



ONTARIO COLLEGE OF TRADES

ORDRE DES MÉTIERS DE L'ONTARIO

Apprenticeship
Training Standard

Schedule of Training

Process Operator –
Food Manufacturing

246T

Development Date: May 2008

PROCESS OPERATOR – FOOD MANUFACTURING

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
Preface	4
Definitions	5
Important Directions to the Apprentice.....	7
Important Directions for the Sponsor/Employer & Supervisor/Trainer.....	7
Notice/Declaration for Collection of Personal Information	8
Roles and Responsibilities of Apprentice, Sponsor/Employer and Supervisor/Trainer	9
Skill Set Completion Form.....	11
Learning Outcome Completion Form	11
Apprentice Completion Form.....	12
<u>TRAINING CONTENT</u>	
A. Description/Duties	13
B. On-the-Job Training Performance Objectives	
U6480.0 Work Safely.....	14
U6481.0 Employ Job Information Resources	16
U6482.0 Use And Maintain Tools And Equipment.....	18
U6483.0 Maintain Food Safety	20
U6484.0 Operate Raw Materials Preparation And Processing Equipment.....	21
U6485.0 Maintain Operation Of Food Process Equipment And Components	23
U6486.0 Control Process Operations	24
U6487.0 Carry Out Process Control Procedures.....	26
C. Learning Outcomes (In-School Or Correspondence)	
S0223 Food Safety and Security	27
S0224 Environmental	27
S0225 Electrical and Instrumentation.....	28
S0226 Mechanical	28
S0227 Communication and Computer Skills	28
S0228 Continuous Quality Improvement	28
Apprentice Record.....	29

PREFACE

This Schedule of Training was developed by the Service Standards and Management Branch of the Ministry of Training, Colleges, and Universities (MTCU), in consultation with representatives from the industry. This document is intended to be used by apprentice, supervisor/trainer and sponsor/employer as a "blueprint" for training and as a prerequisite for completion and certification.

This training document becomes the apprentice's only record of workplace training performance.

Supervisor/trainer and apprentice are required to sign off and date the skills following each successful acquisition unless a skill is marked shaded (optional).

The care and maintenance of this training document are the joint responsibility of the apprentice and the sponsor/employer. By signing off the skill, the supervisor/trainer and the apprentice are indicating that the apprentice has demonstrated competence of the skill. This training standard has been developed specifically for documenting the apprentice's acquisition of skills of the trade.

Please Note: Apprenticeship Training and Curriculum Standards were developed by the Ministry of Training, Colleges and Universities (MTCU). As of April 8th, 2013, the Ontario College of Trades (College) has become responsible for the development and maintenance of these standards. The College is carrying over existing standards without any changes.

However, because the Apprenticeship Training and Curriculum Standards documents were developed under either the Trades Qualification and Apprenticeship Act (TQAA) or the Apprenticeship and Certification Act, 1998 (ACA), the definitions contained in these documents may no longer be accurate and may not be reflective of the Ontario College of Trades and Apprenticeship Act, 2009 (OCTAA) as the new trades legislation in the province. The College will update these definitions in the future.

Meanwhile, please refer to the College's website (<http://www.collegeoftrades.ca>) for the most accurate and up-to-date information about the College. For information on OCTAA and its regulations, please visit: <http://www.collegeoftrades.ca/about/legislation-and-regulations>.

DEFINITIONS

ACA

Apprenticeship and Certification Act, 1998

Certificate of Apprenticeship (C of A)

Certification issued to individuals who have demonstrated that they have completed the trade or occupation in-school training and on-the-job training.

Certificate of Qualification (C of Q)

Certification issued to qualified applicants who have achieved a passing grade on the certification examination for their trade.

Competency Analysis Profile

A document that identifies, in compressed, graphic format, the training requirements of an individual trade and that details the skills/skill sets that must be demonstrated.

Competence

The ability of an individual to perform a skill repeatedly and without assistance in the workplace to the standard set out in the Training Standard or Schedule of Training.

General Performance Objective (On-the-job Skill Set)

Describes the skill set, including all performance objectives under that skill set.

Industry Committee (IC) - under the ACA and Provincial Advisory Committee (PAC) under the TQAA

Under the ACA and TQAA, the Minister may appoint a provincial committee in any trade or group of trades to advise the Minister in matters relating to the establishment and operation of apprenticeship training programs and trades qualifications.

