



Taking the Pathway

Understanding
career direction in
**Quality Control
& Quality Assurance**





Food Processing Skills Canada

FPSC is your labour, skills and workforce development non-profit organization.

Our job is to provide leadership in professionalizing the food and beverage manufacturing industry so that the most important resource - people - are the best in the world. We have developed a national skills strategy which is a proven long-term approach successfully utilized by other Canadian professional sectors. This strategy builds collaborations with industry, government, academia, unions, associations, community organizations and other stakeholders.

Canada

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About Taking the Pathway

Canada's Agri-Food sector, particularly meat and seafood processing, is a significant contributor to our nation's economy, and was recently identified as one of Canada's top growth industries over the next 10 years. Despite this, the sector continues to face a critical labour shortage that, if left unresolved, will impede the industry's growth, employment opportunities, and overall sustainability.

To address this shortage, The Food Processing Human Resources Council (FPHRC) has embarked upon a landmark Labour Market Information Study (LMI). In its finality, the LMI will provide government and

decision-makers with the research needed to make real regulatory change that will bring both prosperity and opportunity to the processing sectors.

Taking the Pathway: Understanding Career Paths in Quality Control and Quality Assurance lays crucial groundwork for the LMI by defining occupations and career paths related to the quality control and quality assurance function of food processing. Utilizing this data, the LMI will take in-depth reviews of each career path, and their specific challenges and opportunities.

How to use the Career Pathway

This document provides practical information about the career paths available for workers in quality control and quality assurance. In a time when attraction and recruitment of workers is important to keep up with demand, the career pathway can be helpful to educate potential workers about the opportunities and career pathways within the sector. The career pathway is a helpful tool for employers to attract, recruit and retain productive and skilled workers.



Developing the Career Pathway

To learn more about the career pathways in quality control and quality assurance, we:

- ◆ Conducted extensive research to learn about the various job positions and skill levels within quality control and quality assurance in the food processing sector, including:
 - ◆ Collecting and analyzing job descriptions, job advertisements, organizational charts and other occupational information from a variety of food processing facilities,
 - ◆ Conducting telephone interviews with food processors
 - ◆ Reviewing and validating the career ladder with an industry-led advisory group.

Understanding the Career Pathway

The career pathway for quality control and quality assurance illustrates the progression of occupational levels from foundational skills to executive management. The career pathway is comprised of six (6) levels. The typical entry-point into the quality control and quality assurance function is at the Foundational Skill Level.

Note: While Quality Control and Quality Assurance are presented separately, many organizations either do not differentiate between the two concepts or they use the terms interchangeably. Typically, when there is a 'quality' department, the focus of the system is quality assurance with quality control activities being a component of the overall system. For the sake of this analysis, quality control is more about the repetitive sampling and testing that ensures the quality of the product on the line. Quality assurance is more about the overall quality system.



occupational levels

Foundational Skill Level (F)

High Skill Level workers within food production may transition into a quality control specific role (e.g. Quality Control Inspector¹) on the production line. While still considered to be a production worker, these quality-control specific positions require extra training on quality, food safety, inspection, auditing and grading. These workers still report to production lead hands and supervisors, but are champions of quality on the line and model positive quality control behaviours and practices to their fellow workers.

Applicable NOC Code(s)

NOC 9465-C - Testers and Graders, Food and Beverage Processing

NOC 2222 - Agricultural and Fish Products Inspectors

Sample Titles for Foundational Skill Level jobs serving a Quality Control function on the production line include:

- ◆ Quality control inspector
- ◆ Presenter/detector
- ◆ HIP (HACCP Based Inspection Program) technician
- ◆ Quality control checker
- ◆ Product grader

Sample Titles for Foundational Skill Level jobs serving a Quality Assurance function on the production line include:

- ◆ QA inspector
- ◆ QA raw materials inspector
- ◆ HACCP assistant

¹. National Occupational Standard for Quality Control Inspector

Intermediate Skill Level (I)

Intermediate Skill Level is the entry-point for positions within the Quality Control and/or Quality Assurance department within a food processing facility. Unlike Foundational Skill Level positions which are production department positions and report to Production Supervisors, the Intermediate Skill Level workers are trained in Quality Control processes and report directly to a Quality Control/Assurance supervisor, manager or senior technician. Intermediate Skill Level workers will possess a diploma or degree in food science, or a related field. They will also have a working knowledge of HACCP and GMPs. Experience in food processing, as well as quality assurance systems, guidelines and standards, are all strong assets.

