Model Curriculum

QP Name: Fundamentals of Food Traceability & Mock Recall

QP Code: FIC/MCr-0008

Version: 1.0

NSQF Level: 4.0

Model Curriculum Version: 1.0

Food Industry Capacity and Skill Initiative (FICSI)
Shriram Bharatiya Kala Kendra (3rd Floor), 1, Copernicus Marg, New Delhi 110001

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Training Parameters

Sector	Food Processing
Sub-Sector	Multi-Sectorial
Occupation	Quality Analysis/ Assurance
Country	India
NSQF Level	4.0
Aligned to NCO/ISCO/ISIC Code	
Minimum Educational Qualification and Experience	1. 12th or Equivalent in Science Stream OR 2. 10th pass with 3 years of experience in food processing industry OR 3. Previous relevant Qualification of NSQF Level 3 with 3 years of experience in food processing Industry OR 4. Previous relevant qualification of NSQF Level 3.5 with 1.5 years of experience in food processing industry
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	07/10/2025
Next Review Date	06/10/2028
NSQC Approval Date	07/10/2025
QP Version	1.0
Model Curriculum Creation Date	07/10/2025
Model Curriculum Valid Up to Date	06/10/2028
Model Curriculum Version	1.0
Minimum Duration of the Course	7.5 Hours
Maximum Duration of the Course	7.5 Hours

Program Overview

This section summarises the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills to:

- Identify and explain the responsibilities of a person in ensuring food traceability and recall preparedness.
- Analyse the importance and benefits of traceability in the food processing sector.
- Develop and integrate product identification systems with existing supply chain management tools to maintain traceability.
- Interpret the traceability regulations for FSSAI and what buyers and consumers want.
- Apply techniques to manage and monitor data communication across the supply chain.
- Plan, execute, and evaluate mock recalls and traceability audits.

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	Total Duration
Module 1: Introduction to the Food Traceability and Mock Recall	00:30	00:00	00:30
Module 2: Maintaining Food Traceability Systems	01:00	02:00	03:00
Module 3: Importance of Mock Recalls and Traceability Checks	01:00	01:30	02:30
Module 4: Understanding Regulatory Compliance in Traceability Systems	00:30	01:00	01:30
Total Duration	**03:00**	**04:30**	**07:30**

Module Details

Module 1: Introduction to the Food Traceability and Mock Recall

Terminal Outcomes:

- Explain the basic principles of food safety and its importance in the food processing industry.
- Describe the significance of food traceability and mock recall in maintaining food safety.

Duration: 00:30	Duration: 00:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Discuss about the food processing industry and its various sub-sectors briefly. • Explain the purpose and importance of food traceability in ensuring food safety, quality, and consumer protection. • Describe the objectives of food traceability systems, including product recall, risk management, and regulatory compliance. • Interpret and apply FSSAI guidelines related to food traceability and mock recalls. • Define the concept of a mock recall. • Explain why mock recall is conducted as part of a preventive food safety strategy. • Identify common causes of food recalls, such as contamination, adulteration, mislabeling, and non-compliance with standards etc. • Outline the roles and responsibilities of food businesses in maintaining effective traceability and recall systems. • Explain the relationship between traceability, supply chain transparency, and consumer trust. • Describe the legal and regulatory implications of failing to implement an effective traceability system.	
Classroom Aids	
Presentation slides, Whiteboard, Marker, Projector or large screen, Laptop with internet connectivity, External Speakers, Multimedia materials, etc.	
Tools, Equipment and Other Requirements	
NA	

Module 2: Maintaining Food Traceability Systems

Terminal Outcomes:

- Design and implement a food traceability system that meets FSSAI and ISO standards.
- Explain the importance of and methods of product identification in the food supply chain.
- Develop, document, and articulate traceability protocols that are aligned with FSSAI guidelines during training sessions.
- Evaluate the performance and effectiveness of the traceability system through simulations and real-time data analysis.

