

INTRODUCTION

Raw Milk Collector (Level 3) National Qualification was developed by the Turkish Milk Producers Central Association assigned by the VQA in accordance with the provisions of the Regulation on the Development of National Occupational Standards and National Qualifications published in the Official Gazette No.29507 and dated 19/10/2015, and the Regulation on the Procedures and Principles for the Establishment, Duties, and Operation of the Vocational Qualifications Authority Sector Committees published in the Official Gazette No. 26713 and dated 27/11/2007; evaluated after receiving the opinions of relevant institutions and organizations in the sector, and approved by the VQA's Executive Board upon being examined by the VQA's Food Sector Committee.

Raw Milk Storage Manager (Level 4) National Qualification has been amended by the Presidential Decree dated 10.06.2020 and numbered 1570.

TERMS, SYMBOLS AND ABBREVIATIONS

EMERGENCY: Fire, explosion, chemical spills caused by hazardous chemicals, natural disasters that may occur in all or part of the workplace, that require prompt action, response, first aid, or evacuation.

EMERGENCY PLAN: The plan that covers the information and practical actions, including the work and transactions to be performed in emergencies that may occur in the workplace,

BUYER: Natural or legal entities who operate in accordance with the provisions of the current food-related legislation and have signed a contract with the producer organization of which they are a member,

WASTE: Any substance formed as a result of any activity, discharged or released into the environment.

RAW MILK: Milk secreted from the mammary glands of farm animals, which has not been heated above 40 °C or has not undergone any treatment with an equivalent effect,

DISINFECTION: The process of destroying pathogenic microorganisms that may contaminate the product to be protected.

FOOD SAFETY: The system cycle that defines the food's processing, preparation, storage, and presentation to the end consumer in a way that prevents physical, chemical, and biological factors causing food-borne diseases,

FOOD HYGIENE: All kinds of measures and conditions necessary to control the hazard and to ensure that the food is suitable for human consumption, taking into account the intended use,

HYGIENE: All of the practices and cleaning measures to be taken in order to be protected from conditions that may be hazardous to health.

FUNNEL: The equipment that enables the transfer of raw milk to the cooling tank,

ISCO: International Standard Classification of Occupations

OHS: Occupational Health and Safety.

WORKPLACE PHYSICIAN: A physician who has a workplace medicine certificate authorized by the relevant Ministry to work in the field of occupational health and safety,

PERSONAL HYGIENE: Measures taken as an individual to be protected from conditions and practices that may harm the health of the individual and of others,

PERSONAL PROTECTIVE EQUIPMENT (PPE): All tools, equipment, instruments, and devices that are either worn, put on, or held for protection purposes and that are

specifically designed to protect the workers against one or multiple risks which may arise during work or which may affect their health and safety,

PERSONAL PROTECTIVE CLOTHING (PPC): Disposable gloves, work clothes, bonnets, caps, masks, galoshes, boots, and similar clothes used by people in work areas involving food production,

NEAR MISS INCIDENT: An incident that occurred at the workplace that had the potential to harm but didn't harm the employee or the work equipment,

RISK: The possibility of loss, injury, or other harmful consequences due to hazards,

RISK EVALUATION: Necessary work to detect the internal and external risks at the workplace, to analyze and rank the factors that cause these hazards to turn into risks and the risks caused by hazards, and to determine the control measures

HEALTH AND SAFETY SIGNS: Signs that give information or instructions about occupational health and safety or warn against dangers by means of a sign, color, sound or light signal, verbal communication or hand-arm sign indicating a special object, activity or situation.

SANITATION: All the measures taken to remove dirt such as food residues, microorganisms, foreign substances, and cleaning material residues from surfaces in order to protect public health,

MILK ACCEPTANCE TEST: Heat resistance, acidity, density, mastitis, antibiotic, alcohol test etc. tests applied before acceptance of raw milk,

HAZARD: Internal or external potential for harm or damage at the workplace that may affect the employee or the workplace,

PRODUCER: Natural or legal entities who own a facility in which one or more farm animals are kept in order to produce milk for supplying to the market as food.

