**Proposed Regulations to amend the Regulations relating to requirements for a technical standard for land-based aquaculture facilities for fish**

**Section 1. Object**

The Regulations are intended to contribute to preventing fish escaping from land-based aquaculture facilities by ensuring that the technical standard of the facilities is satisfactory.

**Section 2. The scope of the Regulations**

The Regulations apply to all land-based aquaculture facilities for fish on Norwegian terrestrial territory, regardless of the purpose of the aquaculture production.

The Regulations apply to all enterprises that hold or are obliged to hold an aquaculture licence for land-based aquaculture facilities for fish pursuant to the Act of 17 June 2005 No 79 relating to Aquaculture (the Aquaculture Act), regardless of the purpose of the aquaculture production.

Chapters 2, 3, 4, 5 and 6 of the Regulations also apply to suppliers of goods and services to the industry.

**Section 3. References in the Regulations to requirements set out in NS 9416:2013 and NS 3424:2012**

Where these Regulations refer to NS 9416:2013, the reference is to Norwegian Standard 9416:2013 – Land-based aquaculture farms for fish. Requirements for risk analyses, design, execution, operation, user handbook and product data sheet – or a European or international standard with a safety level equivalent to NS 9416:2013.

Where these Regulations refer to NS 3424:2012, the reference is to Norwegian Standard NS 3424:2012 – Condition survey of construction works. Content and execution – or a European or international standard with corresponding requirements for determining the condition as NS 3424:2012.

**Section 4. Definitions**

For the purpose of these regulations, the following definitions shall apply:

a) Section: part of land-based aquaculture facility, built to produce fish, which, based on e.g. function, water flow, age or condition shall be understood to be a separate unit in condition surveys pursuant to these Regulations.

b) User manual: document that describes the correct identification of parts, transport, storage, handling, assembly/installation, interfaces, operation and limitations of components in the aquaculture facility, in addition to use and maintenance.

c) Permission to use: document issued by the Directorate of Fisheries that confirms that a land-based aquaculture facility for fish *has documented an adequate technical standard to prevent fish from escaping in accordance with these Regulations.*

d) Design working life: assumed period for which a structure or part of it is to be used for its intended purpose with anticipated maintenance but without major repair being necessary.

e) Aquaculture licence holder: the party registered as the holder of an aquaculture licence in the Aquaculture Register pursuant to the Aquaculture Act Section 18.

*f)* *Tank: Separate container with water circulation used in fish production*

g) Component: part with relevance to fish escapes, e.g. tank, strainer, pipe, hose, dead fish collector, main outlet barrier, alarm system, overflow barrier, supply and mooring systems.

h) Land-based aquaculture facility: production facility for fish placed on land.

i) Component supplier: any party who sells, hires or in other ways delivers individual or assembled components to the aquaculture industry.

j) Delivery system: hoses and pipe systems from a secure area at the land-based aquaculture facility for fish to a landing facility on board a wellboat, motor vehicle or similar.

k) Product certificate: certificate confirming that the product is in compliance with a national or international standard or other technical specification, and that the production is subject to continuous quality control.

l) Design contractor: competent construction enterprise that designs, dimensions and plans land-based aquaculture facilities for fish in accordance with these regulations.

m) Design: design, dimensioning and execution planning.

n) Benchmark: description of the desired condition of a structure, structural component or object. Any condition below the benchmark is deemed to be a nonconformity.

o) Technical escape prevention report: a compilation of documents specifying the technical condition of a land-based aquaculture facility for fish with a view to preventing escapes.

p) Condition rating (CR): expression of a component’s condition in relation to the benchmark.

q) Executing contractor: competent construction enterprise responsible for construction, additions to and/or extension of land-based aquaculture facilities for fish.

r) Maintenance plan: a structured and documented set of tasks specifying the activities, procedures, resources and hours required to carry out maintenance.

s) Maintenance: a combination of all technical, administrative and control measures throughout a unit’s life cycle intended to uphold or restore it to a condition in which it is capable of meeting necessary functional requirements.

