

NATIOANAL OCCUPATIONAL STANDARD

OCCUPATIONAL HEALTH AND SAFETY OFFICER (CONSTRUCTION)

LEVEL 4

REFERENCE CODE / 09UMS0029-4

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Occupation:	OCCUPATIONAL HEALTH AND SAFETY OFFICER(CONSTRUCTION)
Level:	4^{1}
Reference Code:	09UMS0029-4
Standard Development Institution(s):	Turkish Construction and Installation Contractors Employer Syndicate (INTES)
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¹ The qualification level of the occupation equals to the Level 4 (four) according to the 8 level matrix

TERMS, SYMBOLS AND ABBREVIATIONS

EMERGENCY EXIT: It is a door special door opening to fire escape or safe exit of a building in the case of emergency such as natural disaster etc.

EMERGENCY: Events considered as disaster and states arising from incidents of carelessness, imprudence, negligence, a deliberate intent or any other cause. Natural or manmade unplanned events immediately threatening to employees, society and environment, hindering or halting company's operations, causing physical or environmental damage, destroying company's financial status or institutional image.

EMERGENCY TEAM: Team which ensures that all people in a building be evacuated in the case of a fire, earthquake and other disasters, first respond to an event/disaster, take part in search and rescue and fire extinction operations and render first aid when required.

EMERGENCY PLANS: Plans which should be prepared before any emergency to make clear who will take part in intervention, protection, search and rescue and first aid processes and procedures in what ways in the case of emergency.

SUSPENDED SCAFFOLD: Equipment consisting of suspension tools and a platform temporarily suspended from an overhead structure for special purposes and erected on a construction site to be used.

WASTE: Any kind of substance resulting from production and consumption and pose risk to human health and environment when exposed directly or indirectly to the receiving environment

LIGHTING: To provide proper color, radiance, direction and amount of light to ensure rapid, accurate, comfortable and safe vision for employees and boost their performance and efficiency

LIGHTING SYSTEM: A system consisting of mechanical and electrical controllers, lamp(s) and armature(s) and designed as a permanent component of machine, a building and its appendages to provide lighting,

PRESSURE EQUIPMENT: Simple welded vessels used for purposes other than combustion and having an interior gauge pressure greater than 0,5 bar, but a working pressure equal to or less than 30 bar, manufactured in series production and not exposed to light,

FAÇADE ELEVATOR: Mechanism raised and lowered in a vertical shaft to transport people or freight to a construction or building façade.

SHUTDOWN SYSTEM: Mechanisms such as safety ropes located next to conveyor belts, protective keys, s.o.s signals and brakes or elevator parachute which enable the system to shut down under unsafe circumstances

CORRECTIVE ACTIONS: Actions aimed at eliminating causes of nonconformities or other unwanted events

MANUALLY CARRYING: One or more employees' manually lifting, putting down, pushing, pulling or moving certain loads which may hurt employees' backs and lower basks due to unfavorable ergonomic conditions and circumstances or providing physical support to such actions

MOVING PARTS: Components of machine and benches, which move but do not transmit power (such as feed rolls, gravity tray etc)

ISCED: International Standard Classification of Education

ISCO-08: International Standard Classification of Occupations

WARNING TAPE: Resilient plastic tape of a signal color or highly contrasting color combination such as yellow-black or red-white, wrapped in rolls and used as a warning sign.

SHORING: Placing props or braces against a structure in construction excavations for support in order to prevent collapse.

FIRST AID: Provision of initial care with minimal tools for an accident or life-threatening event on the scene to prevent life loss or worsening of the situation until definitive medical treatment can be accessed.

SCAFFOLD: A temporary platform either supported from below or suspended from above, on which workers sit or stand safely when performing tasks at heights above the ground.

ON-THE-JOB TRAINING: Programs designed to give occupational information to help them adapt to new circumstances and when they are newly recruited.

BUSINESS AUTHORIZATION: A system or document which indicate – before a dangerous task - who will carry out relevant works by which means and at what time. It is approved and signed by the relevant authorities after a serial of measurements and must be visibly displayed in the workplace.