Date: 08/04/2020 Rev. No: 00

20UY0405-3 RAW MILK COLLECTOR NATIONAL QUALIFICATION

1	NAME OF THE QUALIFICATION UNIT	Raw Milk Collector		
2	REFERENCE CODE	20UY0405-3		
3	LEVEL	3		
4	PLACE IN THE INTERNATIONAL CLASSIFICATION	7513 (Dairy-Products Manufacturers)		
5	ТҮРЕ	-		
6	CREDIT VALUE	-		
	A) PUBLICATION DATE	08/04/2020		
7	B) REVISION / AMENDMENT NO	Revision No: 00 Amendment No: 01		
	C) REVISION / AMENDMENT DATE	Amendment No. 01 10/06/2020-1570		
8	PURPOSE	 This qualification has been developed to ensure that the Raw Milk Collector (Level 3) occupation is carried out by qualified people and to enhance the quality of the work with the purpose of; Defining the qualifications, knowledge, skills, and competencies that the candidates should possess, Providing the candidates with the opportunity to prove their vocational qualification with a valid and reliable certificate, Providing a reference and resource for the education system, and the examination and certification bodies. 		
9	OCCUPATIONAL STANDARD(S) THAT FORM(S) THE BASIS FOR THE QUALIFICATION UNIT			

19UMS0718-4 Raw Milk Collection and Storage Manager (Level 4) National Occupational Standard

REQUIREMENT(S) FOR ENTERING THE QUALIFICATION EXAM **10**

STRUCTURE OF QUALIFICATION

11-a) Mandatory Units

20UY0405-3/A1: Occupational Health and Safety, Environmental Protection and Work Organization and Food Safety

20UY0405-3/A2: Raw Milk Collection

11-b) Elective Units

11-c) Alternatives for Grouping Units

In order for the candidate to receive a vocational qualification certificate, they must succeed in all qualification units.

12 ASSESSMENT AND EVALUATION

Candidates willing to obtain the Raw Milk Collector (Level 3) Vocational Qualification Certificate shall be subjected to the exams defined in the units. Candidates must be successful in the exams defined in the units in order to receive their qualification certificates.

Theoretical and practical exams in the qualification units can be held separately or jointly for each unit. However, each unit must be evaluated independently.

The validity period of qualification units is 2 years from the date of achievement of the unit. In order to obtain a qualification by combining the qualification units, all units must remain valid.

13 EVALUATOR CRITERIA

The evaluators must meet at least one of the following conditions:

- Having at least two (2) years of experience as an educator/teacher/lecturer in institutions providing education in the field of food.
- Having a bachelor's degree and having at least two (2) years of experience at food laboratories and/or in the field of milk processing.
- Having an associate degree and having at least three (3) years of experience in the field of milk processing.
- Having graduated from the Food branches of Vocational and Technical Anatolian High Schools and having at least four (4) years of professional experience.
- Having at least five (5) years of actual professional experience in the field subject to assessment and evaluation as chief, supervisor, etc.

Evaluators who possess the above-mentioned characteristics and who will participate in the assessment and evaluation process should be trained on vocational qualification system, relevant national qualification(s), relevant national occupational standard(s), assessment and evaluation, and quality assurance in assessment and evaluation by institutions authorized in the relevant field.

	3			
14	CERTIFICATE VALIDITY PERIOD	The validity period of the certificate is five (5) years.		
15	SUPERVISION FREQUENCY	-		
16	ASSESSMENT AND EVALUATION METHOD TO BE USED IN CERTIFICATE RENEWAL	At the end of the validity period of five (5) years, the performance of the certificate holder shall be evaluated using at least one of the methods defined below; a) Submitting records (service document, reference/recommendation letter, contract, invoice, portfolio, etc.) proving that they have worked in the relevant field for at least two years in total or for the last six months within the 5-year validity period of the certificate. b) Taking practical exams defined for the qualification units within the scope of qualification. For the candidates with a positive evaluation result, the validity period of the certificate shall be extended for another 5 years.		
17	HORIZONTAL AND VERTICAL PROGRESSION PATHS IN THE PROFESSION	Persons with a Raw Milk Collector (Level 3) Vocational Qualification Certificate can have a Raw Milk Storage Manager (Level 4) VQA Vocational Qualification Certificate if they pass the exams defined in the qualification units within the scope of vertical progression paths in the profession.		
18	ORGANIZATION(S)	Turkish Milk Producers Central Association		

	DEVELOPING THE	
	QUALIFICATION	
	SECTOR COMMITTEE	
19	VERIFYING THE	VQA's Food Sector Committee
	OUALIFICATION	

Date: 08/04/2020 Rev. No: 00

20UY0405-3/A1: OCCUPATIONAL HEALTH AND SAFETY, ENVIRONMENTAL PROTECTION AND WORK ORGANIZATION AND FOOD SAFETY QUALIFICATION UNIT