Journeyman or Equivalent

A person who has acquired the knowledge and skills in a trade, occupation or craft as attested to by a provincial or territorial authority.

Mandatory

Status assigned to unshaded individual skills, skill sets or general performance objective which must be signed off for apprentices to complete their program.

Optional

Status assigned to shaded individual skills, skills sets or general performance objective for which sign-off is not required for apprentices to complete their program.

Sign-off

Signature of the sponsor/employer of record or an individual to whom, that sponsor or employer has delegated signing authority, indicating an apprentice's achievement of competence.

PROCESS OPERATOR – FOOD MANUFACTURING

Skill

Individual skill described in the Training Standard (note: does not mean the larger skill groups referred to in the Training Standard as Skill Sets, Training Units, or General Performance Objective, but the individual skills that make up those groups).

Skill Sets

Group of individual skills found in the Training Standard (may also be called Training Unit or General Performance Objective)

Skill Set Completion Form

Lists all skill sets and includes space for sign-off by sponsor/employer of record.

Sponsor/Employer

Means a person that has entered into a registered training agreement under which the person is required to ensure that an apprentice is provided with workplace-based training in a trade, other occupation or skill set as part of an apprenticeship program approved by the Director.

Sponsor/Employer of Record

Refers to the sponsor or employer documented as the signatory to the current training agreement or contract. In order for a sponsor/employers to be considered for the training of apprentices, they must identify that the workplace has qualified journeypersons or equivalent on site and can identify that the workplace has the tools, equipment, materials, and processes which have been identified to be required for the trade by Provincial Advisory Committees (PACs) or Industry Committees (ICs).

Supervisor

An individual, who oversees the execution of a task or oversees the actions or work of others.

Trainer

A qualified trainer in a compulsory trade is a journeyperson with a Certificate of Qualification or in a voluntary trade is an individual who, at a minimum, is considered equivalent to a journeyperson with a Certificate of Qualification.

TQAA

Trades Qualification and Apprenticeship Act.

Training Standard

A document that has been written in concise statements, which describe how well an apprentice must perform each skill in order to become competent. In using the document, trainers will be able to ensure that the apprentice is developing skills detailed for the occupation.

IMPORTANT DIRECTIONS

Apprentice

1. All complete skills or skill sets must be signed and dated by both the apprentice and sponsor/employer when either all terms of the contract have been completed or the apprentice leaves the employ of the employer.
2. It is the responsibility of the apprentice to inform the local Apprenticeship Client Services Office regarding the following changes:
 - change of sponsor/employer address
 - change of apprentice name or address
 - transfer to a new sponsor/employer
3. The Skill Set Completion Form must be completed and signed by the current sponsor/employer and presented to the local Apprenticeship Client Services Office at the fulfillment of all terms of a Contract of Apprenticeship/Training Agreement.
4. The apprentice completion form with the Completed and Authorized Training Standard must be presented to the local Apprenticeship Client Services Unit.

Sponsors/Employers and Supervisors/Trainers

The Training Standard identifies skills required for this trade/occupation and its related training program.

This Training Standard has been written in concise statements which describe how an apprentice must perform each skill in order to become competent.

In using this Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing the skills detailed for the trade/occupation.

Supervisors/Trainers and apprentices are required to sign off and date the skills following successful acquisition.

Sponsors/Employers participating in this training program will be designated as the Signing Authority and are required to attest to successful completion by signing the appropriate box included at the end of each skill set.

NOTICE/DECLARATION FOR COLLECTION OF PERSONAL INFORMATION

1. At any time during your apprenticeship training, you may be required to show this training standard to the Ministry of Training, Colleges and Universities (the Ministry). You will be required to disclose the signed Apprenticeship Completion form to the Ministry in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system, including confirming your completion and issuing your certificate of apprenticeship.
2. The Ministry will disclose information about your program completion and your certificate of apprenticeship to the Ontario College of Trades, as it is necessary for the College to carry out its responsibilities.
3. Your personal information is collected, used and disclosed by the Ministry under the authority of the Ontario College of Trades and Apprenticeship Act, 2009.
4. Questions about the collection, use and disclosure of your personal information by the Ministry may be addressed to the:

Manager, Employment Ontario Contact Centre
Ministry of Training, Colleges and Universities
33 Bloor St. E, 2nd floor, Toronto, Ontario M7A 2S3
Toll-free: 1-800-387-5656; Toronto: 416-326-5656
TTY: 1-866-533-6339 or 416-325-4084.

