Friend of the Sea Standard

FOS – Seaweeds and algae products requirements

Friend of the Sea non Seafood Standard

<table>
<thead>
<tr>
<th>REV</th>
<th>DATE</th>
<th>REASON</th>
<th>Issued by</th>
<th>APPROVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>04/02/2014</td>
<td>First issue</td>
<td>Paolo Bray</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>30/01/2020</td>
<td>Update</td>
<td>Paolo Bray</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>27/01/2020</td>
<td>Update</td>
<td>Mario Passoni</td>
<td></td>
</tr>
</tbody>
</table>
Friend of the Sea is a non-governmental organisation founded in 2008 whose mission is the conservation of the marine habitat and its resources by means of certification and promotion of certified products from sustainable fisheries and aquaculture.

Friend of the Sea has created a certification program for products from both fishing and sustainable aquaculture. Audits are carried out by independent certification bodies and ensures that the product conforms to the sustainability requirements.

The use of the logo is authorized only following a positive outcome of an audit carried out by the certification body:

Friend of the Sea sustainable seaweed and algae certification covers the following criteria:

1. Management system
2. Legal compliance
3. Biomass and Environmental Impact Assessment
4. Water monitoring
5. Air emissions monitoring
6. Waste management
7. Chemicals and hazardous substances
8. Energy management
9. Social accountability
10. Traceability
Each of these criteria include essential or important requirements, or recommendations.

**Essential Requirements**: Conformity to essential requirements is mandatory for certification. Any shortfall with regard to these requirements is considered as a Major Non-Conformity. Corrective actions must be implemented and compliance to the requirements must be proved within three months from receipt of the Audit Report.

**Important Requirements**: Conformity to Important Requirements is mandatory for certification. Any shortfall with regard to these requirements is considered as a Minor Non-Conformity. Corrective Actions (declaration of intent and plan of action) must be proposed to the Certification Body within three weeks from the date the Audit Report is received. The Organization must include in its proposed Corrective Action a deadline for compliance. The maximum term for the complete implementation of each Corrective Action is one year.

**Recommendations**: recommendations are not mandatory for certification. Nevertheless, compliance will be verified and non conformity will be reported by the auditor.

**In case a requirement is not applicable to the audited unit of certification this will be defined as not applicable (N/A).**
<table>
<thead>
<tr>
<th>a) NAME OF THE UNIT OF CERTIFICATION BEING AUDITED:</th>
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</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>b) IS THE UNIT OF CERTIFICATION PART OF A GROUP?</td>
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<td></td>
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<tr>
<td>c) ADDRESS OF THE ORGANIZATION BEING AUDITED:</td>
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<td></td>
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<tr>
<td>d) SEAWEED or ALGAE COMMON NAME:</td>
</tr>
<tr>
<td>(e.g.: Dulse)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>e) SEAWEED or ALGAE SCIENTIFIC NAME:</td>
</tr>
<tr>
<td>(e.g.: Palmaria palmata)</td>
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<td></td>
</tr>
<tr>
<td>f) SITES INCLUDED IN THE AUDIT SCOPE:</td>
</tr>
<tr>
<td>(list names of sites and location)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>g) SITES VISITED BY THE AUDITOR:</td>
</tr>
<tr>
<td>(sites audited on site)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>h) DESCRIPTION OF SEAWEED EXTRACTION:</td>
</tr>
<tr>
<td>(e.g.: harvested from naturally grown (wild) seaweed; cultivated (farmed); vegetative cultivation or cultivation involving a reproductive cycle; pond; sea-based. Where available include a map)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
| **i) DESCRIPTION OF FARMING OR HARVESTING TECHNIQUES:**  
<table>
<thead>
<tr>
<th>(Summary of the techniques used farming or harvesting)</th>
</tr>
</thead>
</table>
| **j) OPERATIONS OF THE UNIT OF CERTIFICATION BEING AUDITED:**  
| □ farming  
| □ harvesting  
| □ pre-processing  
| □ final processing  
| □ importing  
| □ exporting  
| □ distribution  
| □ other (description): |
| **k) DESCRIPTION OF THE FINAL PRODUCT:**  
<table>
<thead>
<tr>
<th>(e.g.: fresh, dried, carrageen, human consumption, fertilizer, animal feed, fish feed, biomass, cosmetics, etc.)</th>
</tr>
</thead>
</table>
| **l) FINISHED PRODUCT BRANDS:**  
<table>
<thead>
<tr>
<th>(List of brands, if any under which the product is sold. Where available include brand images)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>m) DESCRIPTION AND LOCATION OF ANY WAREHOUSE EXTERNAL TO THE AUDIT SITE</strong> (for the purposes of products’ traceability)</td>
</tr>
<tr>
<td>---</td>
</tr>
</tbody>
</table>
| **n) TOTAL NUMBER OF EMPLOYEES:**  
<table>
<thead>
<tr>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>o) ENVIRONMENTAL CERTIFICATIONS AND ACKNOWLEDGEMENTS:</strong></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>p) ADDITIONAL INFORMATION:</strong></td>
</tr>
</tbody>
</table>
☐ Friend of the Sea project has been introduced
   *(If not, auditor should provide short description)*