Date: 08/04/2020 Rev. No: 00

1	NAME OF THE QUALIFICATION UNIT	Occupational Health and Safety, Environmental Protection and Work Organization and Food Safety		
2	REFERENCE CODE	20UY0405-3/A1		
3	LEVEL	3		
4	CREDIT VALUE	-		
	A) PUBLICATION DATE	08/04/2020		
5	B) REVISION / AMENDMENT NO	Revision No: 00 Amendment No: 01		
	C) REVISION / AMENDMENT DATE	Amendment No. 01 10/06/2020-1570		
6	THE OCCUPATIONAL STANDARD THAT FORMS THE BASIS FOR THE QUALIFICATION UNIT			

19UMS0718-4 Raw Milk Collection and Storage Manager (Level 4) National Occupational Standard

7 LEARNING OUTCOMES

Learning Outcome 1: Explains OHS and environment protection measures in work processes.

Learning Sub-Outcomes:

- 1.1: Explains potential hazards and risks and OHS measures in work processes.
- 1.2: Explains appropriate behavior and measures for emergency and environmental safety.

<u>Learning Outcome 2: Explains the rules and procedures for ensuring work organization and food safety.</u>

Learning Sub-Outcomes:

- 2.1: Explains the organization and record-keeping rules in the working processes under their responsibility.
- 2.2: Explains the measures for protecting personal health.
- 2.3: Explains the personnel hygiene rules.
- 2.4: Explains hygiene and sanitation rules and measures towards ensuring food safety in raw milk collection.

8 ASSESSMENT AND EVALUATION

8 a) Theoretical Exam

(T1) Structured Oral Exam: The theoretical exam for the A1 unit shall be applied as per the "Information" checklist in Annex A1-2. In the theoretical exam, candidates must be applied an oral exam (T1) with at least eleven (11) questions, each of which is worth equal points, in accordance with the determined situation content, verbally informed by the evaluator, structured to meet the objective conditions, guiding the candidate to practice and explain by showing the necessary procedures. No points are deducted from questions answered incorrectly in the exam, and each question is evaluated according to a structured answer and evaluation chart. In the exam, candidates are given time for each question in accordance with the scope and content of the information criterion it is related to, and this time is specified in the structured format. A candidate who answers at least 60% of the questions correctly according to the evaluation chart in the oral exam shall be deemed successful. The questions in the exam should measure all knowledge statements (ANNEX A1-2) intended to be measured by the theoretical exam in this unit.

Date: 08/04/2020 Rev. No: 00

8 b) Practical Exam

The expressions of skill and competency for this unit are defined in the skills and competencies checklists of other units and, in this context, the mentioned expressions of skill and competency will be assessed and evaluated.

8 c) Other Conditions Regarding Assessment and Evaluation

The candidate must pass T1 exam in order to be considered successful in the mentioned unit. The validity period of the qualification unit is 2 years from the date of achievement of the unit.

L	, 00110	tailanty period of the quantication and is 2 years from the date of define tentent of the and					
	9	INSTITUTIONS / ORGANIZATIONS THAT DEVELOPED QUALIFICATION UNIT	Turkish Milk Producers Central Association				
	10	SECTOR COMMITTEE THAT VERIFIED THE QUALIFICATION UNIT	VQA's Food Sector Committee				

QUALIFICATION UNIT ANNEXES

ANNEX A1-1: Information on the Recommended Training for the Awarding of the Qualification Unit

- 1. OHS, emergency and environmental protection in work processes
 - 1.1. OHS instructions
 - 1.2. Emergency instructions
 - 1.3. Implementation of OHS instructions in work processes
 - 1.4. Implementation of emergency instructions in work processes
 - 1.5. Health and safety signs on tools and equipment used in work processes
 - 1.6. PPE and PPC used in work processes
 - 1.7. Concepts of risk and hazard
 - 1.8. Actions to be taken against risks and dangers, and implementation of such actions
 - 1.9. Storage conditions of chemicals in the working environment
 - 1.10. Environmental protection instructions
 - 1.11. Implementation of environmental protection instructions in work processes
 - 1.12. Environmental hazards and risks, and the measures to be taken
- 2. Food safety and work organization
 - 2.1. HACCP in raw milk storage processes
 - 2.2. Risks that may occur in raw milk storage and food-borne diseases

20UY0405-3/A1: Occupational Health and Safety, Environmental Protection and Work Organization and Food Safety