**Chapter 2. Design, execution, control and documentation requirements**

**Section 5. Qualifications, education and expertise requirements relating to the design contractor**

The aquaculture facility design contractor must be able to document that the enterprise has the overall qualifications required for the area of responsibility pursuant to this chapter, including that the personnel used have the necessary and relevant professional qualifications to ensure that requirements stipulated in or pursuant to the Aquaculture Act and NS 9416:2013 are observed.

The design contractor must be able to document that the enterprise has personnel with relevant practical design experience from the same or a similar field, and emphasis shall be placed on whether the enterprise’s qualifications in terms of education and experience are considered relevant.

**Section 6. Design, execution and control requirements**

A land-based aquaculture facility for fish shall be designed and executed in compliance with the requirements set out in NS 9416:2013 to ensure that the aquaculture activities can take place without any farmed fish escaping as a result of technical failure.

The design shall include all parts of the facility that may be relevant in relation to escapes. A comprehensive approach shall be applied and account shall be taken of how the various components may influence each other. It shall be demonstrated that the components and the facility can withstand the intended loads for the duration of the design working life. *If several enterprises are involved in designing the same facility, one enterprise shall be responsible for ensuring that the various parts are designed in compliance with the provisions of these Regulations.*

The execution shall ensure that the land-based aquaculture facility and its components are placed and installed in accordance with the design and the technical specifications.

The design contractor shall be responsible for preparing documentation that the actual execution complies with the design. When non-conformities pursuant to this provision are reported, the design contractor is responsible for ensuring that the change is designed and documented in accordance with the requirements set out in NS 9416:2013.

If there is no sufficient design basis for the execution, the executing contractor is responsible for reporting this to the design contractor and the aquaculture licence holder. If the execution deviates from the design, the executing contractor shall report back to the design contractor.

In case of missing or inadequate documentation that a land-based aquaculture facility has been designed and executed in accordance with the requirements set out in NS 9416:2013, the Directorate of Fisheries can order an independent inspection of all or parts of the design and execution in accordance with reliability class 3 in NS-EN 1990.

**Section 7. Documentation requirements**

The systems and qualifications of the design contractor under Sections 5 and 6 of these Regulations must be documented.

Once the land-based aquaculture facility is completed and ready for fish production, the design contractor and the executing contractor shall document that the facility was built in accordance with NS 9416:2013 and meets the requirements of Chapters 5 and 6 of these Regulations, including that:

*a) a risk assessment has been carried out in accordance with the standard,*

b) the foundation work is in accordance with the standard,

c) product certificates in accordance with Section 16 for tanks, pipes and hoses exist,

d) the aquaculture facility and its components are placed and installed as designed and in accordance with the technical specifications. Any non-conformities in placement and instalment shall be described,

e) all components are dimensioned and comply with the facility’s component lists. The components shall be marked and traceable to the manufacturer,

f) the components are undamaged after instalment,

g) a user manual exists and is available for day-to-day operations,

h) a condition rating has been set for all or parts of the facility.

The documentation shall be made available to the aquaculture licence holder.

The design contractor and the executing contractor shall use the form prescribed by the Directorate of Fisheries to document to the aquaculture licence holder that the requirements in the first and second paragraphs are complied with, that an inspection has been carried out in accordance with NS 9416:2013, and that no non-conformities or other factors exist that would be an obstacle to a permission to use being issued.

**Chapter 3. General component requirements**

**Section 8. Obligations**

The manufacturer, its representative and, if relevant, the component supplier shall ensure that the components are manufactured, labelled and distributed in accordance with the provisions of these Regulations.

The manufacturer’s representative is the party representing within the EEA area a manufacturer established outside the EEA area.

**Section 9. Component requirements**

In new land-based aquaculture facilities, the components shall be designed, produced and installed in accordance with the requirements set out in NS 9416:2013. The same applies to components not mentioned in NS 9416:2013.

Any components put to use in land-based aquaculture facilities that are already in operation shall also meet the requirements set out in NS 9416:2013 after these Regulations enter into force. The requirements relating to product certifications, cf. Section 16, also applies to tanks, pipes and hoses.

**Section 10. Traceability requirements**

The manufacturer or its representative, and, if relevant, the component supplier, shall have a system in place for ensuring traceability and handling non-conformity to ensure that the obligation pursuant to Section 13 can be fulfilled.