Applicable NOC Code(s)

NOC 2211 – Chemical Technologists and Technicians

Sample Titles for Intermediate Skill Level Jobs within Quality Control departments include:

- ◆ Quality control technician

Sample titles for Intermediate Skill Level jobs within Quality Assurance departments includes:

- ◆ Quality assurance technician
- ◆ HACCP technician
- ◆ Food safety and quality assurance technician
- ◆ Quality assurance coordinator

Supervisory Skill Level (S)

Supervisory Skill Level workers typically have 3-5 years of experience in quality control/assurance within the food processing industry, in addition to a degree in food science and technology or a related discipline. Additional training in relation to food safety management systems, training and management is often required. In addition, workers may have to attain practitioner certification in various food safety management systems or approaches.

Applicable NOC Code(s)

NOC 9213 – Supervisors, Food and Beverage and Associated Products Processing

Sample Titles for Supervisory Skill Level Jobs within Quality Control Function include:

- ◆ Quality control supervisor

Sample Titles for Supervisory Skill Level Jobs within Quality Assurance Function include:

- ◆ Quality assurance supervisor
- ◆ Quality assurance trainer
- ◆ HACCP coordinator

Management Skill Level (M)

Management Skill Level workers typically have a minimum of 5-7 years of supervisory experience within the quality control/assurance function of a food processing facility. Leadership experience is considered an asset. Managers are required to have a minimum of an undergraduate university degree in food science or a related field, and a graduate level university degree being preferred or considered a strong asset.

Applicable NOC Code(s)

NOC 0911 – Manufacturing Manager

Sample Titles for Management Skill Level Jobs within the Quality Control function include:

- ◆ Quality control manager
- ◆ Food safety and systems manager

Sample Titles for Management Skill Level Jobs within the Quality Assurance function include:

- ◆ Quality assurance manager
- ◆ Food safety manager
- ◆ Quality assurance program compliance manager

Senior Executive Leadership Skill Level (SE)

Senior Executive Leadership Skill Level workers typically have significant quality control/assurance experience (e.g. 10+) years within food and beverage processing facilities. Graduate level education and significant leadership experience are often required. Food safety management program (e.g. BRC, HACCP, SQF) is often required. They are responsible for managing corporate affairs and lead the strategic direction and vision of the overall organization in regard to quality control and assurance. Skills in organizational management and business administration are critical.

Applicable NOC Code(s)

NOC 0016 – Senior Manager – construction, transportation, production, and utilities

NOC 0911 – Manufacturing Manager

Sample Titles for Senior Executive Leadership Skill Level Jobs within the Quality Assurance function include:





- ◆ Senior quality assurance manager
- ◆ Director, Corporate food safety and quality



- M** MANAGEMENT
- S** SUPERVISORY
- I** INTERMEDIATE
- F** FOUNDATIONAL

quality control

POSITIONS
CAREER PATHWAY

	TITLE	EXPERIENCE / EDUCATION
	MANAGEMENT <ul style="list-style-type: none"> ◆ QC Manager 	<ul style="list-style-type: none"> ◆ Bachelor of Science (Master's degree may be preferred) ◆ Minimum 5 years QA experience
	SUPERVISORY <ul style="list-style-type: none"> ◆ QC Manager 	<ul style="list-style-type: none"> ◆ Bachelor's Degree in Food Science and Technology or related disciplines ◆ 2-5 years of experience in food processing industry
	INTERMEDIATE <ul style="list-style-type: none"> ◆ QC Technician 	<ul style="list-style-type: none"> ◆ Degree or Diploma in Food Science or related field ◆ Experience in a food processing facility an asset
	FOUNDATIONAL <ul style="list-style-type: none"> ◆ QC Inspector 	<ul style="list-style-type: none"> ◆ High school diploma or equivalent ◆ 1 year of experience in food processing and/or QA