- 2.3. General hygiene rules
- 2.4. Hygiene and sanitation in raw milk storage
- 2.5 Personnel hygiene in food production
- 2.6 Durations and priorities in work processes
- 2.7 Reports and forms used in the work processes
- 2.8 Personal health and hygiene measures in work processes

ANNEX A1-2: Checklist to be Used in the Assessment and Evaluation of the Qualification Unit

Date: 08/04/2020 Rev. No: 00

a) INFORMATION

No.	Knowledge Statement	NOS- Related Departm ent	Qualificati on Unit Performan ce Criteria:	Evaluation Tools
INFO.1	Explain the terms of hazard, risk, risk assessment, and near-miss in respect to occupational health and safety.	A.1.1, A.1.4-5	1.1	T1
INFO.2	Explains the health and safety signs of tools and equipment used in business processes.	A.1.1-2, A.1.4-5	1.1	T1
INFO.3	Explains the PPEs and PPCs that should be used in the work processes.	A.1.3 A.1.6	1.1	T1
INFO.4	Distinguishes proper actions and measures for emergency cases.	A.2.1-2	1.2	T1
INFO.5	Explains the preservation conditions of chemicals in the work environment.	A.1.6, A.3.1-2	1.2	T1
INFO.6	Lists the jobs according to their duration and priority.	B.1.1-3	2.1	T1
INFO.7	Explains the purposes of use for the reports and forms used in the work processes (manufacturer/collector card, registration document, waybill, cleaning follow-up form and so on).	B.3.1-2	2.1	Т1
INFO.8	Explains the personal health and hygiene measures in work processes.	C.1.1-2	2.2	T1
INFO.9	Explains the personnel hygiene rules.	C.1.1-2	2.3	T1
INFO.1	Explains the food safety precautions in the collection and storage of raw milk.	C.1.1-6, C.2.1-2	2.4.	T1
INFO.1	Explains hygiene, sanitation and disinfection operations in work processes.	C.1.3-6, C.2.1-2	2.4.	T1

b) SKILLS AND QUALIFICATIONS

No.	Statement of Skills and Competencies	NOS- Related	Qualification Unit	Assessment Tool
-----	--------------------------------------	-----------------	-----------------------	--------------------

20UY0405-3/A1: Occupational Health and Safety, Environmental Protection and Work Organization and Food Safety

		Depart ment	Performance Criteria	
SC.1	-			
*SC.2	-			

Date: 08/04/2020 Rev. No: 00

^(*) Critical steps that must be accomplished in the practical exam.

20UY0405-3/A2: RAW MILK COLLECTION QUALIFICATION UNIT

Date: 08/04/2020 Rev. No: 00

1	NAME OF THE QUALIFICATION UNIT	Raw Milk Collection			
2	REFERENCE CODE	20UY0405-3/A2			
3	LEVEL	3			
4	CREDIT VALUE	-			
	A) PUBLICATION DATE	08/04/2020			
5	B) REVISION / AMENDMENT NO	Revision No: 00 Amendment No: 01			
	C) REVISION / AMENDMENT DATE	Amendment No. 01 10/06/2020-1570			
6	THE OCCUPATIONAL STANDARD THAT FORMS THE BASIS FOR THE QUALIFICATION UNIT				

19UMS0718-4 Raw Milk Collection and Storage Manager (Level 4) National Occupational Standard

LEARNING OUTCOMES

Learning Outcome 1: Makes preparations before raw milk collection in accordance with OHS and hygiene rules.

Learning Sub-Outcomes:

- 1.1: Makes personal preparations in accordance with OHS and hygiene rules.
- 1.2: Prepares the equipment to be used in raw milk collection in accordance with OHS and hygiene rules.

Learning Outcome 2: Collects raw milk from its place under conditions conforming to food safety.

Learning Sub-Outcomes:

- 2.1: Makes conformity checks of the raw milk to be purchased.
- 2.2: Transfers the raw milk to the transport tank in accordance with the OHS and food safety rules.
- 2.3: Keeps the necessary forms (waybill etc.) during the delivery of raw milk.

ASSESSMENT AND EVALUATION

8 a) Theoretical Exam

8

Theoretical exam will not be applied in this unit.

8 b) Practical Exam

(P1): The practical exam for A2 unit is applied as per the "Skills and Competencies" checklist given in Annex A2-2, in a real or realistically arranged work environment. The candidate is expected to perform the skills and competencies in Annex A2-2 in a realistically arranged environment.

