

Establishing Working Relationship of Food Supplier as Part of effectiveness Food Safety Assessment: Case Study in Indonesia Global Chain Restaurants

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Abstract. Purchasing raw foods materials that are used to make our product must be carefully controlled. Selecting and evaluating the right foods supplier today has become much more critical and complex. Involving process of selecting the right supplier can help many food industries and restaurants meet or exceed regulatory standards, drive customer demand and build a strong brand reputation of quality products. Quality and safety for ingredients, products and packaging are mandatory requirement for every food business, so choosing a good supplier is a critical business decision. Consequently, supply chain team has needed to identify choosing the right supplier, as well as several best practices in the food industry or restaurant. Establishing close working relationships with our foods supplier and provide them high standards also providing feedback as to their performance would be part of effective supplier programs in food safety assessment. Some criteria that should be provide by our food supplier were considered as approved supplier such as purchasing specification, quality system compliance, Regulatory compliance and certificate of analysis. The study found that trust and communication area key element in establishing strong working relationships with foods supplier. Working relationships with foods suppliers have come to be viewed as a competitive advantage for Food Industries and Restaurant who looking for long-term economic success. Trusted food suppliers were described as communicating effectively and demonstrating a willingness to work collaboratively. Foods suppliers who communicate directly and clearly are become more effective in implementation of Food Safety assessment.

Keywords: Foods supplier, Food Safety, Purchasing specification, Quality system compliance and certificate of analysis.

I. Introduction

Food safety assessment was required to maintained and ensure the implementation of food safety management system is effective compliance, it also related with food supplier selection and agreements. Selecting the good food supplier means we make a relationship starts by defining what we are required of that supplier to be considered “ Approved Supplier” the first step is telling a potential supplier exactly what you want in the form of a purchasing specification. Having many supplier can reduce control over food safety. The reduced control of sourcing raw material from many supplier can outweigh its economic benefit. An important part of a good food safety implementation depend on knowing that suppliers understand and assist in controlling hazards in a facility’ products.

By having an agreement with supplier, the supplier shares responsibility for safe final product. Share as much information as possible with suppliers when developing and running the facility’s food safety system. Good communication helps ensure that the facility’s food safety information is up-to-date and correct.

II. Procedure

A common method that use for Supplier Food Safety assessment includes :

1. Supplier Selection
2. Approved supplier list
3. Product Specification and controls
4. Supplier Evaluation
5. Corrective action

2.1. Supplier Selection

This step was aimed to ensure that raw material, service and other material received from supplier are safe. Commonly at food industry and restaurant in Indonesia was classified into medium risk material, high risk material and packaging. Some basic requirement for food supplier selection are listed :

- a. What type of food safety system they have in place.
- b. Are the product were manufacturers or wholesale warehouse.
- c. GMP inspection (cleaning of equipment, storage condition for dry food, chilled food and frozen food, facility, loading delivery, personal hygiene, waste management, pest control, (Fig 1.).

2.2. Supplier Approval

This process were concerned into decision. Once they approved they were listed in the approved supplier list. Some approved supplier list should include:

- a. What product the supplier is approved for
- b. Detail of contract information including individual contact, name of manufacturer or wholesaler and emergency contact in case of recall.
- c. Date approval and date supplier started working into our facility.

2.3. Product Specification and Controls

This program should ensure that all incoming material are meet all specifications, such as important food safety characteristic below:

- a. Chemical
- b. Physical
- c. Microbiological
- d. Sensory
- e. Allergenic
- f. Visual

They may also include required or allowed (numerical) limits or ranges for the test results.

2.4. Supplier Evaluation

This program was concerned into checking how well supplier controls are working, that can be observed through;

- a. Inspection of incoming materials
- b. On-site audits supplier
- c. Input material testing

2.5. Corrective Action

This program is used when evaluation has been done, sometime this corrective action was issued in the case of nonconformance material was come into our site.