quality assurance

POSITIONS
CAREER PATHWAY



- SE SENIOR EXECUTIVE LEADERSHIP**
- M MANAGEMENT**
- S SUPERVISORY**
- I INTERMEDIATE**
- F FOUNDATIONAL**

	TITLE	EXPERIENCE / EDUCATION
SE	SENIOR QA MANAGER	<ul style="list-style-type: none"> ◆ Bachelor of Science (Master's degree may be preferred) ◆ Minimum 10-15 years of QA management experience
M	QA MANAGER	<ul style="list-style-type: none"> ◆ Bachelor of Science (Master's degree may be preferred) ◆ Minimum 10 years QA experience
	QA SUPERVISOR	<ul style="list-style-type: none"> ◆ Bachelor's Degree in Food Science and Technology or related discipline ◆ 3-5 years of experience in QA
S	HACCP COORDINATOR	<ul style="list-style-type: none"> ◆ Diploma/ Degree in Food Science, or a related discipline ◆ HACCP Certification required ◆ 3-5 years of experience in QA
	QA TRAINER	<ul style="list-style-type: none"> ◆ Diploma/ Degree in Food Science, or a related discipline ◆ Training experience ◆ 3-5 years of experience in QA
	QA TECHNICIAN	<ul style="list-style-type: none"> ◆ Degree or Diploma in Food Science or related field ◆ Experience in a food processing facility an asset
I	QA COORDINATOR	<ul style="list-style-type: none"> ◆ Diploma/Degree in Food Science, or a related discipline ◆ BRC, SQF, HACCP certification may be required ◆ Minimum 3 years of experience in food processing and/or QA
	HACCP TECHNICIAN	<ul style="list-style-type: none"> ◆ Diploma/Degree in Food Science, or a related discipline ◆ Minimum 3 years of experience in food processing and/or QA
F	QA INSPECTOR	<ul style="list-style-type: none"> ◆ High school diploma or equivalent ◆ 1 year of experience in food processing and/or QA
	HACCP ASSISTANT	<ul style="list-style-type: none"> ◆ High school diploma or equivalent ◆ 1 year of experience in food processing

quality control & quality assurance career pathway

The following graphic illustrates a typical career progression within the quality control and quality assurance function within the food processing sector (ie. Direct fish and seafood processing).

As the graphic illustrates, workers within High Skill Level occupations from the production department (such as Lead Hand) may move to the Quality Control/Quality Assurance Department and assume a role of Quality Control Inspector. This position is still a production/processing line position, but the Quality Control Inspector performs quality control tests and

SUPERVISORY / MANAGEMENT



SENIOR EXECUTIVE LEADERSHIP

Years of QA/QC experience in the food processing sector, ability to plan strategically, create vision for organization

Titles include: Senior QA Manager; Senior QA Manager Operations; Director of Corporate Food Safety and Quality



MANAGEMENT

Years of experience in QA/QC, ability to manage people, processes and budgets

Titles include: Quality Assurance Manager; Quality Control Manager



DIRECT FISH AND SEAFOOD PROCESSING



SUPERVISORY

Years of experience in QA/QC, ability to manage people

Titles include: Quality Assurance Supervisor; HACCP Coordinator; Quality Assurance Trainer; Quality Control Supervisor



INTERMEDIATE

Minimum of Degree/Diploma in Food Science or related field. experience in food processing facility considered an asset

Titles include: Quality Assurance Technician; Quality Control Technician; Quality Assurance Coordinator; HACCP Technician



FOUNDATIONAL

Experience as a high-skilled processing worker required. training in inspecting/grading may be required

Titles include: Quality Assurance Inspector; HACCP Assistant; Quality Control Inspector



ENTRY POINT
FOR QA & QC
TRAINED
PERSONNEL

TRANSITION
FROM
PROCESSING
TO HERE

Key Findings

Our research helped to identify key issues and challenges that are unique to the quality control/ assurance within the food processing industry:

Quality Functions on the Production Floor

There are quality functions (in regard to inspecting and grading) that are performed by processing workers who have received extra training to perform this specific function. They perform this quality function on the line and most often report to a production/processing supervisor, not the QA department. There is no vertical movement of these workers within QA departments as they do not have food science training to perform quality assurance functions (such as the Quality Assurance Technician role).

High Educational Skill Requirements

A higher level of qualifications is required by most QC/QA positions. For the purposes of the analysis it appeared that technicians required a minimum of a diploma (and in some cases a degree) credential. Supervisory and management positions typically require a degree in food science or a related field (with a Master's degree being a strong asset for higher level management) and significant experience.



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QUALITY CONTROL

Quality Control (QC) is a set of activities for ensuring quality in products. The activities focus on identifying defects in the actual products produced.

Quality Control aims to identify (and correct) defects in the finished product. QC, therefore, is a reactive process. The goal of QC is to identify defects after a product is developed and before it's released.

Quality Control refers to quality related activities associated with the creation of project deliverables. QC is used to verify that deliverables are of acceptable quality and that they are complete and correct. Examples of QC activities include inspection, deliverable peer reviews and the testing process.