**ROLES AND RESPONSIBILITIES OF APPRENTICE, SPONSOR/EMPLOYER
AND SUPERVISOR/TRAINER**

Apprentice “Apprenticeship is Learning On-the-job”

- Practice safe work habits.
- Use your apprenticeship training standard as a journal to keep track of which skills you have achieved.
- Talk over your training plan with your Training Consultant, Employer, Union, or Sponsor.
- Know what tools are required for your trade and how to use them.
- Ask questions and keep asking.
- Talk to your employer about your training needs.
- Demonstrate enthusiasm and good work habits.
- Ensure that you and your supervisor/trainer sign off skill/skill sets upon demonstration of competency.

Sponsor/Employer “Training is an Investment”

- Demonstrate safe work habits.
- Attest to successful achievement by signing the skill/skills sets.
- Provide opportunities and time for the apprentice to learn the trade.
- Offer practical trade training experiences that cover all of the skill sets.
- Foster work ethics that support training while minimizing productivity losses.
- Set out clear expectations, then recognize or reward performance excellence.
- Involve both the apprentice and supervisor/trainer in developing the training plan.
- Use the Training Standard as a monitoring tool and part of regular performance evaluations.
- Select supervisors/trainers with good communication skills and who work well with others.
- Encourage supervisors/trainers to take upgrading courses - (e.g. Train the Trainer, Mentor Coach, etc).
- Complete the Skill Set Completion Form once the apprentice has demonstrated competency in the training.
- Ensure that the apprentice always works under the direction of or has access to a qualified supervisor/trainer.
- Vary the apprentice’s exposure to all the skills set out in the training standard.

PROCESS OPERATOR – FOOD MANUFACTURING

Supervisor/Trainer

- Demonstrate safe work habits.
- Treat apprentices fairly and with respect.
- Use the Training Standard as a guide to evaluating competence in each skill area. In using the Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing skills detailed for the trade/occupation.
- Review the Training Standard with the apprentice and develop a training plan.
- Respond fully to all questions.
- Be patient. Explain what is to be done then, show how it is done, and then let the apprentice demonstrate the task.
- Provide continuous feedback.
- Sign off individual skills/skill sets once the apprentice demonstrates competence in the skill.

Suggestions for Assessing the Progress of the Apprentice in the Workplace

- Use informal daily observation.
- Provide constructive feedback to build confidence.
- Allow the supervisor/trainer time to teach and demonstrate the skills.
- Take prompt action wherever problems occur.
- Conduct regular performance reviews involving the apprentice, supervisor/trainer and sponsor/employer.
- Use the Training Standard as the reference for establishing the competency of the apprentice.

PROCESS OPERATOR – FOOD MANUFACTURING

SKILL SET COMPLETION FORM

SKILLS SETS	TITLE	SIGNING AUTHORITY
U6480.0	Work Safely	
U6481.0	Employ job information resources	
U6482.0	Use and maintain tools and equipment	
U6483.0	Maintain food safety	
U6484.0	Operate raw materials preparation equipment	
U6485.0	Maintain operation of food process equipment and components	
U6486.0	Control process operations	
U6487.0	Carry out process control procedures	
NOTE on Shaded Performance Objectives and Skills:	<ul style="list-style-type: none"> • Shaded performance objectives and skill sets are optional. The shaded skills do not have to be demonstrated or signed-off for completion of the on-the-job component of the apprenticeship • The in-school training will cover all of the skill sets, both shaded and unshaded. 	

LEARNING OUTCOMES COMPLETION FORM

Reportable Subjects	Title	Completed
S0223	Food Safety and Security	
S0224	Environmental	
S0225	Electrical and Instrumentation	
S0226	Mechanical	
S0227	Communication and Computer Skills	
S0228	Continuous Quality Improvement	

PROCESS OPERATOR – FOOD MANUFACTURING

APPRENTICE COMPLETION FORM

APPRENTICE NAME	
Print	
Signature	
Social Insurance Number	

Skill Sets and Learning Outcomes when completed should be signed by the Supervisor/Trainer and presented with this completion form to your local Apprenticeship Client Services Office. Any supporting documentation should also be attached.

