



forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Standard Operating Procedure: Traceability of Cultured Fish

Branch: Fisheries Management
Chief Directorate: Aquaculture & Economic Development
Directorate: Sustainable Aquaculture Management

Issue 4: October 2021

TITLE

Standard Operating Procedure: Traceability of Cultured Fish

COMMENCEMENT

This Standard Operating Procedure comes into force on 1 October 2021.

REVOCATION

This programme issue revokes and replaces Standard Operating Procedure: Traceability of Cultured Shellfish, Issue 3 as well as any previous issues of the document.

STANDARD OPERATING PROCEDURES ISSUED

Issue	Date of issue
1	1 October 2014
2	1 January 2019
3	1 March 2021
4	1 October 2021

ISSUING AUTHORITY

This Standard Operating Procedure is issued by the Environmental Officer Specialised Production of the Directorate Sustainable Aquaculture Management of the Department of Forestry, Fisheries and the Environment in terms of the South African Shellfish Monitoring and Control Programme and the South African Aquacultured Marine Fish Monitoring and Control Programme.



Environmental Officer Specialised Production

DATE: 16/09/2021

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1. DOCUMENT CONTROL

The Standard Operating Procedure (SOP): Traceability of Cultured Fish was compiled by Department Forestry, Fisheries and the Environment (DFFE): Food Safety Office (FSO) of the Directorate Sustainable Aquaculture Management. The SOP is administered by the FSO and will be reviewed and updated as relevant new information becomes available.

A detailed record of all amendments shall be maintained, and the latest version will be made available at the FSO and will be loaded onto the DFFE website (www.environment.gov.za). Suggestions for alterations that would significantly improve the document are welcomed. These should be forwarded to the coordinator, Environmental Officer Specialised Production, Mr John Ford and enquiries can be directed to Environmental Officer Production, Mr Mayizole Majangaza (Appendix 1).

2. SCOPE

This document covers the procedures for the traceability of cultured fish harvested for human consumption as required in terms of the South African Shellfish Monitoring and Control Programme (SASM&CP) and the South African Aquacultured Marine Fish Monitoring and Control Programme (SAMFM&CP). The fish currently cultured include shellfish and finfish. The shellfish species include abalone (*Haliotis midae*), Pacific Oyster (*Crassostrea gigas*), Cape Rock Oyster (*Striostrea mageritacea*), Mediterranean Mussel (*Mytilus galloprovincialis*) and Black Mussel (*Choromytilus meridionalis*), Collector Urchin (*Tripneustes gratilla*) and East Coast Rock Lobster (*Panulirus homarus*). The finfish species include Kob (*Argyrosomus japonicus*), Cape Yellowtail (*Seriola lalandi*) and Rainbow Trout (*Onchorhynchus mykiss*).

The procedures are applicable to all fish production facilities regulated by the Department, relevant Fish Processing Establishments (FPEs) as defined in the SASM&CP and the SAMFM&CP, and the next level in the value chain that handles cultured fish product(s). FPEs, for the purposes of this protocol refers to any authorised facility that processes or packages cultured fish or products thereof. The procedures furthermore provide guidance on the completion of movement documents required in terms of the SASM&CP for marine shellfish production facilities.

3. BACKGROUND

The Department Forestry, Fisheries and the Environment (DFFE) is the managing and regulatory authority for the undertaking of aquaculture activities that include farming, harvesting and transporting of fish for wholesale trading stipulated in the permit conditions issued in terms of the Marine Living Resources Act, 1998 (Act No. 18 of 1998) and its regulations. The Directorate: Sustainable Aquaculture Management (D: SAM) of the Fisheries Branch of DFFE is responsible for the development, management and regulation of a sustainable aquaculture industry that contributes towards job creation, food security, rural development and economic growth for South Africa. D: SAM aims to achieve the above mentioned strategic objectives through the development and implementation of relevant enabling legislation, policies and programmes as well as be responsive and compliant to international obligations and agreed standards. The Food Safety Office (FSO) within D: SAM is responsible for the development and management of food safety programmes stipulated in the permit conditions issued in terms of the Marine Living Resources Act, 1998 (Act No. 18 of 1998) including the SASM&CP, South African Aquacultured Marine Fish Monitoring and Control Programme (SAMFM&CP) and National Residue Control Programme (NRCP). The objectives of the food safety programmes include providing guarantees to domestic and international markets and consumers that South African cultured fish products are safe for human consumption.

The risks to food safety of cultured fish include environmental residues (heavy metals, pesticides, polychlorinated biphenyl, dioxins polycyclic aromatic hydrocarbons and radionuclides) and veterinary drug residues (hormones, antibiotics and anthelmintics). Shellfish are furthermore at risk of accumulating biotoxins (Paralytic Shellfish Toxins (PST), Lipophilic Shellfish Toxins (LST) and Amnesic Shellfish Toxins (AST)) and microbiological pathogens. In some cases, as with oysters, thermal processes are not applied prior to sale to eliminate pathogens and therefore microbial multiplication is likely to occur. Marine biotoxins and residues are furthermore not eliminated by cooking. Traceability is therefore necessary to ensure that the products are only harvested from production facilities that are open for harvesting and can be effectively recalled if found to be unsafe. Each link in the value chain is responsible for ensuring traceability in terms of its supplier and its consignee and that the relevant information is filed in a clear and orderly fashion for effective and efficient retrieval.