OCCUPATIONAL ACCIDENT: An accident which physically or mentally hurts a person immediately or later and occurs due to the work carried out by the employer or his/her own tasks while a person is at his/her workplace, due to the work s/he carries out if s/he works independently and on his/her own account, while out of the office to for occupational purposes, during breastfeeding leave granted to breastfeeding employees, in a vehicle provided by the employer for transporting purposes.

CONSTRUCTION EQUIPMENT: Road construction equipment and similar motor vehicles used for works and services of agriculture, industry, public works and national defense etc, equipped with different materials according to the intended use and not used for human, animal or cargo transport on highways

OCCUPATIONAL HEALTH AND SAFETY (OHS): A multi-disciplinary scientific field that aims to ensure that physical, mental and social well-being of each and every one at a workplace is at maximum,

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM: A part of a company's management system which facilitates management of OHS risks related to that company's operations

SIGNALMAN: Employee who give signals

EMPLOYEE: A natural person employed within the scope of a contract of employment.

EMPLOYER: A natural or legal person or institutions and organization without legal entity that employ workers

VICE PRINCIPAL: A person who acts on behalf of the employer and takes part in the management of the work, workplace and business.

WORKPLACE: Unit where material and non-material elements supplied by an employer and employees come together to produce goods or service (areas of production and other appendices such as rest centers, breastfeeding rooms, showers, examination and care rooms, sports arenas, training areas etc)

ESCAPEWAY LIGHTING: Lighting provided by an armature from its own power or from another source of power when normal lighting circuits are cut

ESCAPEWAY: Unobstructed ways extending from any part of a building out to street such as exits from rooms or other detached structures, corridors or similar passageways, flow exits, stairs extending to ground floor and other ways leading out to the final exit of a building.

LIFTING EQUIPMENT (LIFTING ACCESSORIES): Inseparable components or equipment not installed to lifting machine and placed between machine and load or on the load itself to allow the load to be held

GUIDE ROPE: A rope fastened to another rope that is lifting a possibly dangerous load, used to guide the rope. The other end of the rope is under employees' control and it allows employees' intervention to loads without any additional burden. It is used to prevent any damage to be caused by a load's movement.

LOCK: Consists of bolt and nut to clasp ropes together

I.D. BADGE: A document that signifies a person's identity and position,

MASS TAGGING SYSTEM: Tagging system including devices which lock equipment such as valve, push button or power switch to prevent any damage to people or other equipment due to any misuse or unauthorized use and tags indicating warning information placed on these locks

PPE (**Personal Protective Equipment**): Any instrument, tool or material designed in order for people to wear, put on or carry to be protected against one or more than one health and safety hazard. Equipment consisting of several instruments, tools or materials assembled by the manufacturers to provide protection against one or more than one possible risks. Separable or inseparable protective tools, instruments and materials used together with other equipment held or worn by employees without any intention of protection while carrying out certain tasks

BALUSTRADE: Barriers that prevent employees' falling on lower surfaces

MACHINE PROTECTIVE COMPONENTS: Protection system to shutdown system used in transmission planes, moving parts and operation points of machine

MANHOLE: a hole (usually with a flush cover) through which a person can gain access to an underground structure

LADDER: A structure with fixed or portable steps used for climbing up and down.

OCCUPATIONAL DISEASE: A temporary or permanent disease, disability or mental troubles that occurs as a result of work or relapses as a result of the nature of the work.

NACE: Statistical Classification of Economic Activities in the European Community,

OPERATOR: Employee(s) who operate (s) a machine and device

PREVENTIVE ACTION: An action undertaken to eliminate causes of a potential nonconformity

TRANSMISSION SYSTEM: Elements such as shafts, flywheels, pulleys, belts, couplings, trunnions, balls, cranks, gears and chains etc that transmit power

INFLAMMABLE SUBSTANCE: Liquid substances and preparations which have very low flash and boiling points along with gas substances and preparations which inflame when exposed to air at ambient temperature and pressure

EXPLOSIVE SUBSTANCE: Solid, liquid, pasty or jellylike substances which can create an exothermic reaction through sudden gas evolution without atmospheric oxygen and/or which can automatically explode via heat when partially covered or under identified test conditions and can rapidly flame up.

