1. **SCOPE**

This Thai Agricultural Standard covers good hygienic practices for fish landing site where unloading activities of fish and shellfish are performed with one or more activities i.e. sorting, transferring, buying and selling and primary preparation. The purposes are to maintain proper quality and safety of fish and shellfish for human consumption or for further processing. For other management purposes such as environment shall be done properly according to the relevant laws and will not be addressed in this standard.

2. **DEFINITIONS**

For the purpose of this standard:

2.1 Fish landing site means the place where services are provided to fishing vessels or trucks for docking, loading or unloading of fish and shellfish including any other activities e.g. sorting, transferring, buying and selling and primary preparation, before distributing to markets or processing plants. Fish landing site include other entities with different names where similar activities are performed such as fish agent establishment, fish wholesale market.

2.2 Fish agent establishment means the place where the activities of sorting and buying and selling of fish and shellfish are carried out including any other activities e.g. primary preparation and transportation.

2.3 Fish wholesale market means the place where fish and shellfish are mainly traded by means of auctioning or bargaining.

2.4 Fish and shellfish means both cold-blooded aquatic vertebrates such as finfish and aquatic mollusks, crustaceans and invertebrates such as shrimp, lobster, crab, mollusks and cephalopods.

2.5 Clean water means water from any source where harmful microbiological contamination, substances and/or toxic plankton are not present in such quantities that may affect the safety of fish, shellfish and their products intended for human consumption.

3. **REQUIREMENTS**

Requirements of good hygienic practices for fish landing site are as follows:

3.1 **Establishment**

3.1.1 Surrounding areas shall be clean, no accumulation of unused articles and no garbage or refuse which may encourage pest harbourage and other animals.
3.1.2 The structure of establishment shall be made of durable materials and internal structure shall be easy to clean.

3.1.3 Floor shall be smooth, non-absorbent and easy to clean. The floor shall have suitable slope to allow drainage and no water logging.

3.1.4 The areas for auction, market transaction and/or sorting shall be covered with roof to protect against sunlight and rain.

3.1.5 Lighting and ventilation shall be suitable for operation.

3.1.6 Clean and good-condition hand-wash basins shall be provided in sufficient numbers and easily accessible. Equipment or utensils to facilitate the unloading of fish and shellfish from vessels or trucks to the establishment shall be appropriated and hygienic.

3.1.7 Waste disposal areas shall be separated from other working areas and kept clean. Common areas for food vendors or dining, if any, shall be clearly separated from the working areas.

3.2 Equipment

3.2.1 Equipment and utensils shall be suitably designed for the operation, durable and easy to clean.

3.2.2 Containers, equipment and utensils in direct contact with fish and shellfish shall be in good condition and clean. Such containers, equipment and utensils should not cause any damage and contamination that cause fish and shellfish unsafe for consumption.

3.3 Personal hygiene

3.3.1 Workers shall have no sign of sickness or being a carrier of disease or illness that causes fish and shellfish unacceptable for consumption.

3.3.2 Workers in the establishment shall have their health examined at least once a year and the records shall be kept.

3.3.3 Workers shall be regularly trained on good hygienic practices, at least once a year.

3.3.4 Workers shall wash their hands before and after each operation, including at proper intervals during operation and after each toilet use.

3.3.5 Work clothes shall be proper and clean. If gloves are used, they shall be clean.

3.3.6 Workers shall avoid improper behaviour that may cause contamination to fish and shellfish.

3.4 Handling of fish and shellfish

3.4.1 Unloading, sorting, transferring and primary preparation of fish and shellfish shall be done hygienically without delay. Good management to prevent contamination shall be in place. The selected utensils shall not cause any physical damage to fish and shellfish.
3.4.2 Fish and shellfish shall be hygienical handling and stored at the appropriate temperature according to their types and not to be over stacked to cause any damage.

3.4.3 Primary preparation, shall be carried out according to good hygienic practices.

3.4.4 Availability of area or management system that is able to properly separate fish and shellfish for human consumption from those of animal feed.

3.5 Water

3.5.1 Water used shall be clean water and adequately provided.

3.5.2 Water storage tanks shall be made of easy-to-clean material and closed. Pipe shall be of appropriate size and equipped with a system that prevents contamination or misuse.

3.6 Ice

3.6.1 Ice in direct contact with fish and shellfish shall be made from clean water. Ice shall not be reused.

3.6.2 Ice, including containers, equipment and utensils used for ice shall be stored in a clean and hygienic place. Ice shall not be contaminated from handling.

3.7 Toilets

3.7.1 There shall be adequate number of toilets for workers and located separately from the working areas.

3.7.2 Toilets shall be in good condition, always kept clean. Garbage bin with lid shall be available.

3.7.3 No-hand-operated washbasins and soap shall be provided.

3.8 Chemicals

3.8.1 If chemicals are used, such use shall be in compliance with the relevant laws and regulations.

3.8.2 All chemicals according to Section 3.8.1, including harmful chemicals such as insecticides, shall have clear label and be orderly stored in a separated area. Such chemicals used shall be properly controlled.

3.9 Cleaning and Pest Control

3.9.1 Cleaning and disinfecting programme and work instruction for equipment and utensils, floor, internal structure of the building and surrounding areas shall be made available and implemented accordingly.
3.9.2 Cleaning utensils such as brushes, squeegee, shall be made of non-absorbent materials. They shall be in good condition and clean, not cause contamination to other utensils, and adequate in numbers for use. They shall be stored orderly and hygienically to prevent microbial accumulation.

3.9.3 Cleaning agents and disinfectants shall have properties and effectiveness suitable for use. Pest and other animals control from entering into the unloading, sorting and/or market transaction areas shall be in place.

3.9.4 The effectiveness of cleaning shall be regularly monitored and recorded.

3.10 Management of refuse and waste from fish and shellfish sorting and transferring

3.10.1 Disposal area for refuse and waste shall be provided in separated areas and kept clean, not causing undesirable odour or pest harbourage and infestation.

3.10.2 Refuse and waste shall be removed from working areas regularly within appropriate time intervals. The refuse and waste shall be removed without causing any contamination to fish and shellfish.