**Section 11. User manual requirements**

The manufacturer or its representative, and, if relevant, the supplier, of tanks, dead fish collectors, alarm systems and main outlet barriers, shall ensure that each component is accompanied by a user manual meeting the requirements set out in NS 9416:2013.

**Section 12. Product data sheet requirements**

The manufacturer or its representative, and, if relevant, the supplier, of other components than those mentioned in Section 11, shall, as a minimum, ensure that each component is accompanied by a product data sheet meeting the requirements set out in NS 9416:2013.

**§ 13. Obligation to implement measures in case of non-conformities, notification obligation etc.**

If the manufacturer, its representative or the supplier of components are or should be aware of non-conformities concerning their own products that may lead to fish escaping, they are obliged to implement suitable measures to close the non-conformities without undue delay. The Directorate of Fisheries and the recipients of the component in question must be notified of the non-conformity immediately.

**Chapter 4. Accreditation requirements**

**Section 14. Requirements relating to accredited certification bodies**

Certification bodies shall be certified pursuant to ISO/IEC 17065:2012 Requirements for bodies certifying products, processes and services – or to the international standard with the same purpose applicable at all times.

**Section 15. Accreditation requirement**

Accreditation as mentioned in Section 14 shall be carried out by Norwegian Accreditation or another accreditation body that is a signatory to the relevant multilateral mutual international recognition agreements and that is established in a EU/EEA state.

**Chapter 5. Requirements relating to components subject to product certification requirements**

**Section 16 Product certification requirements**

Tanks, pipes and hoses shall undergo product certification by an accredited certification body and in accordance with requirements set out in NS 9416:2013 or the international standard with the same purpose applicable at all times. Product certificates apply to one specific product and shall be issued to the manufacturer, its representative or, if relevant, the supplier. *The product certification requirement does not apply to tanks with a maximum volume smaller than or equal to 1 m3.*

**Section 17 Requirements relating to product certification**

An accredited certification body shall determine and certify that a sample product that is representative of the production in question meets the requirements set out in NS 9416:2013. The manufacturer or the manufacturer’s representative shall make this sample product available to the accredited certification body.

The manufacturer or its representative shall present technical documentation that makes it possible for the accredited certification body to determine whether the product meets the requirements set out in NS 9416:2013 and any other relevant standards that may apply to the product. As far as necessary to this assessment, the technical documentation shall include information about the product’s design, construction standard, production, installation and function.

The accredited certification body shall review the technical documentation and check that the product is manufactured in accordance with the documentation. It shall also carry out or arrange for suitable examinations and such testing as is necessary to check whether the product actually complies with the requirements set out in NS 9416:2013 and any other applicable standards.

Once the accredited certification body has confirmed that the product meets the requirements set out in NS 9416:2013 and any other applicable standards, a product certificate can be issued.

**Section 18 Product certificate requirements**

Product certificates must contain the following information:

a) the certification body’s name, logo, address, accreditation number and signature,

b) the accreditation mark of Norwegian Accreditation or other recognised accreditation body,

c) a unique number,

d) the product name and product type,

e) the standards with which the product complies,

f) the name and address of the manufacturer,

g) the name and address of the supplier of the certified product, if relevant,

h) the date on which the product certificate was issued,

i) a more detailed description of the product, including the design working life,

j) the date and validity period of the certification,

k) the criteria for valid certification.

A list of relevant technical documentation shall be enclosed with the certificate. The accredited certification body shall retain a copy of this.

**Section 19. Production follow-up**

The manufacturer of components liable to product certification shall be able to present documentation of its quality system. All conditions, requirements and provisions the manufacturer has taken into account shall be documented in a systematic and structured manner in the form of written measures, procedures and instructions. The quality system documentation shall ensure a uniform interpretation of quality programmes, plans, manuals and registers.

In particular, the documentation shall contain a thorough description of;

a) the quality goals, organisation chart, management responsibility and authority as regards product quality,

b) the production processes, quality control and quality assurance methods, as well as the systematic methods and processes that will be applied,

c) the examinations and testing that will be carried out before, during and after production, including an indication of frequency,

d) the quality registers, e.g. inspection reports, control and calibration data, reports on the qualifications of the personnel in question etc.

e) the possibilities of verifying that the required product quality is achieved and that the quality system functions efficiently.