NEAR MISS ACCIDENT: Unplanned events that did not result in disease, death, injury, damage or other losses,

RAMP: Upslope or downslope of a land, highway or railway according to the horizontal direction.

RISK: It is what emerges when the occurrence possibility of a hazardous incident intersects with the occurrence frequency of the incident

RISK ASSESSMENT: Identification of risks elated to a concrete situation or hazard and assessment of whether those risks are acceptable.

SITE: Field where construction works are carried out.

RECREATIONAL FACILITIES: Facilities such as cafeterias, sports arena, rest centers and **similar** structures included in the definition of workplace

RESTRICTED AREA: A forbidden area or an area where one needs to get permission to go into and leave or an area which needs to be restricted or surrounded according to the nature of the work carried out.

INSTRUCTION: Authoritative written or oral directions given by a superior and including responsibilities to b undertaken and principles to be followed in order to achieve all relevant tasks with success. Official communications, guidelines or directives issued by a superior to an inferior and including what to follow at a workplace.

DANGER: A source or a situation which may potentially cause damage or loss to people, workplace, machinery or environment. It may be present in the work place and conditions or may be externally exposed. It may cause injury or disease to people, damage to property and work place etc.

WARNING SIGN: A sign which indicates a hazard or a situation which may cause death or severe injuries if not avoided.

NONCONFORMITY: Failure to conform to a requirement. Not conforming to management system performance, laws, procedures, practices and standards or behaviors which may directly or indirectly cause injury, illness, damage to property or workplace or all

IMMINENT and SUDDEN DANGER: Any danger likely to emerge at any time,

COMBUSTION: Chemical process where a combustible substance, heat and oxygen react together under suitable conditions.

FIRE: Combustion growing out of control.

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1. INTRODUCTION

The national occupational standard for Occupational Health and Safety Officer (Level 4) has been prepared in accordance with the provisions of the "Regulation on the Development of National Occupational Standards" and "Regulation on the Establishment, Tasks, Working Procedures and Principles of Sector Committees of the Vocational Qualifications Authority" issued pursuant to the Vocational Qualifications Authority (VQA) Law no 5544 by the Turkish Construction and Installation Contractors Employer Syndicate (INTES) assigned by the VQA.

The National Occupational Standard for Occupational Health and Safety Officer (Level 4) has been assessed according to opinions of the relevant institutions and organizations in the sector, analyzed by the VQA's Construction Sector Committee and approved by the VQA's Board of Directors.

2. OCCUPATIONAL INFORMATION

2.1. Occupational Definition

An Occupational Health and Safety Officer (Construction) (Level 4) is a qualified professional who thoroughly checks a site for occupational health and safety carries out risk assessments, checks on materials and devices in terms of occupational health and safety, carry out emergency planning, fire prevention, record keeping and reporting procedures in order to ensure prevention of occupational accidents and diseases.

2.2. Occupational Class according to International Classification

ISCO 08	: 3257
ISCED 97	:862
NACERev.2	:43.99

2.3 Health, Safety and Environmental Legislation

Social Insurance and Universal Health Insurance Law no 5510 Regulation on Heavy and Dangerous Works Legislation on Occupational Health and Safety Rules Regulation on Health and Safety Conditions Governing Use of Work Equipment Regulation on Use of Personal Protective Equipment at Work Health and Safety Signs Regulation

* It is also essential to comply with other legislation, laws, bylaws and regulations in force about occupational health and safety and environment and carry out risk analysis on the issue

2.4. Other Occupational Legislation

Labor Law no 4857

* It is also essential to comply with other legislation, laws, bylaws and regulation in force about the occupation.