In-school Completed Yes () No () Not applicable ()
(Proof to be provided)

Hours completed as
Per Contract: Yes () No () Not applicable ()

SPONSOR/EMPLOYER INFORMATION	
Name	
Address	
Telephone	
E-mail Address	
Signature of Signing Authority	

You will be required to disclose this signed form to the Ministry of Training, Colleges and Universities in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system.

For further information please see the notice/declaration for collection of personal information that is referenced in the table of contents of this training standard.

PROCESS OPERATOR – FOOD MANUFACTURING

A. DESCRIPTION/DUTIES

PROCESS OPERATOR: Food Manufacturing operates, monitors, adjusts and maintains food processing units and equipment. They are employed by food and beverage manufacturing and processing companies.

A PROCESS OPERATOR: Food Manufacturing performs the following:

- Demonstrates safe working practices and procedures;
- Employs job information resources;
- Uses and maintains tools and equipment;
- Maintains food safety
- Operates raw materials preparation equipment
- Maintains process equipment and components;
- Controls process operations;
- Carries out process control procedures

Process Operators are knowledgeable in:

Food Safety and Security
Environmental Management
Electrical and Instrumentation
Mechanical
Communication and Computer Skills
Continuous Quality Improvement

BENCHMARK/GUIDELINE TOTAL TRAINING TIMEFRAMES: (ON-THE-JOB AND OFF-THE-JOB):

4300 hours

This includes a maximum of 300 hours of in-school or equivalent correspondence training.

B. ON-THE-JOB PERFORMANCE OBJECTIVES

U6480.0 WORK SAFELY

GENERAL PERFORMANCE OBJECTIVE

Demonstrate safe working practices by identifying and taking corrective action against potential workplace health and safety hazards; handling, storing and disposing of hazardous workplace materials; complying with workplace legislation relating to health and safety; wearing and maintaining personal protective equipment, practicing good housekeeping in the workplace, implementing food safety and contamination control and applying lock out and tag out procedures in accordance with relevant legislation, manufacturer’s recommendations and company policies.

SKILLS

U6480.01 Take corrective action against potential workplace health and safety hazards including: noxious fumes and dust, high sound levels, fires, elevated work sites, suspended loads, poor lighting, extreme temperatures, inadequate ventilation, confined spaces, untidy work sites and uncontrolled power sources so that the potential for personal injury and damage to equipment and the environment are minimized in accordance with applicable manufacturer’s instructions, government regulations and company policies.

Date Completed

Apprentice

Supervisor/Trainer

U6480.02 Handle, store and dispose of hazardous workplace materials including lead, gases, acids and solvents so that individuals are protected from injury, the environment from contamination and safety practices are followed in accordance with WHMIS, OHSA, manufacturer’s instructions and company procedures and policies.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6480.03 **Comply with workplace legislation** relating to health and safety including the Workplace Hazardous Materials Information Systems (WHMIS) guidelines and the *Occupational Health and Safety Act*.

Date Completed Apprentice Supervisor/Trainer

U6480.04 **Wear and maintain personal protective equipment where required** including eye, ear, hand, head, respiratory, body and foot protection, ensuring that correct fit and optimum protection is provided to the wearer for the specific task performed in accordance with applicable government regulations, manufacturer's specifications and company policy.

Date Completed Apprentice Supervisor/Trainer

U6480.05 **Practice good housekeeping in the workplace** by ensuring that the workplace is clean, organized and free of obstructions, spills or fire hazards; that materials and equipment are cleaned and stored in designated areas after use and that protective barriers, UV shields and guards are erected so that accident or injury potential is minimized.

Date Completed Apprentice Supervisor/Trainer

U6480.06 **Apply lockout and tag procedures** and de-energizing procedures to electrical, mechanical, hydraulic and pneumatic equipment before commencing maintenance and overhaul, in accordance with the CEC, the BPVR, the OHSA, manufacturers' instructions and company policies and procedures.