☐ The Audited company has been informed that in case of approval confirmation, it can use the
   Friend of the Sea logo on its certified products

☐ The Company has handed over a copy of the company unit of certificational chart
   identifying the role of the staff involved in the audit

☐ Audit timing has been agreed upon.

☐ Data of Preliminary Information Form have been confirmed: *(In case of different
   info please detail)*

<table>
<thead>
<tr>
<th>CERTIFICATION BODY:</th>
<th>AUDIT TEAM:</th>
<th>AUDIT START AND END DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SIGNATURE OF AUDITOR:</th>
<th>NAME OF THE PERSON IN CHARGE OF THE UNIT OF CERTIFICATION AND ACCOMPANYING THE AUDITOR DURING THE AUDIT:</th>
<th>AUDIT CODE:</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>TYPE OF AUDIT:</th>
</tr>
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<tbody>
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</tbody>
</table>
NOTES FOR THE AUDITOR

1) The Auditor must complete all fields of the checklist.
2) Instructions for completing the checklist are indicated in blue.
3) The Auditor must justify in case requirement is Not Applicable.
4) The Auditor must answer Yes (Y) when the Organization is compliant with the requirement and No (N) when it is not compliant.
5) The Auditor must provide comments and explanations for positive or negative responses. Yes, No or Not Applicable are not sufficient.
6) Any significant documental evidence must be attached to the final audit report in a separate and numbered appendix.
7) Photographs should be added to the checklist and/or as an annex.

1 - MANAGEMENT SYSTEM

<table>
<thead>
<tr>
<th>No.</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>A sustainable seaweed/algae unit of certification management system must include the following:</td>
<td></td>
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</tr>
<tr>
<td>1.1.1</td>
<td>a manager of the environmental and social management system, with formally defined authority and responsibilities;</td>
<td>Important</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.2</td>
<td>a set of written procedures to ensure compliance with the requirements of this checklist;</td>
<td>Important</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.3</td>
<td>a written record of non-conformities and/or stakeholders' objections;</td>
<td>Important</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.1.4 a yearly internal review report. Important

The Auditor must examine the procedures used by the Unit of certification and report the identification number or code for the given procedure and database

## 2 - LEGAL COMPLIANCE

<table>
<thead>
<tr>
<th>No.</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Harvesting and farming activities supplying the unit of certification must be carried out in compliance with national and international legislation.</td>
<td>Essential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1</td>
<td>Farmers and harvesting suppliers of the unit of certification must have a valid administrative authorization or license, when requested by law.</td>
<td>Essential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.2</td>
<td>Harvesting suppliers of the unit of certification must comply with quotas or maximum permissible harvesting limits, when requested by law.</td>
<td>Essential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.3</td>
<td>Harvesting suppliers of the unit of certification must be compliant with minimum harvesting size limits, when requested by law.</td>
<td>Essential</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 2.1.4 Harvesting suppliers of the unit of certification must be compliant with rotational systems and stock recovery periods, when requested by law.

**Essential**

### 2.1.5 If seaweeds and/or algae are harvested from a shared or common harvest area, documentary evidence shall be available that the total harvest complies with national regulations, when in place.

**Essential**

### 2.2 The unit of certification must actively recommend national and international stakeholders to implement regulations to reduce potential environmental impact and risks of seaweed/algae harvesting and farming, according to the best scientific data available.