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QUALITY CONTROL

LEVEL/NOC	SAMPLE TITLES	DESCRIPTION/DUTIES	EXPERIENCE/ EDUCATION
<p>Management</p> <p>NOC 0911 – Manufacturing Manager</p>	<ul style="list-style-type: none"> ◆ Quality control manager ◆ Food safety and systems manager 	<ul style="list-style-type: none"> ◆ Promote in-house quality program ◆ Work with relevant departments to develop corporate quality improvement strategies ◆ Mobilize work teams to achieve quality objectives ◆ Develop innovative strategies and communicates them to stakeholder ◆ Implement action plans to achieve established objectives within a set budget ◆ Play an influential role within the corporate quality team and with clients to create buy-in ◆ Plan, manage, coordinate and control in-house quality control and assurance to ensure food safety ◆ Develop and implement audit programs ◆ Review and update food safety plans (e.g. HACCP plan, prerequisite programs, food safety programs and policies) ◆ Enforce standards and procedures to ensure that manufactured products meet company, client and government standards ◆ Lead investigations and root-cause analyses when quality incidents occur ◆ Develop and implement correction and preventive action plans ◆ Develop corporate quality guidelines and practices and ensure compliance. ◆ Manage the product supply chain from a quality perspective ◆ Review and analyze quality data ◆ Define operational quality KPIs ◆ Conduct quality training 	<ul style="list-style-type: none"> ◆ Bachelor of Science (Master's an Asset) in Food Engineering, Food Science, Biological Sciences, etc. ◆ Minimum of five (5) years' relevant experience as quality manager in the food industry or related area ◆ Technical knowledge of food safety, including risk management ◆ Leadership experience ◆ Technical expertise in food engineering ◆ Statistical process control and root cause analysis ◆ Project management experience ◆ Experience in managing food safety systems (e.g. SQF, BRC, HACCP) ◆ Experience in training and managing staff in a quality role ◆ Experience in auditing and inspections (asset)

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QUALITY CONTROL

Supervisory

NOC 9213 –
Supervisors, Food
and Beverage
Processing

- ◆ QC supervisor

- ◆ Manage the various quality assurance programs (GFSI, SQF-2000, HACCP, BPF, etc.)
- ◆ Audit and review all programs and procedures on an annual basis
- ◆ Update the various literature (manuals, procedures, instructions, etc.)
- ◆ Provide employee training and development support so employees can master and apply the programs
- ◆ Take part in various audits
- ◆ Carry out plant inspections and lend support to appropriate departments to resolve non compliance issues
- ◆ Sit on process improvement and plant project taskforces
- ◆ Manage training records of employees;
- ◆ Assist QC Manager and serve as replacement as needed
- ◆ Ensure department's OH&S rules and procedures are being applied
- ◆ Take part in the implementation of new technologies, new facilities/ equipment and new products

- ◆ Bachelor's degree in food science and technology or related disciplines
- ◆ 2-5 years of experience in food processing industry

Intermediate

NOC 2211 –
Chemical
Technologists
and Technicians

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> ◆ QC technician | <ul style="list-style-type: none"> ◆ Monitor, sample and test food products to ensure they comply with quality standards and customer specifications ◆ Assess level of : <ul style="list-style-type: none"> ◆ flavour ◆ odour ◆ appearance ◆ mouth feel of food product ◆ Aseptic sampling for microbiological, allergen and other product testing and validation ◆ Participate in plant inspections ◆ Verification of sanitation activities, including preoperational inspections, swabbing, and communicating corrective actions to production personnel ◆ HACCP monitoring and verification, including metal detector and x-ray checks and calibrations. ◆ Complete and file accurate and legible QC records and documentation ◆ Calibrate, clean and maintain laboratory equipment ◆ Liaise with production personnel and supervisors on day to day activities | <ul style="list-style-type: none"> ◆ Diploma or degree in food science or related field ◆ Working knowledge of HACCP and GMP's ◆ HACCP certification an asset ◆ Experience in food processing would be considered an asset ◆ Experience with QA systems, regulations, guidelines, and associated standards ◆ Practical experience with risk management, product testing, capability studies, and control plans |
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appendix a

QUALITY CONTROL

Foundational

NOC 9465 – C
Testers and Graders,
Food and Beverage
Processing

- ◆ QC inspector
- ◆ Presenter/Detector
- ◆ HIP (HACCP Based Inspection Program Technician
- ◆ QC checker
- ◆ Product grader

**Note that this function is performed on the line and with direct report to the Supervisor of a production department.

Not a QC department function

For some species/plants, grading is performed by CFIA or CFIA approved/certified inspectors