III. Results and Discussions

3.1. Supplier Selection

In Indonesia food suppliers could be categorized as a manufacturer and wholesaler. Some were established with Food Safety Management System within either manufacturer or wholesaler as we call big chain supplier, others we called it middle supplier and small supplier. In term of supplier selection as part of food safety assessment they were rarely meet any nonconforming or finding. Since they were fully concerned on food safety requirement. What we need to concern is when we deal with supplier that we need their product but in term of food safety assessment were needed to be develop as commonly we called middle supplier which is their supply a local or traditional foods, such as seasoning, cookies, traditional set menu (Table 1).

Table 1. List Priorities Food Supplier Assessment.

Requirements	Minimum Score achievement			
	1	2	3	4
Storing method				
Facility condition				
Personal Hygiene, training and health				
Delivery Management				
Waste and pest control				

Through this matter some food industry or restaurant were classified all various food supplier into some categorized, such as ranked or scored. These method were helpful in term that they can purchase some needed specific food but still hold down any overcome issue regarding food safety implementation. In regard to big supplier we would not be needed many effort to explain further dealing with the food safety requirement, since they were aware and implemented all the food safety requirement, but in term of middle and small supplier some point due to food safety requirement would be need further communication and would sometime develop their performance with food safety implementation to minimize safety risk come into our production area and more so over eliminate food outbreak. Some food industry or were classified food supplier into certain scoring, through this scoring they would be focused on how their monitory food supplier in other way they also would be needed to develop food supplier performance (Table 2).

Table.2. Scoring table on Food Supplier performance

Category	Total Score	Note
Big Supplier	Min >75%	Verification will be held per 1 year
Middle Supplier	Min 74-60	Verification will be 6 month after listed in supplier approval list or any nonconforming high risk issue.
Small Supplier	Min 59-50	New prospect supplier were get food safety introduction as shortly they listed in the supplier approval list

3.2. Supplier Approval

Suppliers approval list are needed to be documented as this process was came after initial assessment as part of supplier selection. Mostly in food industry the list of food supplier was categorized into high risk food supplier, medium risk food supplier or low risk food supplier. High risk supplier were mostly for frozen products, meat, fish, poultry and ready to eat foods (RTE), example of medium risk food is dry food, grain, flour,etc. In fact high risk food supplier were listed to be the most supplier that need to be controlled wither in the initial assessment or during delivery processed/incoming process. Through this list also we have to know whether they have food safety program or any appropriate quality control system

Table 3. Categorized Food Supplier

<i>Food Supplier</i>	<i>Product Example</i>
High Risk Food Supplier	Cooked meat and poultry, dairy products, egg product, shellfish and seafoods
Medium Risk Food Supplier	Fruits, vegetable, juices, canned food, butter and confectionary
Low Risk Food Supplier	Acidic food, dry food, preserved foods, food with high sugar

Through this supplier approval list we would be needed a date of approval and signature of person in charge since this date was indicate the food supplier were started working with the contracting facility and know the person in the contracting facility responsible for this list.

3.3. Product Specification and Controls

Product specifications mean that a product must meet acceptance criteria or expectations. Which is meant refer to the specified limits for the amount or presence of contaminants, impurities or foreign material. This document will become an important control tool for the facilities which is describe the name ingredients, kind of packaging material, or chemical also the most important this is specification of acceptance criteria or reject levels. Most of incoming products were expected to be conformance with the standard but in fact some specification factor were not meet expectation in the other hand we need this product immediately to use. Here is some critical control would be needed in term we make critical control that should be conformance with the specification without any tolerance. These point should be checked and documented in every incoming product.