**Recommendation**

*The Auditor must provide evidence of compliance to these requirements.*

### 3 - BIOMASS AND ENVIRONMENTAL IMPACT ASSESSMENT

<table>
<thead>
<tr>
<th>No</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>In case of seaweed harvesting activity, an assessment of the status of the seaweed/algae and its biomass by appropriate research institutes or other recognised institutions unconnected to any harvesting and/or processing industries must be undertaken and it must conclude that the seaweed/algae is not overexploited nor endangered.</td>
<td>Essential</td>
<td></td>
<td></td>
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</tbody>
</table>

*The auditor must refer to the biomass studies (title, date, author)*
<table>
<thead>
<tr>
<th>No</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2*</td>
<td>This requirement applies to all harvesting operations and to those farming operations producing more than 20 tonnes per year. An Environmental Impact Assessment (EIA) or equivalent assessment of the harvesting or farming activity has been carried out with a positive outcome by the presiding authority or by other recognized independent institute or laboratory.</td>
<td>Essential</td>
<td></td>
<td>The auditor must check whether an independent environmental impact assessment or equivalent was carried out. The auditor must specify the title, date, author and significant conclusions of the inspected EIA or equivalent document. *In case the unit of certification is not compliant for 3.1, it must alternatively be compliant to 3.2 and sub requirements.</td>
</tr>
<tr>
<td>*3.3</td>
<td>In case of non compliance with 3.2, farming activities producing more than 20 tonnes per year must alternatively be compliant with the following requirements:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3.3.1</td>
<td>sea-based systems must not imply removal of rocks, corals or other obstructions leading to damage to the coastal ecosystem;</td>
<td>Essential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3.2</td>
<td>sea-based systems must not imply removal of competitive grasses or predators leading to damage to the coastal ecosystem;</td>
<td>Essential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3.3</td>
<td>large scale sea-based farms must not influence coastal water movement in a detrimental way. Protection from erosion or other positive impacts would not constitute a non-compliance with this requirement;</td>
<td>Essential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Requirement</td>
<td>Level</td>
<td>Y/N</td>
<td>Comments</td>
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<tr>
<td>3.3.4</td>
<td>any multiuser conflict must have been solved positive and allow other users access to the sea and to the shore.</td>
<td>Essential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3.5</td>
<td>a careful assessment of potential impacts must precede the introduction of any non-native species.</td>
<td>Essential</td>
<td></td>
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</tr>
<tr>
<td>3.3.6</td>
<td>removal of mangroves for farming purposes is prohibited. In case removal has occurred, a reforestation program must fully compensate the mangroves degradation occurred and caused by the seaweed/algae farming activity.</td>
<td>Important</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3.7</td>
<td>carrying capacity must have been independently evaluated, considering in particular the potential impact of nutrients removal.</td>
<td>Important</td>
<td></td>
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</tr>
</tbody>
</table>

The auditor must acquire documented information and evidence (text, photos, official documents to be annexed to the audit report) of the environmental conditions of the ecosystem prior to the installation and assess whether the site has led to a negative impact on the ecosystem.
### 3.4 In case of farming operations of less than 20 tonnes each per year, but more than 20 tonnes on a regional or national level, a regional or national level independent assessment must prove compliance with requirements 3.3 and sub. The study cannot be older than 5 years.

*The auditor must refer to the regional or national level assessment. The auditor must run sample onsite checks at small scale producers and produce / report evidence of compliance.*

### 4 - WATER MONITORING

<table>
<thead>
<tr>
<th>No</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>In farming facilities on land (Pond farming) where external nutrient sources are used and producing more than 20 tonnes per year, the nutrient levels in the effluent water shall be verifiably the same, or lower, than the inflowing water. Compliance with this requirement will be proved via independent laboratory analysis carried out at least annually, showing a non-significant variation of the following parameters:</td>
<td>Essential</td>
<td></td>
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<tr>
<td></td>
<td><strong>4.1.1</strong> communities of benthic macro invertebrates;</td>
<td>Essential</td>
<td></td>
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<tr>
<td></td>
<td><strong>4.1.2</strong> nitrogen and phosphorus content;</td>
<td>Essential</td>
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<tr>
<td></td>
<td><strong>4.1.3</strong> oxygen concentration;</td>
<td>Essential</td>
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<tr>
<td></td>
<td><strong>4.1.4</strong> increase of sedimentation and the granulometric variation;</td>
<td>Essential</td>
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<tr>
<td></td>
<td><strong>4.1.5</strong> deposits of organic matter.</td>
<td>Essential</td>
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</tbody>
</table>

*The Auditor must examine the procedure relating to the frequency and method of monitoring and shall record the number of the procedure and the relative manual. The Auditor must examine previous annual analyses of water and sediments.*
4.2 In case of farming operations of less than 20 tonnes each per year, but more than 20 tonnes on a regional or national level, a regional or national level independent assessment must prove compliance with requirements 4.1 and sub. The study cannot be older than 5 years.

The auditor must refer to the regional or national level assessment. The auditor must run sample onsite checks at small scale producers and produce / report evidence of compliance.

4.3 Seaweed/algae processing facilities and the unit of certification itself must provide evidence of water effluents compliance with existing regulation.