The accredited certification body shall assess the quality system to decide whether it meets the requirements of this provision before a product certificate can be issued.

At least every other year, the accredited certification body shall carry out audits to ensure that the manufacturer maintains and uses the quality system. This shall be documented in an audit report.

**Chapter 6. Documentation of technical conditions of relevance to escapes**

**Section 20. Technical escape prevention report**

A technical escape prevention report shall contain a condition survey that meets the requirements set out in NS 3424:2012 as described in Section 21 of these Regulations.

The following documentation must also be available in order to issue a technical escape prevention report:

a) a plan drawing and *flow chart* of the facility’s wastewater system and delivery system,

b) a risk assessment for the facility's operations and delivery of fish

c) a geotechnical assessment of the ground in accordance with the requirements set out in NS 9416:2013. In cases where it is not possible to obtain a geotechnical assessment, the Directorate of Fisheries will decide whether the presented documentation is sufficient. For existing facilities where an assessment of the ground cannot be carried out, the ground conditions in the area in which the facility is located shall be documented.

**Section 21. Condition survey**

The condition survey shall be carried out in accordance with the requirements set out in NS 3424:2012 and shall, as a minimum, contain the following information:

a) the benchmark forming the basis for the significance and assigning of condition rating 0, for the individual components and for the components as a whole / the combination of components,

b) which criteria represent the framework for determining the condition rating for each component and the components as a whole / the combination of components,

c) the assigning of condition rating 0, 1, 2 or 3 for each component and the components as a whole / the combination of components, including descriptions of any non-conformities,

d) an assessment of the cause of any registered non-conformities, and the risk and consequences associated with the condition registered,

e) an assessment, recommendation and prioritisation of measures to ensure a satisfactory technical standard and escape security.

The condition survey shall be carried out in accordance with the applicable guidance material. The Directorate of Fisheries will decide whether the condition survey meets the requirements in the first paragraph.

**Section 22. Valid condition rating requirement**

Land-based aquaculture facilities for fish shall at all times have a validly determined condition rating for all sections. The condition rating shall be arrived at through a condition survey and documented in the technical escape prevention report. The section with the lowest condition rating will determine the condition rating for the whole facility.

Sections with one or more components with condition rating 3 cannot be given a condition rating higher than 2.

Sections whose condition rating has not been determined, or that have been awarded condition rating 3, cannot be used for aquaculture activities and shall not be included in the assessment of the facility's condition rating pursuant to the first paragraph.

The condition rating shall be stipulated at the frequencies described in Annex A to these Regulations.

**Section 23. Requirements relating to qualifications and independence in the preparation of the technical escape prevention report and condition survey**

The person/persons writing the technical escape prevention report and the condition survey shall meet the requirements for qualifications described in NS 3424:2012.

*The enterprise carrying out the condition survey shall be another legal entity than the enterprise holding the aquaculture licence.*

*The enterprise carrying out the condition survey cannot control work that it has carried out itself. In addition, it shall not have any personal or financial connection to the aquaculture licence holder that may affect its ability to make independent assessments. However, this shall not apply if the employment relationship or connection ended more than 10 years ago.*

*The enterprise carrying out the condition survey is responsible for the content of the technical escape prevention report.*

**Section 24. Requirements relating to new condition surveys and technical escape prevention reports**

By the end of the period determined by the condition rating awarded in the previous report, the aquaculture licence holder shall make arrangements for a new condition rating to be set and a new technical escape prevention report issued in accordance with the requirements described in Section 20.

No later than two weeks after the technical escape prevention report has been issued, the aquaculture licence holder shall submit an electronic copy of the report to the Directorate of Fisheries in the manner decided by the Directorate.

**Chapter 7. Permission to use**

**Section 25. Requirement for a permission to use**

By 1 January 2021, all land-based aquaculture facilities for fish shall hold a permission for use issued by the Directorate of Fisheries.