Duration: 01:00	**Duration: 02:00**
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Explain the steps to collect necessary information about products, suppliers, and processes for designing a traceability system. • Define the scope and objectives of a traceability system (what to track, where, and how). • Describe tracking mechanisms such as barcodes, batch IDs, QR codes, and RFID, with reference to ISO standards. • Identify various methods and technologies used to capture and manage traceability data across the food supply chain. • Explain the role of data management systems and software (ERP, SCM, and MS Excel) in supporting traceability. • Explain how traceability systems integrate with existing enterprise resource planning (ERP) tools. • Discuss the significance of supplier approval programs in maintaining food traceability. • Discuss the importance of documentation templates and SOPs for standardising records across the organisation. • Elaborate on the concept of Critical Tracking Events (CTEs) and the data elements linked to them (date, time, location, personnel, and batch). • Explain the need for budget allocation and resource planning for designing and maintaining a traceability system. • Explain how traceability systems are integrated	• Collect and organise sample product, supplier, and process information into structured formats (Excel/Word templates). • Create a basic traceability flowchart showing movement from raw materials to finished product. • Design a traceability system blueprint, identifying key data points for different stages of food processing. • Analyse different traceability technologies and select the most appropriate for specific food products. • Use an MS Excel sheet (or similar tool) to record product codes, batch IDs, supplier details, and distribution data. • Practice setting up barcodes/QR codes/RFID tags on sample items and linking them to batches. • Demonstrate how to log Critical Tracking Events (CTEs) (receiving raw materials, processing, storage, and dispatch) in a digital record. • Develop a documentation template for standardising traceability data collection as per FSSAI guidelines. • Simulate a small-scale traceability exercise by identifying the source of raw material and mapping the finished product's movement till dispatch.

with food safety management systems (FSMS).	• Practice preparing a sample budget sheet for traceability system implementation (cost of software, tags, manpower, etc.).
Classroom Aids	
Presentation slides, Whiteboard, Marker, Projector or large screen, Laptop with internet connectivity, External Speakers, Multimedia materials, etc.	
Tools, Equipment and Other Requirements	
Barcode scanners, RFID tags, RFID readers, QR code scanners, Sample product labels with batch IDs / QR codes, Printer, label stickers, Sample data sets (supplier details, product codes, process sheets), traceability software (ERP/SCM demo versions)	

Module 3: Importance of Mock Recalls and Traceability Checks

Terminal Outcomes:

- Conduct and manage mock recalls effectively.
- Simulate various recall scenarios, demonstrating proficiency in managing communications and coordinating with internal and external stakeholders.
- Perform detailed audits of traceability records, identifying and addressing gaps or deficiencies to ensure compliance with regulatory standards.
- Document and analyse the outcomes of mock recalls and audits.

Duration: 01:00	**Duration: 01:30**
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Define what a mock recall is and its purpose in ensuring food safety. • Describe the steps involved in conducting a successful mock recall. • Explain how traceability systems support mock recalls by identifying product batches. • Summarise the key data points necessary for auditing a traceability system. • Discuss the role of mock recalls in maintaining compliance with FSSAI guidelines. • Identify the roles and responsibilities of the recall team (QA, operations, marketing, regulatory, customer service). • Recognise the difference between forward traceability (to customers) and backward traceability (to suppliers). • Explain the role of digital and manual systems in logging critical tracking events (CTEs). • Analyse the common causes of food recalls, including contamination, labelling errors, and regulatory non-compliance. • Identify the communication strategies used during mock recalls to notify stakeholders. • Explain the process of documenting customer complaints during a recall. • Discuss how internal and external audits are conducted for traceability and recall systems. • Summarise the process of auditing traceability records for compliance with regulatory standards.	• Conduct a mock traceability exercise to trace a product backward to suppliers and forward to customers within a set timeframe. • Identify specific products involved in a simulated food alert, including their production batch and distribution channels. • Apply appropriate techniques to document critical tracking events (CTEs), such as receiving, processing, storage, and distribution during the mock recall process. • Show how to review traceability records to ensure they align with the batch numbers involved in the recall. • Analyse customer complaints and trace them to the appropriate product batches during mock recalls. • Role-play to simulate recall communication, notifying suppliers, regulatory bodies, and consumers through email and social media. • Prepare audit documentation showing how traceability records and recall procedures are maintained. • Perform an internal traceability audit to ensure compliance with regulatory requirements. • Update traceability records based on audit findings and regulatory changes • Simulate different recall scenarios to test the traceability system's ability to track product movements. • Compile a final report detailing the mock recall, including lessons learned and system