The auditor must report evidence of legal compliance with water quality and emissions regulations

5 - AIR EMISSIONS MONITORING

<table>
<thead>
<tr>
<th>No</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Seaweed/algae processing facilities and the unit of certification itself must provide evidence of its air emissions compliance with existing regulation.</td>
<td>Essential</td>
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</table>

The auditor must report evidence of legal compliance with air quality and emissions regulations
### 6 - WASTE MANAGEMENT

<table>
<thead>
<tr>
<th>No</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Ropes and other equipment used for growing and processing seaweed/algae shall be re-used or recycled where possible.</td>
<td>Important</td>
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</table>

*The Auditor should provide documental and photographic evidence of compliance.*

<table>
<thead>
<tr>
<th>No</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2</td>
<td>Seaweed/algae processing facilities and the unit of certification itself must provide evidence of waste management compliance with existing regulation.</td>
<td>Essential</td>
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*The auditor must report evidence of legal compliance with waste management regulations*

### 7 - CHEMICALS AND HAZARDOUS SUBSTANCES

<table>
<thead>
<tr>
<th>No</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>The use of toxic and persistent chemical compounds (e.g. TBTs, Malachite Green, DDT) is not permitted. The use of hazardous substances must be carried out in compliance with safety regulations.</td>
<td>Essential</td>
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</table>

<table>
<thead>
<tr>
<th>No</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2</td>
<td>Use of chemicals, such as Formaldehyde and slaked lime is permitted only when an independent assessment has proved their impact on the environmental to be sustainable.</td>
<td>Essential</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.3 Bio-fouling organisms shall be removed only by physical means or by hand and where appropriate returned to the sea at a distance from the farm. Cleaning of equipment and facilities shall be carried out by physical or mechanical measures.

The Auditor must examine the procedures for the use of chemicals and hazardous substances and indicate the number of the procedure. In addition, the Auditor must also verify their conformity during the inspection.

8 - ENERGY MANAGEMENT

<table>
<thead>
<tr>
<th>No</th>
<th>Requirement</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1</td>
<td>The unit of certification must maintain a record of energy consumption updated at least annually.</td>
<td>Important</td>
<td></td>
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</tr>
<tr>
<td>8.2</td>
<td>The unit of certification should calculate its non-renewable energy consumption per unit of product and undertake to reduce it annually.</td>
<td>Recommendation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.3</td>
<td>The unit of certification and its suppliers shall, by preference, use renewable energy sources.</td>
<td>Recommendation</td>
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</tbody>
</table>

The Auditor must obtain copies of the records.

9 - SOCIAL ACCOUNTABILITY
<table>
<thead>
<tr>
<th>No</th>
<th>Requirements</th>
<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>9.1</td>
<td>The unit of certification shall respect human rights, complying with the following requirements:</td>
<td></td>
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<tr>
<td>9.1.1</td>
<td>Compliance with national regulations and ILO on child labour.</td>
<td>Essential</td>
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<tr>
<td>9.1.2</td>
<td>Pay the employees adequate salaries compliant at least with the minimum legal wages according to the international legal framework.</td>
<td>Essential</td>
<td></td>
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</tr>
<tr>
<td>9.1.3</td>
<td>Grant employees access to health care.</td>
<td>Essential</td>
<td></td>
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</tr>
<tr>
<td>9.1.4</td>
<td>Apply safety measures required by the law. Nonetheless, compliance with the minimum safety requirements are mandatory, even if not required by local law.</td>
<td>Essential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.1.5</td>
<td>Keep records of accidents or injuries.</td>
<td>Essential</td>
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</tbody>
</table>
9.1.6  Freedom of association and collective bargaining.  Essential

9.1.7  No forced or compulsory labour.  Essential

9.1.8  No discrimination.  Essential

10 - TRACEABILITY

<table>
<thead>
<tr>
<th>No</th>
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<th>Level</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1</td>
<td>The unit of certification must have a system that allows verification that certified products originate from approved installations and that there is no possibility of interchange or mixing with products from non-approved installations.</td>
<td>Essential</td>
<td></td>
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</tr>
</tbody>
</table>
CONCLUSIONS:
It is important that the Auditor also completes the following fields

☐ The Unit of certification's products CONFORM to Friend of the Sea requirements.

☐ The Unit of certification's products DO NOT CONFORM to Friend of the Sea requirements.
The Auditor has found the following nonconformities:

MAJOR NONCONFORMITY (to conform within 3 months)
Specify

MINOR NONCONFORMITY (proposal within 3 weeks and conformity within 1 year)
Specify

RECOMMENDATIONS (notification before the subsequent inspection)
Specify