Land-based aquaculture facilities for fish that do not hold a permission to use cannot be used for aquaculture activities after this date.

*All or parts of* any land-based aquaculture facilities for fish that are designed after these Regulations enter into force shall hold a permission to use before the facility *or the section* is taken into use.

**Section 26. Conditions for being granted a permission to use**

Before a permission to use can be issued for all or parts of a land-based aquaculture facility for fish *that is designed* after these Regulations enter into force, documentation must be presented that the facility’s components of relevance to escape security have been designed in a manner that meets the conditions set out in Sections 6 and 7.

Before a permission to use can be issued for parts or all of a land-based facility designed *before* these Regulations entered into force, a technical escape prevention report must be presented in line with the requirements described in Chapter 6.

**Section 27 Requirements relating to the permission to use**

Documentation confirming that the conditions set out in Section 26 are met shall accompany the permission to use.

**Chapter 8. Requirements relating to the operation, maintenance, inspections of and changes to land-based aquaculture facilities for fish**

**Section 28. Assembly and adaptation**

The aquaculture licence holder shall ensure that construction parts, components and extra equipment are assembled correctly at all times and that they are adapted to each other in accordance with the requirements set out in NS 9416:2013, user manuals, product data sheets and user guides.

**Section 29. Use, maintenance and notification obligation**

The aquaculture licence holder shall ensure that the land-based aquaculture facility is in a satisfactory technical condition at all times.

The aquaculture licence holder shall ensure that operations, maintenance and inspections of the aquaculture facility meet the requirements set out in NS 9416:2013. Operations, maintenance and inspections shall take place in accordance with the user manual or product data sheet.

At land-based aquaculture facilities where no user manual or product data sheet exist for the components pursuant to the requirements of NS 9416:2013, maintenance and inspections must comply with the maintenance plan in the technical escape prevention report.

Suitable measures to prevent fish escaping shall be implemented immediately for components that are awarded condition rating 3 in connection with a condition survey carried out pursuant to Section 21. A plan for repairs to achieve an acceptable condition rating shall be submitted to the Directorate of Fisheries without undue delay.

If the aquaculture licence holder is aware or should be aware of non-conformities in components or the compatibility of components used together, the holder is obliged to implement suitable measures to prevent or limit escapes without undue delays. The holder shall immediately notify the Directorate of Fisheries and the component supplier of the non-conformity.

**Section 30. Documentation requirements in connection with changes to and replacement of equipment**

When an individual component is replaced, it shall be documented that the new component meets the requirements set out in NS 9416:2013.

When components are replaced pursuant to the first paragraph, it must also be documented that the replacement will not have an undesirable influence on other components. If the documentation indicates that such an undesirable influence exists, measures must be implemented to ensure that the technical conditions are brought into compliance with the requirements described in NS 9416:2013.

No changes shall be made to or close to tanks that can lead to fish escaping without the changes being approved by the manufacturer and the necessary assessments being documented. If it is not possible to obtain the manufacturer’s approval, necessary analyses shall be carried out of the tank to document that changes can be made and how they should be made.

The aquaculture licence holder is responsible for ensuring that the necessary underlying documentation required pursuant to this provision is available.

**Section 31. Logs and storage requirements**

The aquaculture licence holder is responsible for ensuring that all changes and replacements are logged in separate records as they occur and that these records are stored and made available for control at the facility at all times. As a minimum, these records shall contain information about;

a) the action carried out, including the type of inspection, maintenance or repair, with reference to plans and procedures,

b) necessary follow-up in conclusion after the action was carried out,

c) the date on which the action was carried out,

d) the signature of the person carrying out the action.

Such records must be stored at the facility for a minimum of 10 years.

**Chapter 9. Final provisions**

**Section 32. Right to grant dispensations**

The Directorate of Fisheries may grant dispensations from these Regulations in special cases.

**Section 33. Penal sanctions and other sanctions for violation**

Violations of the Regulations or decisions made pursuant to the Regulations may lead to penal and other sanctions pursuant to the Act of 17 June 2005 No 79 relating to Aquaculture.

**Section 34. Entry into force and repeal of the Regulations**

These Regulations enter into force on xx.xx.xxxx.