- ◆ Take samples of products at various stages of processing
- ◆ Examine and inspect containers, materials, and packaged products to ensure that specifications are met
- ◆ Conduct routine tests for product specifications
- ◆ Measure, weigh, and count products and materials
- ◆ Grade and label raw materials or finished products
- ◆ Examine contents and compare with records, such as manifests, invoices, or orders, to verify accuracy of incoming or outgoing shipments
- ◆ Record product, packaging, and order information on specified forms and records
- ◆ Ensure hygiene and sanitation practices conform to policies and regulations
- ◆ Record shipment data, such as weight, charges, space availability, and damages and discrepancies, for reporting, accounting, and record keeping purposes
- ◆ Ensure FIFO stock rotation within our facility and coolers
- ◆ Take photos and prepare quality reports for other departments

- ◆ High school diploma or equivalent
- ◆ WHMIS training
- ◆ Training in inspection processes may be required
- ◆ Less than 1 year of experience in food processing and/or QA
- ◆ Knowledge of CFIA standards and principles of grading and inspecting

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QUALITY ASSURANCE

Quality Control (QA) is a set of activities for ensuring quality in the processes by which products are developed.

Quality Assurance aims to prevent defects with a focus on the process used to make the product. It is a proactive quality process. QA refers to the process used to create the deliverables, and can be performed by a manager, client, or even a third-party reviewer.

The goal of QA is to improve development and test processes so that defects do not arise when the product is being developed.

Examples of QA include process checklists, project audits and methodology and standards development. QA activities are determined before production work begins and these activities are performed while the product is being developed. QA is process oriented and focuses on defect prevention.



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QUALITY ASSURANCE

<p>Senior Executive Management</p> <p>NOC 0911 – Manufacturing Manager</p>	<ul style="list-style-type: none"> ◆ Senior QA manager ◆ Senior QA manager - Operations ◆ Director, Corporate food safety and quality 	<ul style="list-style-type: none"> ◆ Provide leadership and vision with respect to the company’s food safety and quality programs plants ◆ Investigate, find root cause, determine corrective actions, preventative measures and follow up on any deviations, customer and consumer complaints if required ◆ Ensure that all HACCP/Food Safety and Quality related programs (e.g. Prerequisites, HACCP, SOPs, BRC requirements, etc.) are compliant with the customer and Company’s requirements standards to ensure that food safety, quality and legality requirements are met ◆ Participate and aids in the coordination during all external audits ◆ Attend all meetings related to Operations, Continuous Improvement, HACCP/Food Safety and Quality meetings when required 	<ul style="list-style-type: none"> ◆ Bachelor’s degree in scientific or technical field (Master’s degree may be preferred) ◆ BRC, HACCP and/or SQF certification ◆ Minimum 10-15 years management experience in quality assurance in food manufacturing industry, preferably meat and in a unionized environment ◆ Working knowledge of food and meat plant regulatory standards (CFIA, etc.) ◆ Working knowledge of GMP, HACCP, BRC, food safety, food quality, etc. ◆ Working knowledge of OHSA, WHMIS, etc.
<p>Management</p> <p>NOC 0911 – Manufacturing Manager</p>	<ul style="list-style-type: none"> ◆ QA manager ◆ Food safety manager ◆ QA program compliance manager ◆ QA manager – Food safety/ quality programs ◆ QA manager – Animal welfare audit program ◆ Manager of animal welfare and 	<ul style="list-style-type: none"> ◆ Communicate with regulatory authorities ◆ Develop and manage QA programs ◆ Oversee maintenance of HACCP program ◆ Review QA data for compliance with specification and regulations ◆ Plan and conduct internal audits ◆ Schedule sampling of raw materials, work in progress and finished product ◆ Assist with analysis of data to determine root cause of deficiencies and provide feedback on performance and necessary improvements ◆ Monitor plant procedures and ensure that verification of records are being completed on scheduled frequencies ◆ Supervise staff to ensure quality standards are being implemented as written ◆ Compile data for documentation; prepare reports 	<ul style="list-style-type: none"> ◆ University degree or college diploma in Food Science or related discipline (Master’s degree may be preferred) ◆ BRC, HACCP and/or SQF certification is preferred ◆ Auditor certification may be required ◆ Minimum 10 years of experience working in a Quality/ Food Safety Systems environment ◆ In depth understanding of food safety management systems (e.g. QMP, BRC, HACCP)

