Food Fraud Guidance for Sites and Auditors

Applicable SQF Food Safety Code Requirements

- 2.4.4.6 The food fraud mitigation plan (refer to 2.7.2.2) shall include methods by which the identified food safety vulnerabilities from ingredients and materials shall be controlled.
- 2.7.2.1 The methods, responsibility and criteria for identifying the site's vulnerability to food fraud shall be documented, implemented and maintained. The food fraud vulnerability assessment shall include the site's susceptibility to product substitution, mislabeling, dilution, counterfeiting or stolen goods which may adversely impact food safety.
- 2.7.2.2 A food fraud mitigation plan shall be developed and implemented which specifies the methods by which the identified food fraud vulnerabilities shall be controlled.
- 2.7.2.3 The food fraud vulnerability assessment and mitigation plan shall be reviewed and verified at least annually.
- 2.7.2.4 Records of reviews of the food fraud vulnerability assessment and mitigation plan shall be maintained.

2.7.2 Implementation Guidance

What does it mean?

As part of 2.4.4.6 (M) and 2.7.2, food fraud has been added to both the site's approved supplier program and as part of the site's SQF system requirements. In July 2014, GFSI published a discussion paper "GFSI position on Mitigating the public health risk of food fraud," in which it states "The GFSI Board recognizes that the driver of a food fraud incident might be economic gain, but if a public health threat arises from the effects of an adulterated product, this will lead to a food safety incident."

Food fraud is often described as EMA, economically motivated adulteration. However, it is more than that. As well as adulteration, food fraud includes substitution, dilution, addition, misrepresentation or tampering of food ingredients or food products. It is in fact illegal deception for economic gain.

The economic risks of food fraud to the industry are apparent. It is estimated that fraud costs the global food industry between \$US40bn -\$US50bn every year (Australian Food News, 11th July 2017). However, the public health impacts are less so. In many cases, the health impact of food fraud is not known until after the fact, when consumers become sick and the adulterant is detected.

GFSI now requires that a food fraud vulnerability assessment and mitigation plan to be incorporated into the food safety management systems in all GFSI benchmarked schemes. SQF in edition 8 now requires food fraud to be considered for the site (2.7.2), and for incoming materials and ingredients (2.4.4.5, 2.4.4.6).

What do I have to do?

2.4.4.6 is a mandatory element and although 2.7.2 is not mandatory, it is a key GFSI requirement and can only be exempted on receipt by the Certification Body (CB) of a written request from the site justifying exemption. If the justification is accepted by the CB, the element can be exempted. If not, and the site has not completed a vulnerability assessment and mitigation plan, then the CB is required to raise a major non-conformance against 2.7.2.

For many sites, food fraud is a new consideration and the hardest part is getting started. What is a vulnerability assessment? What is a mitigation strategy?

The food fraud strategy is similar to the HACCP methodology sites are familiar with. In general terms, it is:

- 1. Identify the risks (vulnerabilities)
- 2. Determine corrective and preventative actions (mitigation strategies)
- 3. Review and verify
- 4. Maintain records

The food fraud requirements talk about 'vulnerabilities' rather than 'risk'. A risk (ISO 31000 Risk Management) is something that has occurred frequently before, will occur again, and there is enough data to conduct a statistical assessment. Vulnerability is more a condition that could lead to an incident (Dr John Spink, MSU). GFSI considers an "incident" to be a "consumer health risk if not addressed."

As part of the food fraud plan (refer to 2.7.2.1 and 2.7.2.2) the site shall include within the vulnerability assessment and mitigation plan the potential risks for economic adulteration that may impact food safety for all incoming materials. Vulnerabilities may include ingredient substitution, mislabeling, dilution or counterfeiting. It is important to

include minor ingredients such as spices, additives, and processing aids. These materials are often overlooked but many have a high rate of fraud.

'Vulnerabilities' need to be identified in incoming materials and ingredients, and within the site. Not all materials and ingredients are subject to risk, and the highest risks may be from minor or infrequent ingredients that originate from sensitive geopolitical areas, or suppliers with poor past histories. Ingredients can be prioritised based on perceived risk.

Within the site, vulnerabilities may include the potential for intentional or accidental substitution, dilution, or adulteration. The question that needs to be asked is "who benefits financially from internal food fraud?"

Mitigation strategies will be developed based on the identified vulnerabilities.

Although SQF requires that the food fraud vulnerability assessment and mitigation plan to be reviewed and verified at least annually, the site should be constantly aware of their supplier history and changes in the supply chain that could impact the vulnerabilities.

SQFI recommends that suppliers initiating their food fraud strategies seek assistance from one of the many resources that are available on-line. Although SQFI lists these resources, we take no responsibility for the information they provide or the outcomes of the assistance they offer.

SQFI partners with the Food Fraud Initiative at Michigan State University (MSU) http://foodfraud.msu.edu. This group offers free on -line training for sites and auditors on food fraud called Massive Open On-line Courses or MOOCs.

Other resources that could be considered include the PwC food fraud vulnerability assessment, and the USP Food Fraud Database.

2.7.2 Auditing Guidance

Food fraud requirements are relatively new to auditors, and SQFI recommends that all SQF auditors seek training in food fraud strategies through the resources outlined above, or through their internal CB training.

The auditor must avoid pre-determining site's food fraud vulnerabilities or making a quick decision on 2.4.4.4 and 2.7.2 Food Fraud. Food fraud is a new and inexact science, and there is no prescribed methodology for determining vulnerabilities or their mitigating actions. It is based on the information that the site has available at the time.

The auditor will seek evidence of compliance to this requirement by review of documents and records, and interview. Evidence may include:

- An evaluation of the site's approved supplier program includes an assessment of the site's suppliers against potential economic motivation. This can be done through a vulnerability assessment that includes the susceptibility of the raw material, the origin or source, or the potential for economic gain.
- There is awareness within senior management of the need for a food fraud vulnerability assessment and mitigation strategies.
- There is a current, documented vulnerability assessment in place that identifies key ingredient vulnerabilities including justification for their inclusion. The methodology for selecting the key ingredient vulnerabilities shall be available.
- The vulnerability assessment shall include an evaluation of the site vulnerabilities including from staff, contractors, and other associates.
- There are documented mitigation (ie prevention) strategies in place for all identified vulnerabilities, which identify what is to be done and who is responsible.
- The mitigation strategies are active, and are being reviewed for effectiveness.
- The vulnerabilities and mitigation strategies are reviewed at least annually.
- There are records available of review of the food fraud program.