Date Completed Apprentice Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6481.0 EMPLOY JOB INFORMATION RESOURCES

GENERAL PERFORMANCE OBJECTIVE

Employ job information resources by determining in-house operation and maintenance requirements; communicating with co-workers; writing work reports; maintaining service documents; and applying manufacturing best practice requirements so that the information needed to plan and complete maintenance activities is made available and used.

SKILLS

U6481.01 Determine operation and maintenance requirements by reviewing manuals, manufacturers' specifications and recommendations, preventive maintenance schedule sheets and government regulations; identifying system and component types, capacities, tolerances and limitations, safety procedures, replacement procedures and in-house maintenance and licensing limitations and locating any other necessary information to complete maintenance processes in accordance with all regulations and company procedures.

Date Completed

Apprentice

Supervisor/Trainer

U6481.02 Communicate with co-workers, supervisors, company representatives and other tradespersons by personal communication, telephone, postal service/letter and e-mail, ensuring that information delivered is concise, clear and accurate and is in accordance with company procedures or practices.

Date Completed

Apprentice

Supervisor/Trainer

U6481.03 Write work reports including standard work documentation as well as safety reports, injury reports, environmental reports and maintenance charts by completing them manually or using a computer system, ensuring that written reports are concise, detailed, clear, accurate and timely, in accordance with company practices or procedures.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6481.04 **Maintain service documents** including service call sheets, work orders, work performance sheets, logbooks and lot number tracking and traceability documents, ensuring that all procedures are documented and recorded in accordance with employer’s specifications and practices.

Date Completed

Apprentice

Supervisor/Trainer

U6481.05 **Apply manufacturing “best practice” requirements** to food and beverage handling and processing activities including control of foreign substances and sanitation procedures ensuring that all procedures and maintenance tasks are documented and recorded in accordance with industry recommendations and company practices.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6482.0 USE AND MAINTAIN TOOLS AND EQUIPMENT

GENERAL PERFORMANCE OBJECTIVE

Use and maintain hand tools, measuring devices and testing and troubleshooting devices by employing and servicing trade-specific hand tools and associated equipment, measuring devices and testing and troubleshooting devices for mechanical, hydraulic and pneumatic systems so that tools, equipment and devices are used for their intended purpose and are maintained at a standard of repair that is safe and functionally effective.

SKILLS

U6482.01 Use and maintain hand and power tools such as hammers, wrenches, drills screwdrivers and pliers by determining the correct tool for the job, selecting the tool and required components, documenting use in a tool-control system, testing it, applying it to the job, replacing consumables and user-maintainable parts so that tools are used for maintaining equipment to baseline condition and are maintained at a standard of repair and cleanliness that is safe and functionally effective.

Date Completed

Apprentice

Supervisor/Trainer

U6482.02 Use and maintain measuring devices including those for temperature, pressure, level and flow by determining the correct device or equipment for the job, selecting the device and required components, setting up the device, testing it, applying it to the job, identifying deficiencies and replacing any consumables and user-maintainable parts so that devices are used for their intended purposes and are maintained at a standard of repair, cleanliness and accurate calibration that is safe and functionally effective.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6482.03 **Use and maintain testing devices for processing systems** such as those for temperature, pressure, level, flow, gas concentration, liquid concentration, density and specific gravity by determining the correct device or equipment and components, setting it up and testing it, monitoring and adjusting its operation, recording results, replacing consumables and user-maintainable parts so that the devices are used for their intended purposes and are maintained at a standard of repair and accurate calibration that is safe and functionally effective.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6483.0 MAINTAIN FOOD SAFETY

GENERAL PERFORMANCE OBJECTIVE

Implement food safety and contamination control procedures, identifying food safety violations and undertaking contamination prevention, detection and removal procedures in accordance with recommended industry prevention and control measures.

SKILLS

U6483.01 Implement food safety control systems by applying recommended industry control measures in accordance with the company food safety procedure.

Date Completed

Apprentice

Supervisor/Trainer

U6483.02 Identify food safety infractions on the manufacturing premises, in the equipment, the transportation and storage areas, the sanitation / pest control procedures and personnel behaviour in accordance with standard hazard analysis procedures.