The critical steps that must be accomplished by the candidate shall be specified in the skills and competencies checklist. In order for the candidate to be successful in the (P1) practical exam, they must score at least 80% success in the overall exam, provided that they perform successfully in all of the critical steps. The duration of the (P1) practical exam should correspond to the actual application conditions, within the specified scope. All Skills and Competencies Statements (Annex A2-2) determined as (P1) must be assessed through a practical exam (P1).

The assessment of the skills and competencies identified in the "Skills and Competencies" checklist (P2)

Date: 08/04/2020 Rev. No: 00

8 c) Other Conditions Regarding Assessment and Evaluation

The candidate must pass P1 and P2 exams in order to be considered successful in the mentioned unit. The validity period of the qualification unit is 2 years from the date of achievement of the unit.

9	INSTITUTIONS / ORGANIZATIONS THAT DEVELOPED QUALIFICATION	Turkish Milk Producers Central Association
	UNIT SECTOR COMMITTEE THAT	
10	VERIFIED THE QUALIFICATION UNIT	VQA's Food Sector Committee

QUALIFICATION UNIT ANNEXES

ANNEX A2-1: Information on Recommended Training for Acquisition of a Qualification Unit

- 1. OHS, environmental protection and organization in work processes
 - 1.1. PPE and PPC used during processes
 - 1.2. Cleaning of equipment used in raw milk collection
- 2. Food safety

practical exam.

- 2.1. Risks that may occur in food and food-borne diseases
- 2.2.General hygiene and sanitation rules
- 2.3. Personnel hygiene in food production
- 3. Raw milk collection
 - 3.1. Tools, equipment and auxiliary materials used
 - 3.2. Checks to be performed in raw milk collection
 - 3.3. Nonconformities that may be encountered during the collection of raw milk
 - 3.4. Sampling techniques and sampling of raw milk
 - 3.5. Raw milk cooling
 - 3.6. Raw milk transportation
 - 3.7. Records and forms kept during raw milk collection processes
 - 3.8 Recording of raw milk
 - 3.9. Procedures to be applied to milk found unsuitable as a result of checks performed

ANNEX A2-2: Checklist to be Used in the Assessment and Evaluation of the Qualification Unit

a) INFORMATION

No.	Knowledge Statement	NOS- Related Departm ent	Qualificati on Unit Performan ce Criteria:	Evaluation Tools
INFO.1	-			

b) SKILLS AND COMPETENCIES

No.	Statement of Skills and Competencies	NOS- Related Departm ent	Qualificati on Unit Performan ce Criteria	Assessment Tool
SC.1	Implements personal hygiene measures (regarding nails, hair, beard, not using perfume and not wearing jewelry etc.) in work processes.	C.1.1-2 A.1.1	1.1	P1
SC.2	Wears PPE and PPC (boots, work clothes, bonnet, gloves, mask etc.) suitable for OHS and personnel hygiene.	A.1.3 C.1.1-2	1.1	P1
*SC.3	Visually checks the cleanliness of the jug and transport tank to be used in the raw milk collection processes.	B.2.1, C.1.3 D.1.1	1.2	P1/P2
SC.4	Prepares auxiliary materials (sample container, ladle, registration forms and similar) to be used during collection.	B.2.2	1.2	P1
SC.5	Checks the temperature and acidity of the milk before milk collection.	D.1.2 D.2.2	2.1	P1/P2
*SC.6	Performs sensory checks (characteristics such as appearance, color, smell -except for taste) regarding whether raw milk has properties suitable for consumption.	D.2.4, C.3.2	2.1	P1/P2
SC.7	Conducts alcohol and density tests on raw milk.	D.1.3	2.1	P1/P2
*SC.8	Takes samples from the raw milk taken from the producer according to relevant technique.	D.1.5	2.1	P1
SC.9	Notifies the authorities in case the results of checks performed are outside the values determined by the legislation.	D.2.3	2.1	P2
SC.10	Determines the amount of milk to be received.	A.1.1-2, C.1.3, D.1.4	2.2	P1
SC.11	Transfers the milk to be delivered to the transport tank in accordance with the instructions.	A.1.1-2, C.1.3, D.1.4	2.2	P1
SC.12	Keeps records of the milk received according to the instructions.	D.1.6	2.2	P1
SC.13	Keeps the necessary forms (waybill etc.) during the delivery of raw milk.	B.3.1-2 D.1.7	2.3	P1/P2

^(*) Critical steps that must be accomplished in the practical exam.