2.5. Work Environment and Conditions

Occupational Health and Safety Officers (Construction) may work indoors or outdoors and in hot, cold, damp, dusty, smelly or noisy areas with sudden changes in temperature or air current. Any place where construction and production are on may be their workplace. They might have to work full-time, at nigh time, in shifts or at weekends. They carry out works that require attention varying according to the size of the construction site.

2.6. Other Occupational Requirements

An Occupational Health and Safety Officer must have a medical certificate issued for those to be recruited at heavy and dangerous works.

3. OCCUPATIONAL PROFILE

3.1. Tasks, Actions and Performance Criteria

Tasks	Tasks		s	Perform	Performance Criteria			
Code	Name	Code	Name	Code	Explanation			
Α	To carry out risk assessment	A.1	To identify dangers at on a construction site	A.1.1	To be informed on works and activities carried out and possible sources of danger related to the works and identify sources of danger.			
				A.1.2	To inspect the whole construction site with his superior and contribute to the preparation of a "Check-List". To identify dangerous environments and behaviors.			
		A.2	To contribute to the	A.2.1	To recommend people to be recruited in the team along with their tasks.			
			establishment and works of the risk assessment team	A.2.2	To communicate in writing dangers on the site to the team.			
				A.2.3	To convey works and solutions provided by the team to those on the site and follow them.			
		A.3	To present opinion on OHS measures	A.3.1	To deliver opinion on the risks that may arise from the sources of danger identified.			
				A.3.2	To present opinion on how to keep these sources of danger under control.			
				A.3.3	To deliver opinion on methods of keeping sources of danger under control and fighting against risks.			
		A.4	To contribute to the implementation of OHS measures	A.4.1	To follow whether OHS measures are effectively implemented or not.			
				A.4.2	To take part in the implementation of OHS measures.			
		A.5	To give feedback on the implementation	A.5.1	To conduct regular meetings with the staff responsible for implementing these measures.			
			of OHS measures	A.5.2	To keep record of implementation problems.			
				A.5.3	To ensure that feedback procedures be initiated.			
		A.6	To contribute to	A.6.1	To recommend on priority risks.			
			performing risk assessment	A.6.2	To recommend on works carried out on the site.			

Tasks		Actions		Perform	Performance Criteria		
Code	Name	Code	Name	Code	Explanation		
В	To check the site for occupational health and safety (continues)	B.I	To ensure that occupational safety related measurements be carried out	B.I.I	To present opinion to the superior about measurements to be done on the construction site.		
				B.1.2	To check whether employees use personal protective equipment according to the results of the measurements on the site.		
				B.1.3	To inform employees the on the hazards of elements such as dust, gas, noise and vibration measured.		
				B.1.4	To keep record of results of OHS related measures.		
				B.1.5	To follow future measurement periods.		
		B.2	To check on scaffolds and ladders (continues)	B.2.1	To ensure that scaffolds are designed, erected, altered and dismantled by the experts.		
				B.2.2	To recommend safe work practices planning including use of specific equipment to provide protection against falls from scaffolds and check how the current system works.		
				B.2.3	To check whether all scaffolds including independent scaffolding are safely tied or supported.		
				B.2.4	To take measures to prevent scaffolds being overloaded and inform employees accordingly.		
				B.2.5	To check whether loads on scaffolds are spread properly.		
				B.2.6	To check whether fall prevention measures for materials are taken on scaffolds.		
				B.2.7	To ensure that proper barriers and signs are put around scaffolds while they are erected and dismantled in order to prevent any employee injury.		
				B.2.8	To check whether ladders are broken, damaged, worn or with any missing step		
				B.2.9	To check if ladders are tied from their upper parts and safe to use.		