• Explain how to maintain proper documentation and reports after conducting a mock recall.	improvements.
Classroom Aids	
Presentation slides, Whiteboard, Marker, Projector or large screen, Laptop with internet connectivity, External Speakers, Multimedia materials, etc.	
Tools, Equipment and Other Requirements	
Mock recall forms & templates (FSSAI aligned), Barcode / RFID tagged sample products, Storage racks / boxes, Microsoft Excel, etc.	

Module 4: Understanding Regulatory Compliance in Traceability Systems

Terminal Outcomes:

- Oversee the implementation of traceability systems to ensure compliance with FSSAI guidelines and food safety standards.
- Evaluate supplier approval programs and traceability records to enhance food safety and regulatory compliance.
- Apply corrective actions based on audit findings and traceability data to improve food safety and system compliance.

Duration: 00:30	Duration: 01:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Explain the importance of communication protocols during recalls to ensure compliance with FSSAI and other regulations. • Describe the process of managing supplier approval in the context of traceability and food safety. • Summarise the critical elements of a traceability system that supports food safety compliance. • Describe the primary and secondary communication channels (phone, email, print, social media) for informing stakeholders. • Discuss the role of press releases, customer notices, and internal communication templates in recall management. • Describe the options for disposition of recalled products (destruction, salvage) as per company policy and legal directives. • Identify the key documentation required for compliance with FSSAI and ISO standards. • Describe the options for disposition of recalled products (destruction, salvage) as per company policy and legal directives. • Analyse the impact of non-compliance on food safety and consumer protection. • Recognise the importance of continuous improvement in traceability systems to enhance food safety.	• Draft sample press releases and customer notifications for a mock recall scenario. • Prepare a communication plan using multiple channels (email, phone, and social media). • Simulate the process of notifying regulatory agencies, suppliers, and retailers in a recall situation. • Role-play the use of internal communication templates to update different departments. • Practice the physical removal of recalled items from a simulated storage/distribution area. • Demonstrate how to document and record the disposition of recalled products (destruction/salvage report). • Compile all recall-related communications and actions into a final compliance report ready for audit. • Demonstrate how to use traceability data to improve supplier approval processes and food safety compliance.
Classroom Aids:	

Presentation slides, Whiteboard, Marker, Projector or large screen, Laptop with internet connectivity, External Speakers, Multimedia materials, etc.
Tools, Equipment and Other Requirements
Templates for press releases, Templates for customer notifications, MS Word/Excel, Sample shelves/stock area, Disposal/salvage report templates, Filing system (digital or physical), PPE, etc.

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
B.Sc / B.Tech/ BE	Food Safety and Quality Management/ Food technology/ Food engineering /Food Science	3	Quality Assurance or Food Processing or Food Safety or Food Regulatory or Food Science	1	Quality assurance Or Food processing Or Mock Recall and Traceability	
M.Sc/ M.Tech/ ME	Food Safety and Quality Management/ Food technology/ Food engineering /Food Science	2	Quality Assurance or Food Processing or Food Safety or Food Regulatory or Food Science	1	Quality assurance Or Food processing Or Mock Recall and Traceability	
MBA	Food Safety and Quality Management	2	Quality Assurance or Food Processing or Food Safety or Food Regulatory or Food Science	1	Quality assurance Or Food processing Or Mock Recall and Traceability	

Trainer Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: Fundamentals of Food Traceability & Mock Recall", "FIC/MCr-0008, v1.0", Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: "Trainer (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2601, v2.0". The minimum accepted score as per MEPSC guidelines is 80%.