Table 4. List of Mandatory point during

<i>Category</i>	<i>High risk</i>	<i>Medium risk</i>	<i>Low risk</i>
Physical	V	V	V
Chemical	V	V	V
Product Temperature	V	V	V
Personal hygiene & Equipment Sanitation	V	V	V

Note V : comply with product specification

Incoming material inspection will be required Certificate of analysis (CoA) for each product, visual inspection and analytical laboratory testing. In real case CoA or laboratory testing were stated that the result was applied for certain period of time, so we have to accommodate that these document would not be need in every incoming process.

Table 5. Checked Parameter per Period

<i>Inspection checked</i>	<i>Period</i>	
	Per Incoming	Certain Time
Visual Checked	V	-
CoA	-	V
Halal	V	-
Daily laboratory checked (microbiological)	V	-

3.4. Supplier Evaluation

Verification was part Food Safety requirement, in this case we need to evaluate supplier which is mean to evaluate their performance during contract working. This evaluation could be checked during inspection of incoming materials (Fig 4.) and on-site audits of supplier with the obtained duration and score right after the selection is done (Fig 2.), input material testing combination all of them which all parameter should be checked by qualified personnel. In supplier audit, person in charge or person in contracting facilities visit the supplier's facility. For products with higher food safety risk, supplier audit help maintain safety controls over incoming material, it should be confirm for management commitment that, supplier facility and equipment are well maintained, food safety system, manufacturing quality program, regulatory requirements.

Table 6. Food Safety System applied at Restaurant and Food Industry in Indonesia

<i>Food Safety System</i>	<i>Description</i>	<i>Note</i>
ISO 2200	Food Safety Management System	Accredited by certification body
HACCP	Hazard Analysis Critical Control Point	Accredited by certification body
GMP	Good Manufacturing Practice	
Piagam Bintang 1	Good Manufacturing Practice	Certified by BPOM
Piagam Bintang 2	Good Quality Practice	Certified by BPOM
Piagam Bintang 3	GMP and HACCP	Certified by BPOM
Sertifikasi Laik Sehat	Good Caterer practice	Certified by Health Department

3.5. Corrective Action

Corrective action would be needed when non-conformance was found during incoming delivery or evaluation audit. This non-conformance information is sent back to the supplier and they are then required to investigate and find the cause of the deviation or problem. Food supplier need to provide documents showing that the problem was found and corrected. These documents should prove that steps were taken to prevent the problem from reoccurring. Usually document may include inspection checklist, operator training records or a change to the process. A corrective action log confirms that the facility follow up on issues about supplied products. It also allows the facility to track any continuing problems in follow up with the supplier in question. We need also to define any corrective action when non conforming were happen during delivery product from supplier. In this case we need to control what action would be need to be taken effectively reduce or get rid of the hazard and define what is critical limits and corrective action was addressed what should be done if the control measure fails and or the critical limits are not met.

Table 7. Corrective Action table for many issues during receiving material

<i>Hazard</i>	<i>Control Measure and Critical Limits</i>	<i>Corrective Action</i>
Presence and growth of harmful bacteria	Accept deliveries from reputable supplier at a temperature that will discourage the growth of harmful bacteria Food collected must be transported in a way that will ensure that the temperature on arrival will comply with food specification	Decide if food should be rejected Review supplier Dispose of unsafe food Review collection practice or methods of transportation Reject food beyond “use by” date and review supplier
Cross Contamination	Keep raw and cooked/ready to eat foods separate use safe handling practice	Reject food which may be contaminated Review delivery methods Review staff training
Contamination from vehicle and equipment	Make sure that delivery/collection vehicle is clean Make sure that food is protected/covered	Reject food which may be contaminated Review supplier Review staff training

IV. Conclusions

Good working relationship between buyer and food supplier can increasing long term partnerships, improve the operation and food safety implementation as a whole for mutual benefit of all parties involved. However suggested that the degree of good working relationship that develops between buyer and food suppliers are likely to be more improved by continuous improvement and commitment among them in implementing Food Safety Management System all pre-requisite and procedure were need to be applied in all process and every non conformance issue would be need to get corrective action to avoid re-occurrence.

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