Tasks		Actions		Perform	Performance Criteria		
Code	Name	Code	Name	Code	Explanation		
B	To check the site for	B.2	To check on scaffolds and	B.2.10	To take necessary measures to prevent employees' carrying heavy and dangerous		
	occupational health and safety (continues)		ladders	B.2.11	To check whether employees to work on scaffolds and ladders are medically fit by consulting the occupational physician.		
				B.2.12	To check employees to work on scaffolds and ladders are adequately trained/informed on the subject.		
				B.2.13	To check on ladders and scaffolds as per terms and periods stipulated by the relevant bylaws and regularitons ² .		
		B.3	To check on personal protective equipment	B.3.1	To ensure that PPE is distributed according to the results of the risk assessment.		
				B.3.2	To check if PPE is used and cleaned properly.		
				B.3.3	To ensure that PPE is preserved according to the relevant rules.		
				B.3.4	To ensure that damaged and/or expired PPE is identified and destroyed.		
				B.3.5	To check and report to the superior whether all equipment and PPE are CE marked.		
				B.3.6	To identify all employees not using the proper PPE on the site.		
				B.3.7	To correct any mistake in the PPE use.		
				B.3.8	To ensure periodical cleaning and maintenance of all PPE.		
				B.3.9	To ensure that hygiene rules are observed in order to prevent microbial transmission from person to person.		

Tasks			Actior	15			ance	
Code Name			Code Name				Code	Explanat ion
							B.4.1	To inspect whether a risk assessment has been carried out before work at height is undertaken.
				To check on the work at height			B.4.2	To check if employees work in line with the plans drawn up according to the risk assessment results.
			B.4			ork at	B.4.3	To check if necessary measures have been taken to ensure that employees safely climb up and down while working at height.
		2					B.4.4	To check if necessary measures have been taken for spaces, openings and fragile roofs.
	To check the site for occupational health and safety (continues)						B.4.5	To check on the whether when there is work at height and warn employees accordingly.
							B.4.6	To check if the system for work at height is checked and maintained as required.
		ite for					B.5.1	To check if the suspended scaffolds comply with the relevant legislation and standards.
В		ealth					B.5.2	To ensure that steel or hemp ropes to be used for suspending scaffolds or similar materials are examined everyday before work starts.
							B.5.3	To keep records of any indented, broken or rotten rope and prevent employees' working on these scaffolds.
				To check	on suspe	nded	B.5.4	To check if there is any barrier which would hinder ascending and descending suspended scaffolds
			B.5	elevators	(continue	es)	B.5.5	To keep records of the experts' documents proving that the suspended scaffolds on the site are fit for use.
							B.5.6	To check on the safety systems to be used on the suspended scaffolds.
							B.5.7	To take necessary measures to prevent overloading on suspended scaffold
							B.5.8	To warn the employees not to use ladders on suspended scaffolds.
							B.5.9	To ensure that elevators are periodically checked and maintained and keep record of them.

Tasks		Actions		Performance Criteria		
Code	Name	Code	Name	Code	Explanation	
В	B To check the site for		To check on suspended	B.5.10	To take necessary measures to prevent the misuse of elevators.	
	occupational health and safety (continues)		scaffolds and façade elevators	B.5.11	To take necessary measures to prevent elevators' being overloaded.	
		B.6	To check whether necessary measures are taken while maintenance-repair and start-	B.6.1	To check whether maintenance-repair and start-up processes are carried out only by the qualified personnel.	
			up	B.6.2	To ensure that necessary measures are taken not to cause any person get hurt during maintenance-repair and start-up processes.	
				B.6.3	To provide proper PPE to those in charge of maintenance-repair and start-up processes or those likely to be hurt.	
				B.6.4	To check if the "mass tagging system" is on.	
		B.7	To check how clean and well-organized the site and recreational facilities are.	B.7.1	To check if there is enough housing and in what conditions they are	
				B.7.2	To check if there is adequate number of wash basin and cleaning supply on the construction site and at the recreational facilities.	
				B.7.3	To check whether necessary measures are taken to ensure that employees' work clothes and personal clothes and belongings are kept separately where the work involves damp, filthy or similar conditions or hazardous materials	
				B.7.4	To check on the adequacy of rest rooms fit for use	
				B.7.5	To check on the adequacy of showers according to the nature of the work carried out and for health purposes	
				B.7.6	To check whether the showers run both hot and cold water.	
				B.7.7	To check on whether the construction site is daily cleaned and organized.	

