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The food fraud prevention plan consists of the procedures, documents and records listed below. Refer to those documents for purpose, scope and responsibilities.

Documents and records	FSSC 22000 clause
Food fraud prevention procedure	2.5.4
Vulnerability assessments for food fraud	2.5.4.
Food fraud control measures & prevention plan(s)	2.5.4. 2.5.4.

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Terms and definitions

End-to-end supply chain	The steps in the process from raw material source to end user
Food fraud	A collective term used to describe the deliberate adulteration or misrepresentation of food, food ingredients or raw materials for financial gain
Dilution	Mixing a liquid of high value with a liquid of lower value
Substitution	Replacing an ingredient or part of the product of high value with another ingredient or part of the product of lower value.
Concealment	Hiding the low quality of food ingredients or product.
Mislabeling	Placing false claim on packaging for economic gain.
Unapproved enhancement	Adding unknown and undeclared materials to food products to enhance the quality attributes.
Counterfeiting	Copying a brand name packaging concept, recipe, processing method etc of food products for economic gain.
Grey market production/theft/diversion	Sales of stolen or excess unreported product.
Motivation	"A reason or reasons for acting or behaving in a particular way to revenue maximization or cost minimization"
Opportunity	"A time or set of circumstances that makes it possible to do food fraud because of nature of product, quality, production process, geographical origin".
Control	Company's primary food fraud controls existing in the company.
Perpetrator	A person who intends to commits, an illegal, criminal, or evil act
Raw material vulnerability	A threat and vulnerability assessment carried out on the raw material supply chain
Vulnerability	How exposed the business is to the threat having an impact on the consumer
VACCP	Vulnerability assessment and critical control point

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FFVA	Food Fraud Vulnerability Assessment
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Objective

To protect our products from food fraud-related risks to consumer health.

Scope

Food fraud is the deception, using food, for economic gain (Food Fraud Initiative, Michigan State University, 2016). This food fraud prevention procedure aims to prevent, detect and prevent food fraud in our products.

It assesses vulnerabilities prior to receipt and use of the materials, ingredients and it does not address vulnerabilities within this facility.

Reference

FSSC 22000- 2.5.4 (Version 5.1)
SSAFE- FFVA tool

Procedures

1) Vulnerability assessments for food fraud

Purpose: The purpose of the vulnerability assessment is to

- a) assess the susceptibility of raw materials and products to potential acts of food fraud,
- b) Identify potential vulnerabilities,
- c) Prioritise the vulnerabilities with the purpose of developing preventive and control measures.

Outcome: The outcome is a documented estimate of the vulnerability of each product raw material, ingredients and packaging materials to food fraud, with each being rated as per significant assessment of the risk.

Frequency: The vulnerability assessments are conducted or reviewed and updated as follows:

- a) at least annually,
- b) after each actual or potential failure of a preventive measure,
- c) each time any of the following occurs:
 - i) New ingredients are to be purchased

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- ii) New products are developed
- iii) A change of supplier or a new supplier
- iv) Information about a new incident of food fraud affecting that food type becomes known
- v) A change to supplier auditing regimes
- vi) A significant change to the cost of a material
- vii) Changes to availability of material, for example; seasonal supply issues, war, droughts.
- viii) Changes to material purchasing specifications, procedures or test protocols

2) Control measures to prevent food fraud

Purpose: To describe action that has been taken or will be taken to reduce or eliminate identified vulnerabilities from potential acts of food fraud.

Outcome: Each product and/or ingredient or raw material that is identified as being at high risk or medium risk of being affected by food fraud will be included in a *(the)* food fraud prevention plan(s). The food fraud prevention plan(s) are controlled within the scope of the food safety management system, are supported by our food safety management system and are in compliance with applicable legislation.

3) Food Fraud Prevention Plan

Food Fraud prevention plan will be developed and implemented to prevent the identified food fraud vulnerabilities and it will be reviewed as given below:

Frequency: The food fraud prevention plan(s) will be reviewed and updated as follows:

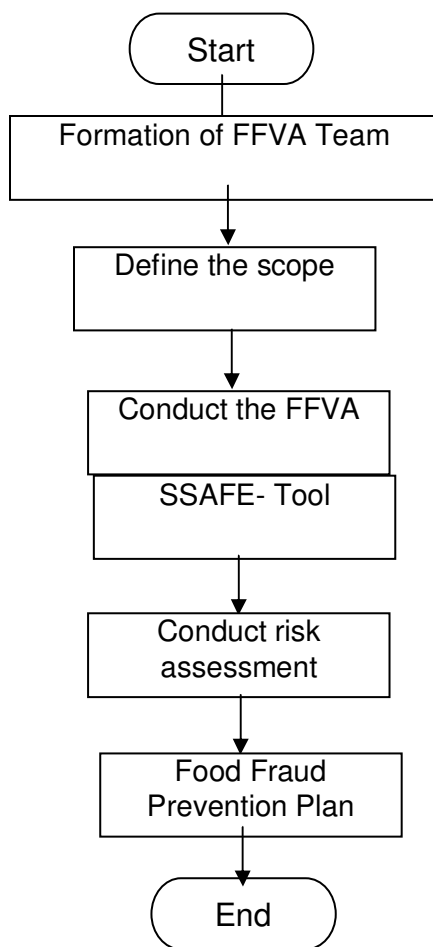
- a) at least annually
- b) if there is a change to the risk rating from a vulnerability assessment of any product or ingredient or raw material.
- c) if there is a potential or actual failure of an existing preventive measure.