4. TRACEABILITY REQUIREMENTS

The traceability procedures considers components such as:

- Operational marine aquaculture permits to engage and process marine aquaculture products
- South African Shellfish Monitoring and Control Programme movement documents
- Unique product identifier
- Records of receipts and invoices
- Product packaging and labelling

The principle of traceability is to ensure that records are kept for each stage of movement of a batch of fish. Records should include a unique batch description, where the batch came from and to where it is going to be transported. Fish producers and FPEs shall in addition ensure that the following information is available upon request:

- Operational permits issued to marine aquaculture Right Holder and FPEs.
- Operational permits issued to retailers and restaurants in the case of undersized cultured abalone product(s).
- Status of fish production facility operational status (i.e. open, temporarily closed or closed to harvesting).
- Relevant traceability documents.

4.1. Traceability documents relevant to the production facility

A production facility should have records of daily movements of fish from the production area to the FPE. The following information is required to be kept by the production facility:

- Daily record of how much fish was harvested and from which production facility.
- Daily record indicating how much fish was sent to the FPE and should include:
 - Unique batch identification
 - Batch date i.e. harvest date
 - The production facility name and code (issued by DFFE)
 - The FPE name and code (issued by the NRCS) to which the batch was sent.
 - Quantity of fish moved to the FPE and whether it was for processing or where relevant, packing live.
- Movement documents required for the movement of molluscan shellfish correctly completed as outlined in Section 5.1 below.

4.2. Traceability documents relevant to the Fish Processing Establishment

The packing facilities are required to keep clear properly filed documentation indicating the following information:

- Daily record/documents of how much fish was received from which production facilities and each record should include the Batch Date (harvest date) for each consignment.
- Daily record/documents of the fish distributed, which should include:
 - Batch Date
 - Pack Date

- Quantity of fish distributed
- Name of the consignee (client)
- Copy of the correctly completed movement document (See Section 5) as proof of origin of harvested cultured shellfish.
- Each individual consignment must have its own delivery note, receipt and/or tax invoice.
- Each consignment package shall comply to minimum labelling specifications for traceability purposes:
 - Name of FPE and the facility code (allocated by NRCS)
 - Production facility name and the facility code (allocated by DFFE)
 - Physical address
 - Net mass
 - Country of origin
 - Pack date (may add production date, product code, best before date - but not required)

5. Movement Document for Molluscan Shellfish

Movement documents are part of a traceability system to track the movement of live molluscan shellfish from the production facility to the Fish Processing Establishment (FPE). The movement documents do not provide an official transport authorisation. An official movement document shall accompany each batch of live molluscan shellfish during transport from the production facility up to and including arrival of the batch at a FPE where relevant. If harvesting is carried out by the same staff members that operate the FPE, the Department may, if satisfied that the requirements concerning gathering and handling are complied with, issue a permanent authorization absolving the harvester from the requirement to use movement documents.

Movement document books are issued by the DFFE. The books contain the movement documents in triplicate. The documents are completed and handled as indicated in Section 5.1.

5.1. Completion of movement document

The movement document books and the forms in the books should be used sequentially, i.e. use one book at a time to ensure that the numerical sequence reflects the date sequence. All relevant fields should be completed at source including:

- The classification status and current production facility status.
- The production facility physical address for land-based systems or the production facility details including farm name and code and location for sea-based operations.
- The details of the Fish Processing Establishment including company name, physical address and facility code.
- Relaying and depuration information for Class B areas where applicable.
- Description of goods including species harvested, amount harvested, date harvested, and production area classification status.
- The documents are completed in triplicate and handled as follows:
 - The **white copy** must accompany the batch of live shellfish to the destination where it is signed on receipt. This copy is kept on file by the destination packer/processor.

If the intention is to export the batch, the fully completed form should be faxed to the NRCS when request is made for export certification by the packer.

- The **blue copy** should be mailed by the production facility to the FSO Attention: Mr. Mayizole Majangaza c/o Ms Hellen Ntoampe (Appendix 1) no less frequently than once a month and copies emailed (SAMSanitation@environment.gov.za) to the FSO no less frequently than once a week.
- The **pink copy** is retained in the movement document book by the production facility and be readily available for audit purposes.
- Should a movement document be spoilt, the word "Cancelled" must be written across the document and the blue copy must still be sent to FSO.

6. REFERENCES

Department of Agriculture, Forestry and Fisheries. 2016. South African Aquacultured Marine Fish Monitoring and Control Programme. Issue 3, 1-31.

Department of Environment, Forestry and Fisheries. 2021 South African Shellfish Monitoring and Control Programme. Cape Town. Issue 8, 1-65.

National Regulator for Compulsory Specifications. 2018. Procedure: Sampling and Transport of Aquacultured Marine Fish. Cape Town. Issue 1, 1-14.

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Appendix 1: Contact Information

Food Safety Office
 Directorate: Sustainable Aquaculture Management
 Chief Directorate: Aquaculture and Economic Development
 Department Forestry, Fisheries and the Environment
 Sea Point Research Facility
 307 Beach Road
 Sea Point
 8001

Food Safety Office

Contact	Email	Office	Cell
Food Safety Office	SAMSanitation@environment.gov.za	021 430 7065	-
Ms Helen Ntoampe	HNtoampe@environment.gov.za	021 430 7065	-
Ms Portia Dwane	PDwane@environment.gov.za	012 319 6397	076 172 7305
Mr Mayizole Majangaza	MMajangaza@environment.gov.za	021 430 7076	061 506 2328
Mr John Foord	JFoord@environment.gov.za	021 430 7003	082 343 8327