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training/Assessment Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
B.Sc / B.Tech/ BE	Food Safety and Quality Management/ Food technology/ Food engineering /Food Science	4	Quality Assurance or Food Processing or Food Safety or Food Regulatory or Food Science	1	Quality assurance Or Food processing Or Mock Recall and Traceability	
M.Sc/ M.Tech/ ME	Food Safety and Quality Management/ Food technology/ Food engineering /Food Science	3	Quality Assurance or Food Processing or Food Safety or Food Regulatory or Food Science	1	Quality assurance Or Food processing Or Mock Recall and Traceability	
MBA	Food Safety and Quality Management	3	Quality Assurance or Food Processing or Food Safety or Food Regulatory or Food Science	1	Quality assurance Or Food processing Or Mock Recall and Traceability	

Assessor Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: Fundamentals of Food Traceability & Mock Recall", "FIC/MCr-0008, v1.0", Minimum accepted score is 80%	Certified for the Job Role: "Assessor (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2701, v2.0", with a minimum score of 80%.

Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the learner's required competencies in the program.

1. Assessment System Overview:
    - Batches assigned to the assessment agencies for conducting the assessment on SDSM/SIP or email
    - Assessment agencies send the assessment confirmation to VTP/TC looping SSC
    - Assessment agency deploys the ToA certified assessor to execute the assessment
    - SSC monitors the assessment process & records
    - If the batch size is more than 30, then there should be 2 Assessors.
2. Testing Environment: Assessor must:
    - Confirm that the centre is available at the same address as mentioned on SDMS or SIP
    - Check the duration of the training.
    - Check the Assessment Start and End time to be 10 a.m. and 4.5 p.m.
    - Check that the allotted time for the candidates to complete the Theory & Practical Assessment is correct.
    - Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
    - Confirm the number of TABs on the ground is correct to execute the assessment smoothly.
    - Check the availability of the Lab Equipment for the particular Job Role.
3. Assessment Quality Assurance levels / Framework:
    - Question papers created by the Subject Matter Experts (SME)
    - Question papers created by the SME should be verified by the other subject Matter Experts along with the approval required from the SSC
    - Questions are mapped with NOS and PC
    - Question papers are prepared considering that levels 1 to 3 is for the unskilled & semi-skilled individuals, and levels 4 and above are for skilled, supervisors & higher management.
    - Assessor must be ToA certified.
    - Assessment agency must follow the assessment guidelines to conduct the assessment
4. Types of evidence or evidence-gathering protocol:
    - Time-stamped & geotagged reporting of the assessor from the assessment location
    - Centre photographs with signboards and scheme specific branding
    - Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
    - Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos
5. Method of verification or validation:
    - Surprise visit to the assessment location

- Random audit of the batch
- Random audit of any candidate

6. Method for assessment documentation, archiving, and access
    - Hard copies of the documents are stored
    - Soft copies of the documents & photographs of the assessment are uploaded/accessed from Cloud Storage and are stored in the Hard Drives.

References

Glossary

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood to accomplish a task or solve a problem.
Key Learning Outcome	A key learning outcome is a statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on-site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on-site.
Procedural Knowledge	Procedural knowledge addresses how to do something or perform a task. It is the ability to work or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	The terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes helps to achieve the training outcome.
CCP	Critical Control Point (CCP) is a critical control point in the food production process where hazards can be prevented, eliminated, or reduced to acceptable levels.
HACCP	Hazard Analysis Critical Control Point (HACCP) is a systematic preventive approach to food safety that identifies, assesses, and controls critical control points (CCPs) to ensure the safe production of food.

Acronyms and Abbreviations

Term	Description
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
QP	Qualifications Pack
PwD	People with Disability
PPE	Personal Protective Equipment