4) Review

This procedure will be reviewed after each actual or potential failure of a preventive measure, and at least annually.

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5. Steps in the assessment of food fraud Vulnerabilities and Plan



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Procedure

1. Formation of Food Fraud Assessment Team:

A multidisciplinary Food fraud Vulnerability Team is constituted FFV Team includes individuals at the facility with experience and knowledge to develop food fraud vulnerabilities in the RMs, Processing aides, Ingredients, Packing materials, Cleaning chemicals etc.

The VACCP team includes:

Name of Person	Designation	Role	Date of joining the Team
B.N.V.D. Prasad	Quality Controller	FDC	01/05/2020
Y.Sathiraju	Production Manager	Member	01/05/2020
G.Nageswararao	Ware house Manager	Member	01/05/2020
B.Murali	Power plant Manager	Member	01/05/2020
B.Srinivas	Asst. manager marketing	Member	01/05/2020
V.Satyanarayana	I/C Lab	Member	01/05/2020
M.Jyothi Kumari	Asst. QC	Member	01/05/2020

The team members for a raw material vulnerability assessment may include:

- Purchasing
- Supply chain staff
- Production and operations staff - with responsibility and knowledge of acceptance criteria and 'goods-in'
- Technical or technologist - with an understanding of the nature of the raw materials.
- New product development (NPD) - knowledge of NPD activities and current trends will be required to highlight which new ingredients are in the pipeline and what threats these may be vulnerable.

2. Define the scope

The FFVA of raw materials and packing materials included in the study are as given below:

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FOOD FRAUD VULNERABILITY ASSESSMENT	
Material	Raw materials& ingredients, packing materials, Processing aides, Cleaning chemicals
Name of Unit	SVROIPL
VACCP Team	As per the list
Date	01.05.2020

Materials included in the assessment	
Material Group	Raw materials& ingredients, packing materials, processing aides, Cleaning chemicals
Description	1. Rice Bran 2. Crude oil (Rice barn) 3. Sunflower/ Vegetable Oil 4 Enzymes & Vitamins 5. Processing aides 6. Packaging materials 7. Cleaning chemicals
Material name and/or codes included in this assessment	
1. Rice Bran	01
2. Crude oil (Rice barn)	02
3. Sunflower/ Vegetable Oil	03
4 Enzymes & Vitamins	04
5. Processing aides	05
6. Packaging materials	06
7. Cleaning chemicals	07

3. Conduct Food Fraud Vulnerability Assessment:

Food Fraud Vulnerability assessment is conducted by using SSAFE- Tool.

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After administering the tool, the significant vulnerable points are captured from the spider web matrix of SSAFE tool and the Risk assessment is done based on the following parameters:

- a) Likelihood of Occurrence of fraud
- b) Likelihood of Detection of Fraud

1. Likelihood of Occurrence of Fraud:

To assess the chances of likelihood of occurrence of food fraud, the score will be given based on the table below:

Likelihood of Occurrence (LOO)	
Definition	Score
Very High	5
High	4
Medium	3
Very low	2
Very low	1

2. Likelihood of Detection of Fraud:

To assess the likelihood of Detection of food fraud, the score will be given based on the table below:

Likelihood of detection (LOD)	
Definition	Score
It will not be detected- Very low	5
It is unlikely to be detected- Low	4
It is likely to be detected- Medium	3
It is highly likely to be detected- High	2
It will be very easily detected- Very high	1

Based on the above parameters the total Risk Score is calculated by Using the score board.

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Risk Score Matrix

Likelihood of Detection	5 (V.Low)					
	4 (low)		Risk B		RiskA	
	3 (Medium)					
	2 (High)	Risk C				
	1 (V.High)					
		1 (V.Low)	2 (Low)	3 (Medium)	4 (High)	5 (V.High)
Likelihood of Occurrence						
High Risk				Risk A		
Medium risk				Risk B		
Low risk				Risk C		

Based on the assessment using risk score matrix, significant risks which are assessed as High risk and medium risk will be considered for food fraud prevention plan.

Action Plan	
Risk	Parameters
High (Risk A)	Urgent action is required with specific plan, implementation and regular monitoring will be needed.
Medium (Risk B)	Action is needed to reduce the risk with occasional monitoring to mitigate the risk
Low (Risk C)	The activity may proceed with normal supervision after implementing the control measures.

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Reference:

1. **SSAFE – Food Fraud Vulnerability Assessment Tool** - developed by SSAFE in collaboration with Wageningen University and VU University, Amsterdam.

Records

1. Vulnerability Assessment Plan – Annexure 01