Date Completed

Apprentice

Supervisor/Trainer

U6483.03 Undertake contamination prevention, detection, containment and removal procedures to control biological pathogens, allergens, foreign material and pests in accordance with HACCP or another food safety management system.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6484.0 OPERATE RAW MATERIAL PREPARATION AND PROCESSING EQUIPMENT

GENERAL PERFORMANCE OBJECTIVE

Operate raw material and ingredient preparation and processing equipment by determining materials condition; determining materials properties; processing raw materials and ingredients; monitoring yields and balances and running batch operations in accordance with required procedures, methods and company procedures and standards.

SKILLS

U6484.01 Determine condition of raw materials and ingredients by sampling and testing for such qualities as colour, freshness, grade, size and weight against the contracted standard so that materials are within required specification in accordance with production requirements.

Date Completed

Apprentice

Supervisor/Trainer

U6484.02 Determine properties of raw materials and ingredients by monitoring reactions, temperatures and ingredient analysis of raw materials in accordance with standard procedures and methods.

Date Completed

Apprentice

Supervisor/Trainer

U6484.03 Process raw materials and ingredients through such operations as sorting, screening, grading, peeling, washing, cleaning, separating, weighing, mixing, blending and forming in accordance with standardized recipes or formulations and equipment and company procedures and methods.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6484.04 **Monitor yields and balances** of raw materials and ingredients in accordance with standard procedures and methods.

Date Completed

Apprentice

Supervisor/Trainer

U6484.05 **Run batch operations** using standard recipes in accordance with required procedures and methods and company procedures.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6485.0 MAINTAIN OPERATION OF FOOD PROCESS EQUIPMENT AND COMPONENTS

GENERAL PERFORMANCE OBJECTIVE

Maintain operation of food process equipment and components by operating the equipment, servicing the equipment and troubleshooting and maintaining the operation in accordance with manufacturers' specifications and manufacturing plant standards.

SKILLS

U6485.01 Operate food process equipment by setting it up, testing it, monitoring and adjusting its operation, confirming output and replenishing consumables so that the operation and output of the equipment/machinery meet the manufacturer's specifications and company operational requirements.

Date Completed

Apprentice

Supervisor/Trainer

U6485.02 Service food process equipment by adjusting, cleaning, lubricating and carrying out minor operator-level adjustments and repairs on line equipment such as those for liquid, gas and material conveyance and control; heat transfer; size reduction, mixing and forming; separation and decontamination in accordance with manufacturer's specifications and company standards.

Date Completed

Apprentice

Supervisor/Trainer

U6485.03 Troubleshoot and maintain process equipment by monitoring the operation of equipment and carrying out routine or emergency maintenance on operator maintainable equipment such as that for liquid, gas and materials conveyance and control; heat transfer; size reduction, mixing and forming; separation and decontamination in accordance with manufacturer's specifications and company standards.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6486.0 CONTROL PROCESS OPERATIONS

GENERAL PERFORMANCE OBJECTIVE

Control process operations by starting up and shutting down process operations, packaging operations and utilities operations; performing troubleshooting procedures on process operations and shut down, isolate and prepare process units or production equipment for maintenance in accordance with equipment manufacturers' requirements and company procedures and standards.

SKILLS

U6486.01 Start up and shut down food process operations for product or equipment changeovers and other operations such as size reduction; component separation; mixing; forming; heat transfer; decontamination, packaging and other processing operations such as coating, carbonation, fermentation and soaking in accordance with pre start-up safety review procedures and company specifications and standards.

Date Completed

Apprentice

Supervisor/Trainer

U6486.02 Start up and shut down packaging operations including those using textiles, wood, metal, glass, plastic, film and paper or board packaging materials in accordance with company procedures and standards.

Date Completed

Apprentice

Supervisor/Trainer

U6486.03 Start up and shut down utilities operations such as water treatment, refrigeration, vacuum, compressed air and cleaning/ sanitizing equipment as well as metal detectors and check weighers in accordance with government and company procedures and standards.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd)

U6486.04 Perform troubleshooting procedures on process operations including those for raw material supply, product analysis, assessment of process continuity and integration, pressures, flows, levels, temperatures, and output in accordance with company procedures.