Management

NOC 0911 –
Manufacturing
Manager

- ◆ Monitor, audit, measure QA performance
- ◆ Review staff performance
- ◆ Lead all CFIA and BRC audits together with HACCP Team when required
- ◆ Ensure staff training requirements are kept up to date according to changes in HACCP and SOP programs
- ◆ Manage development of new products from conceptual/ exploratory stage through to full-scale production
- ◆ Modify existing products for improved productivity, marketability and/or quality
- ◆ Research new technologies and prepare cost benefit analysis
- ◆ Coordinate batch testing and manage preparation of prototypes for presentation
- ◆ Design and document new product specifications including raw material selection, procedures, materials and packaging, and finished product specifications
- ◆ Approve all label changes and updates in keeping with relevant regulations
- ◆ Maintain product specifications
- ◆ Identify areas where cost savings can be achieved
- ◆ Liaise with suppliers of raw ingredients, packaging materials, chemicals and chemical and nutritional analysis consultants and with representatives of the CFIA

appendix a

QUALITY ASSURANCE

Supervisory

NOC 9213 – Supervisors, Food and Beverage Processing

- ◆ Quality assurance supervisor
 - ◆ Food safety supervisor
 - ◆ Quality specialist
 - ◆ QA and HACCP supervisor
 - ◆ QA supervisor animal welfare
- ◆ Select, train and develop QA Technicians
 - ◆ Plan, coordinate, and direct HACCP/Food Safety and Quality Control Programs designed to ensure continuous production of products consistent with established standards
 - ◆ Monitor and lead the day to day activities of the Quality Assurance Technicians in conjunction with planned production
 - ◆ Conduct research and testing to improve safety, shelf-life and overall quality of products
 - ◆ Assist with Analyzing Quality Assurance Data, summarize, and share with stakeholders to improve process performance and product quality
 - ◆ Provide suggestions and implement continuous improvement of the Quality Assurance Program
 - ◆ Provide assistance during customer visits, complaint resolution and research and development projects
 - ◆ Supervise and direct activities of QA Technicians and HACCP Assistant and ensure compliance with facility food and people safety policies, SOPs and meat regulations
 - ◆ Provide assistance regarding continuous improvement of Quality Assurance Programs and Procedures
 - ◆ Identify product quality and compliance issues
 - ◆ Liaise with outside laboratories, pest control services, and CFIA
 - ◆ Provide ongoing coaching, developing and mentoring to the Quality Assurance team
 - ◆ Manage QA department budget
 - ◆ Assess and react to immediate safety concerns, including product withdrawals and recalls and follow up to implement preventive measures
 - ◆ Analyze statistical data and product specifications to determine present standards and establish proposed quality and reliability expectancy of finished product
- ◆ Bachelor of Science Degree in Food Science, microbiology or equivalent
 - ◆ 3-5 years of experience in a similar role in a food manufacturing environment
 - ◆ 2 or more years of supervisory experience is an asset
 - ◆ Prior knowledge of HACCP, Six Sigma, GMPs an asset
 - ◆ Strong experience in developing and maintaining Quality Assurance Programs, HACCP systems and SOP's
 - ◆ Excellent leadership and communication skills

Supervisory

NOC 9213 –
Supervisors, Food
and
Beverage
Processing

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> ◆ HACCP coordinator ◆ CFIA (Cdn. Food Inspection Agency) | <ul style="list-style-type: none"> ◆ Manage company HACCP (Hazard Analysis Critical Control Point) program which includes verification of documents, onsite observations, updates for new products or processes and a yearly reassessment to ensure compliance to regulations ◆ Assist and accompany CFIA inspectors during performance of their CVS tasks including product or environmental sampling ◆ Implement and manage CFIA rules and regulations ◆ Document existing HACCP programs, providing a complete paper trail ◆ Revises pre-requisites programs as necessary according to production practices ◆ Update and executes HACCP programs and HACCP-related SOP's according to changes in CFIA regulations, or new production processes ◆ Maintain HACCP training program ◆ Train new employees on HACCP procedures and company policies in Food Plant Hygiene. ◆ Performs HACCP verifications ◆ Update and review HACCP records, taking action on records showing deficiencies or recurring issues ◆ Continuous evaluation of the effectiveness of current HACCP programs to include continuous improvement ◆ Collaborate with the CFIA inspectors, Operations, QA Manager and Supervisors when resolving food safety issues ◆ Assist third-party auditors ◆ Report all HACCP concerns and deficiencies to QA Manager | <ul style="list-style-type: none"> ◆ Diploma or Degree in Food Science, or a related discipline ◆ HACCP Certification required ◆ Minimum 3-5 years of food safety related experience required ◆ Strong knowledge of GMP (Good Manufacturing Practices), GFSI (Global Food Safety Initiative), Quality regulatory requirements and systems, and inspection programs and processes ◆ Knowledge of Statistical Process Control is required ◆ Previous program management experience |
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QUALITY ASSURANCE

