



HOW TO COMPLETE AN EFFECTIVE RISK ASSESSMENT

A food safety risk assessment should be used when there is a concern that a current or new process, ingredient, procedure or environmental factor could introduce a food safety risk to a customer or consumer. Performing a risk assessment demonstrates awareness of the potential food safety risk and that measures were taken to define it, evaluate it, manage it and validate it.

A food safety risk is determined when a measurement is put on the possibility of an identified hazard being present and causing potential harm to someone. This measurement will determine if a potential food safety risk will have a low or high impact on food safety. Low-risk hazards may or may not require control measures to be put in place, depending on their significance. High-risk hazards require control measures to be put in place.

The food safety risk assessment is the overall documented process of identifying the hazard, defining the risk, determining what control measures are currently in place (if any), evaluating the risk and explaining how the risk will be managed going forward and validating that the control measures in place or implemented are effective and properly implemented on a set frequency (i.e. annually). This process is most effective when completed with a collaborative team.

For example, after several attempts, an employee at a meat-packing plant is unable to calibrate the metal detector used for packaged ground beef successfully – the metal detector will not pick up the test wands. The ground beef is already produced and packaged. The last step is to run it through the metal detector before storage and shipping. The employee knows this step is important to ensure the finished product is free of foreign metal material.

What steps can the plant take to evaluate the risk of foreign metal material being present in the finished product, in order to make a confident decision on the disposition of the product?

Complete a food safety risk assessment.

STEPS TO COMPLETING A FOOD SAFETY RISK ASSESSMENT:

1. Define the risk – describe the standard not met/fully met.
2. List the potential hazards.
3. Determine what control measures are currently in place to minimize or eliminate the risk.
4. Evaluate the risk using a defined risk analysis matrix, which considers the frequency in which the hazard could occur and the severity of the consequence if the hazard occurs.
5. Justify why the risk rating was chosen (take into consideration why the frequency rating was chosen and why the consequence rating was chosen).
6. Using the risk analysis matrix, determine if the food safety risk is low (may or may not require control measures to be put in place depending on their significance) or high (requires control measures to be put in place).
7. List any additional control measures that will be implemented.
8. Have the collaborative team sign off on the completed risk assessment and date the document.
9. Schedule and complete the final validation to confirm the control measures put in place are effective and properly implemented. Be sure to include any corrective actions (if any) to be taken.



FACT SHEET

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RISK ASSESSMENT METHOD

Description of the risk or standard not met/fully met: reference any sections and subsections (if applicable) to the standard, regulation, SOP and give a brief overview of the standard that is not met

Potential hazards: list the possible hazards to the product that can occur when the standard, regulation, SOP is not met

Controls in place: list the controls that you currently have in place to minimize or eliminate the potential hazards to the finished product

Evaluate the risk: using a defined risk analysis matrix

Consequences	Frequency
1. Critical/loss of client, fatality	A. Common occurrence
2. Rejected lot, serious illness	B. Known to occur
3. Major – warning from client, recall	C. Could occur
4. Low impact – client pays less, complaint	D. Not expected to occur
5. No impact, insignificant	E. Practically impossible

X	Frequency				
	Common	Known to occur	Could occur	Not expected to occur	Practically impossible
Consequence	A	B	C	D	E
1. Critical/loss of client, fatality	1	2	4	7	11
2. Rejected lot, serious illness	3	5	8	12	16
3. Major – warning from client, recall	6	9	13	17	20
4. Low impact – client pays less, complaint	10	14	18	21	23
5. No impact, insignificant	15	19	22	24	25

Frequency x Consequence = Risk Rating
 Red = High Risk 1-10, Green = Low Risk 11-25

Justification: reasons why the risk rating was chosen

Additional control measures: list any additional control measures that will be implemented

Sign off: have the collaborative team sign off on the completed risk assessment and date the document

Validation: schedule and complete validation to check that controls in place are properly implemented and effective on a set frequency. Complete a validation form:

Validation of: _____
Completed by: _____
Date: _____

Controls	Are controls in place effective(Y/N)? Include justification for the decision.	Corrective Action Required (non-conformance report required enter reference #)	Initial and Date
List all controls in place			

Conclusions: _____

Verified by: _____
Date: _____

The purpose of the food safety risk assessment is to create a document that can be referenced when communicating and working through food safety risks, problem-solving, making decisions on the course of action and bringing attention to and clarifying food safety risks.

FOR MORE INFORMATION CONTACT:

Perennia Food and Agriculture Inc.
Tel: 902-956-3376
Email: foodsafety@perennia.ca