Date Completed

Apprentice

Supervisor/Trainer

U6486.05 Shut down, isolate and prepare process units or production equipment for maintenance or repair in accordance with company procedures and standards.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

B. ON-THE-JOB PERFORMANCE OBJECTIVES (cont'd):

U6487.0 CARRY OUT PROCESS CONTROL PROCEDURES

GENERAL PERFORMANCE OBJECTIVE

Carry out process control procedures and checks and record data on process operations in accordance with company procedures and standards.

SKILLS

U6487.01 Carry out process control or procedure check in accordance with company procedures and standards.

Date Completed

Apprentice

Supervisor/Trainer

U6487.02 Record process control or procedure check data and complete required documentation in accordance with company procedures and standards.

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

C. LEARNING OUTCOMES

In-school training is a maximum of 300 hours or may be completed by approved, self-paced correspondence learning.

LEVEL 1

S0223 FOOD SAFETY & SECURITY - 81.0 hours

- Explain how GMP programs are implemented
- Develop documented programs for food safety
- Describe procedures for implementing sanitation, pest control and chemical control in food processing
- Describe procedures for implementing traceability of products, product holds and critical issues management
- Identify means of developing product information and consumer awareness
- Develop a process control safety program including food safety hazards, HACCP and a plant specific plan
- Identify components of an incoming material and receiving program
- Describe a packaging process control program
- Identify required storage and distribution specifications, temperatures and lot numbers
- Identify requirements for employee training and re-training
- Describe how facilities and equipment are designed to reduce contamination
- Identify record and document control procedures
- Describe food safety procedures when performing maintenance functions
- Carry out a food safety audit
- Carry out basic laboratory procedures
- Identify control procedures for food defense
- Describe roles and responsibilities of government, customer and third parties for food safety

S0224 ENVIRONMENTAL - 6.0 hours

- Identify procedures for emergency response and spill management
- Describe regulations for waste management & disposal

TOTAL LEVEL 1 - 87.0 hours

PROCESS OPERATOR – FOOD MANUFACTURING

LEVEL 2

S0225 ELECTRICAL AND INSTRUMENTATION - 96.0 hours

Describe electrical safe work practices
Develop trouble shooting procedures for electrical equipment
Phase 1 – Describe basic electrical theory
Phase 2 – Identify electrical machines and controls
Phase 3 – Maintain automatic system controls (AC/DC drives)
Phase 4 – Maintain PLC control systems
Phase 5 – Use basic Control Logix system
Interpret instrumentation systems
Use instrumentation and digital control systems

S0226 MECHANICAL - 39.0 hours

Carry out safe work practices
Apply troubleshooting procedures
Identify application of tools and equipment
Describe the function of conveyors & conveyor systems
Describe the application of pneumatics in food processing systems
Describe the application of hydraulics in food processing systems
Identify work order management procedures
Identify fundamental lubrication procedures

S0227 COMMUNICATION AND COMPUTER SKILLS - 18.0

Use Word and Excel programs in general business environment
Write reports and use effective communications

TOTAL LEVEL 2 - 153.0 hours

LEVEL 3

S0228 CONTINUOUS QUALITY IMPROVEMENT - 60.0 hours

Describe basic lean and Total Productive Management (TPM) Concepts
Describe operator preventive maintenance procedures
Describe equipment failure analysis
Describe energy management programs
Apply problem solving techniques
Apply statistical process control
Describe Six Sigma concepts

TOTAL LEVEL 3 - 60.0 hours

IN-SCHOOL TOTAL HOURS - 300.0 hours

PROCESS OPERATOR – FOOD MANUFACTURING

APPRENTICE RECORD

APPRENTICE NAME (Print):

SPONSOR/EMPLOYER INFORMATION	
Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

SUMMARY OF TRAINING	
Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

APPRENTICE RECORD

APPRENTICE NAME (Print):

SPONSOR/EMPLOYER INFORMATION	
Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

SUMMARY OF TRAINING	
Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	

Date Completed

Apprentice

Supervisor/Trainer

PROCESS OPERATOR – FOOD MANUFACTURING

APPRENTICE RECORD

APPRENTICE NAME (Print):

SPONSOR/EMPLOYER INFORMATION	
Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

SUMMARY OF TRAINING	
Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	

Date Completed

Apprentice

Supervisor/Trainer

You will be required to disclose this signed form to the Ministry of Training, Colleges and Universities in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system.

For further information please see the notice/declaration for collection of personal information that is referenced in the table of contents of this training standard.