Supervisory

NOC 9213 –
Supervisors, Food
and
Beverage
Processing

- ◆ QA trainer
- ◆ Food safety and quality assurance trainer
- ◆ Develop and present all applicable food safety program training
- ◆ Perform evaluations to determine effectiveness of training
- ◆ Conduct quality and food safety training for new employees, and refresher training for existing employees when required
- ◆ Conduct orientation sessions and arrange on-the-job training for new hires
- ◆ Identifies training and development needs within an organization through job analysis, appraisal schemes and regular consultation with Plant Management, and QA department
- ◆ Design and expand (if necessary) training and development programs based on the needs of the organization and the individuals
- ◆ Develop more effective induction programs as well as HACCP refresher training programs
- ◆ Produce training materials for in-house courses
- ◆ Monitor and review the progress of trainees through questionnaires and discussions with managers
- ◆ Keep up to date with developments in training by reading relevant journals, going to meetings and attending relevant courses
- ◆ Research new technologies and methodologies in workplace learning
- ◆ Develop and organize training manuals, multimedia visual aids, and other educational materials
- ◆ Diploma or Degree in Food Science, or a related discipline
- ◆ Minimum of three (3) years of Quality Assurance and/or Research and Development experience in food industry, preferably meat and seafood
- ◆ Experience with instruction or training with knowledge of adult instructional and learning theory and principles
- ◆ Knowledge of instructional design and training methodologies
- ◆ Knowledge of learning management systems
- ◆ Working knowledge of food and meat plant regulatory standards (CFIA, etc.)
- ◆ Working knowledge of GMP, HACCP, BRC, food safety, food quality, etc.
- ◆ Working knowledge of OHSA (Occupational Health & Safety Act), WHMIS, etc

Intermediate

NOC 2211 –
Chemical
technologists
and technicians

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| <ul style="list-style-type: none"> ◆ Quality assurance technician ◆ FSQA (Food Safety Quality Assurance) technician ◆ QA technician animal welfare | <ul style="list-style-type: none"> ◆ Assist HACCP Coordinator with HACCP reassessment, monitoring, auditing and verification as required ◆ Coordinate/follow up with internal or external Non-Conformance Reports ◆ Help investigate customer and consumer complaints ◆ Sort and analyze data and provide recommendations based on data analysis ◆ Assist in audit preparations ◆ Create and manage HACCP-related Work Notifications ◆ Assist with planning and executing of environmental monitoring program ◆ Assist CFIA inspectors ◆ Update SOPs and forms as necessary from HACCP reassessments, program changes, etc. ◆ Collect environmental samples for microbiological analysis ◆ Conduct quality control tests and tasks ◆ Conduct pre-operational inspection of all production areas ◆ Calibrate QA equipment ◆ Monitor production for compliance to specifications and collect product quality data for analysis ◆ Verify HACCP, regulatory and food safety programs for compliance ◆ Monitor processing procedures and investigate food safety incidences ◆ Monitor food handling and sanitation ◆ Audit items including, but not limited to, building structure, maintenance, sanitation, employee hygiene and product handling practices for compliance to food safety and quality standards ◆ Initiate, trace and monitor product on QA hold | <ul style="list-style-type: none"> ◆ Diploma or Degree in Food Science, or a related discipline ◆ WHMIS Training ◆ HACCP Training ◆ Previous experience in a technical role ◆ Experience in the Food industry preferred ◆ Strong understanding of Sanitation, SOPs, Pre-requisite Programs, HACCP, CCP's and GMP's |
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appendix a

QUALITY ASSURANCE

Intermediate

NOC 2211 –
Chemical
technologists
and technicians

- ◆ HACCP technician
- ◆ Facilitator – HACCP programs

- ◆ Ensure accuracy to all programs and policies, HACCP plans, records (including proper version controls) and maintain all information via the secured company database
- ◆ Work directly with the Supervisor to ensure that HACCP plans are kept up to date and accurate in their content
- ◆ Works with various functional areas to ensure all program information is current and available to them
- ◆ Ensure required re-assessments of programs are following prescribed schedules and informs Senior QA Staff of any delays
- ◆ Manage, update, process and log report revisions
- ◆ Maintain and update Allergen Matrices for all departments and facilities
- ◆ Ensure compliance to the written programs (Prerequisites, HACCP, BRC) by verifying related records
- ◆ Review and monitor changing regulatory policy and reports to Senior QA staff so that necessary changes can be made in a timely manner
- ◆ Organize and maintain product specification documents
- ◆ Aid in conducting root cause analysis for nonconformities and customers' complaints
- ◆ Analyze micro and product analyses data to provide QA & Food Safety recommendations to Management
- ◆ Prepare necessary documentation for all related QA Technicians training and ensure completeness
- ◆ Prepare all tests schedule (e.g. carcass rinse, hand swabbing, sanitation swabbing, equipment teardown, allergen verification, etc.) and ensure compliance as requested
- ◆ Perform on-site inspections and testing when requested to ensure that the manufactured product complies with the customer's requirements and company specifications
- ◆ Assist in performing Internal Audits
- ◆ Plan, organize and execute requested projects as well as providing analysis and reports
- ◆ Perform trend analysis for specific quality related tasks

