate (NO ₃ ⁻)	Essential	≤15 mg/L		
8.1.3	Nitrite (NO ₂)	Essential	≤1 mg/L		
8.1.4	Phosphorus (PO ₄)	Essential	≤0.2 mg/L		
8.1.5	Dissolved Oxygen	Essential	≥5 mg/L		
8.1.6	CO ₂	Essential	<2.0 ppm		
8.1.7	Cd	Essential	≤0.05 mg/kg		
8.1.8	Pb	Essential	≤0.03 mg/kg		
8.1.9	Zn	Essential	≤0.02 mg/kg		
8.1.10	Cu	Essential	≤0.01 mg/kg		
8.1.11	Trophic Index value	Recommendation	<6		
8.2	The effluents shall be monitored at least once every six months.	Important	The monitoring shall be carried out at least every 6 months.		
8.3	The company maintains records of the water chemical analyses carried out.	Important	The records shall be kept for at least 5 years.		
The Auditor requests to examine the monitoring frequency and method procedure and takes note of the number of the procedure and the manual that includes it. The auditor requests to view the previous yearly analysis of waters and sediments. * Trophic index= log.((CHL *DO *N * P) +1.5) / 1.2) (CHL: chlorophyll,DO: dissolved O2).					

9 - HAZARDOUS SUBSTANCES

No.	Requirement	Level	Parameters and information	Y/N	Comments (Report on the control of the relevant purchase register)
9.1	Using toxic and persistent chemical compounds (e.g. TBT, Malachite Green, DDT) is forbidden. The use of forbidden substances shall occur in compliance with the safety regulations.	Essential	As reference to the existing international regulation verify http://www.fao.org/fishery/nalo/search/en		
The Auditor requests to view the use procedures of the hazardous substances contained in the Safety Manuals and reports the number of the procedure. The Auditor shall also verify its compliance during the inspection.					

10 - ENERGY MANAGEMENT

No.	Requirement	Level	Parameters and information	Y/N	Comments
10.1	The Organization shall keep a register of the energy consumption, updated at least once a year.	Important	The at least-yearly frequency of the energy consumption records shall be included in the procedure. The register shall state at least the following parameters: 1. incoming energy sources, 2. energy consumption values and 3. consumption per production phase and 4. per product unit.		
10.2	The organization undertakes to achieve a yearly energy consumption reduction per product unit.	Recommendation			
The Auditor shall request copies of the registers.					

11 - SOCIAL ACCOUNTABILITY

No.	Requirement	Level	Parameters and information	Y/N	Comments (Report on documental evidence provided by the organisation and evidence collected on-site through interviews with employees)
11.1	The Organization shall respect human rights, complying with the following requirements:				
11.1.1	comply with national regulations and ILO on child labor	Essential	Refer to ILO: http://www.ilo.org/global/standards/introduction-to-international-labour-standards/language--en/index.htm		
11.1.2	pay the workers adequate salaries compliant at least with minimum legal wages	Essential	Minimum wages vary depending on the country. The Auditor shall verify the Organisation knows about it.		
11.1.3	grant their workers access to healthcare	Essential			

11.1.4	apply the safety measures required by the law	Essential			
11.2	The organisation should be SA8000-certified.	Recommendation			

The Auditor shall verify the compliance with the requirements through documental evidence (work-contract samples) and on-site observation.

12- TRACEABILITY

No.	Requirement	Level	Y/N	Comments
12.1	The Company shall implement a traceability system that allows verifying that the certified products come from approved systems and there is no possibility of exchange with products coming from non-certified systems.	Essential		

Further comments:

The Auditor shall also fill-in the following fields

- **The products of Organization come from an aquaculture system which COMPLIES with Friend of the Sea requirements.**

- **The products of Organization come from an aquaculture system which DOES NOT COMPLY with Friend of the Sea requirements.**

The Auditor found the following non-conformities:

MAJOR NON-CONFORMITIES (to be conformed within 3 months)

Specify the points

MINOR NON-CONFORMITIES (to be reported within 3 weeks and confirmed within 1 year)

Specify the points

RECOMMENDATIONS (to be communicated within the next inspection)

Specify the points