- ◆ Bachelor's Degree in Food Science or related field
- ◆ HACCP training
- ◆ Minimum three (3) years of HACCP/GFSI experience in the food industry
- ◆ Working knowledge of quality assurance principles, CFIA regulations and GFSI standards is an asset

Intermediate

NOC 2211 –
Chemical
technologists
and technicians

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| <ul style="list-style-type: none"> ◆ QA coordinator ◆ QA coordinator – Internal audits ◆ QA Coordinator – Internal audits (HACCP/BRC) ◆ Quality systems coordinator ◆ Quality assurance coordinator/assistant ◆ QA lead ◆ QA facilitator | <ul style="list-style-type: none"> ◆ Participate and cooperate during all external audits ◆ Investigate, finds root cause, determine corrective actions, preventative measures and follow up on any deviations, customer and consumer complaints ◆ Attend all meetings related to Operations, Continuous Improvement, HACCP/Food Safety and Quality meetings when required ◆ Assist the QA Manager and HACCP Coordinator in the verification that the HACCP program functions according to specifications ◆ Act as a floor monitor to ensure GMP compliance ◆ Coordinate and assist with an internal calibration program for all pieces of equipment ◆ Assist with Quality Assurance data entry, micro plate reading, carcass swabbing ◆ Provide support on Quality Assurance and HACCP related reports and resolutions ◆ Support in the implementation of improvements in quality production techniques ◆ Support the interpretation and enforcement of HACCP Program ◆ Maintain and update Food Quality Manual to align with corporate QA requirements ◆ Interact with Production, Maintenance, Sanitation, line employees, and CFIA when quality / food safety issues arise ◆ Provides reports on Quality Compliance and Food Safety to the QA Manager and HACCP Coordinator ◆ Actively participates on overall Quality and Food Safety continuous improvement programs | <ul style="list-style-type: none"> ◆ Bachelor of Science degree ◆ BRC, HACCP and/or SQF certification is preferred ◆ Minimum of three (3) years of quality assurance and/or research and development experience in food manufacturing industry ◆ Working knowledge of food safety and regulatory standards (CFIA, etc.) ◆ Working knowledge of GMP, HACCP, BRC, food safety, food quality, etc. ◆ Working knowledge of OHSA, WHMIS, etc. |
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appendix a

QUALITY ASSURANCE

<p>Foundational</p> <p>NOC 2222 – Agricultural and Fish Products Inspectors</p>	<ul style="list-style-type: none"> ◆ QA inspector ◆ QA raw materials inspector 	<ul style="list-style-type: none"> ◆ Assist with HACCP Coordinator and Plant Manager in implementing the Quality Assurance, Food Safety and Food Quality systems ◆ Sample and inspect various incoming products to ensure product complies with all required regulatory, customer, and internal company specifications 	<ul style="list-style-type: none"> ◆ High school diploma ◆ Post-secondary education in relevant field may be required ◆ 1 year of experience in food processing and/or quality assurance ◆ Knowledge of GMPs, HACCP
	<ul style="list-style-type: none"> ◆ HACCP assistant 	<ul style="list-style-type: none"> ◆ Audit processing floor, including but not limited to building structure, maintenance, sanitation, employee hygiene and product handling practices for compliance to food safety and quality standards ◆ Verify pre-operational sanitation inspections of processing equipment and food contact surfaces on the processing floor ◆ Daily monitoring of food handling and sanitation on the processing floor ◆ Perform chemical tests to ensure food safety as per HACCP standards ◆ Verify all HACCP documents ◆ Complete required checks in compliance with safety programs ◆ Complete grade reports 	<ul style="list-style-type: none"> ◆ High school diploma or equivalent ◆ HACCP training in all areas of the plant ◆ WHMIS training ◆ 1+ years of experience in a meat/seafood processing plant ◆ Ability to enforce quality assurance and HACCP rules and regulations

notes



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Lined area for taking notes.



Food Processing Skills Canada (FPSC)

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