Tasks	Tasks		Actions		Performance Criteria			
Code	Name	Code	Name	Code	Explanation			
В	To check the site for occupational health	B.8	To check on the barriers, passages and ramps on the	B.8.1	To check whether loading zones and ramps are fit to use according to the size of the load to be carried			
	and safety (continues)		construction site.	B.8.2	To check whether necessary measures are taken to prevent employees working on the loading ramps from falling.			
				B.8.3	To take necessary measures to ensure that there is only one vehicle on the ramps.			
				B.8.4	To ensure that there are barriers and similar protection tools where necessary for those working at height.			
				B.8.5	To check whether there are proper barriers and wainscoting on fixed constructions ladders and platforms.			
				B.8.6	To check whether there are barriers on both sides of ramps and passages where necessary.			
				B.8.7	To ensure that spaces and holds in the ceiling and furnishings are fixed with barriers when necessary.			
				B.8.8	To check whether there is enough safety zone around a place to be demolished and whether this zone is surrounded with barriers			
				B.8.9	To ensure that ladders located on the employees' itinerary are surrounded with barriers and proper signs are visibly placed.			
							B.8.10	To check whether the scaffolds used on the roofs and inclined surfaces are equipped with proper barriers or not.
						B.8.11	To check whether the barriers are strong enough to prevent falls.	
				B.8.12	To check whether necessary measures are taken to ensure that lighting systems on passages are located so as not cause any risk of accident for employees.			
				B.8.13	To check whether the passages to serve as bridge on the scaffolds are equipped d with proper barriers.			
				B.8.14	To ensure that ladders, fixed stepladders, loading zones and ramps are located and organized properly to allow easy and safe passes.			

Tasks		Actions	5	Performance Criteria		
Code	Name	Code	Name	Code	Explanation	
B	To check the site for	B.9	To check on shoring	B.9.1	To check on shoring in an excavation to avoid landslide.	
	and safety (continues)			B.9.2	To regularly check on the adequacy of shoring while the work progresses or ensure that it is checked	
				B.9.3	To keep record of the relevant results and communicate them to the relevant units	
		B.10	To check at stockyards and warehouses.	B.10.1	To check whether materials are piled up properly at stockyards or warehouses	
				B.10.2	To check whether inflammable and combustible materials are properly stored without any risk of leak or flow.	
				B.10.3	To check whether fire extinguishers are easily accessible where necessary.	
				B.10.4	To prevent unauthorized access to stock yard.	
		B.11	To take measures of protection against materials' fall and overturning.	B.11.1	To check whether protection measures are taken against materials' fall and overturning.	
				B.11.2	To check whether materials and equipment are piled so as to avoid downfall and turn over.	
				B.11.3	To prohibit access to dangerous zones.	
				B.11.4	To check whether working platforms, passages and scaffolds are placed properly to prevent people from falling and protect them against falling	
		B.12	To check on OHS I.D	B.12.1	To check whether employees in charge of OHS wear their ID cards regularly	
			cards	B.12.2	To want those who do not wear their ID cards.	
		B.13	To check whether waste is stored properly or not.	B.13.1	To check whether waste and hazardous materials are properly stored according to their types and safely discharged.	
				B.13.2	To check whether procedures on the use and disposal of hazardous substances are followed or not.	

Tasks			Action	IS		Perform Criteria	ance
Code			Code			Code	Explanat ion
						B.14.1	To recommend measures to prevent manual lifting and carrying of heavy objects
			D 14	To check on ma	anual ying.	B.14.2	To define physical conditions an employee should have where heavy materials must be lifted and carried manually.
			Б.14			B.14.3	To inform employees on safe lifting and carrying techniques.
						B.14.4	To prepare or contribute to the preparation of necessary instructions on safe lifting and carrying.
						B.15.1	To check if there is a safe traffic planning for all vehicles.
	To check the site for occupational health and safety (continues)	site for				B.15.2	To check if drivers hold proper licenses according to vehicles they drive.
В		health				B.15.3	To check if there are warning systems to prevent people getting hurt
					B.15.4	To check whether visiting drivers inform the management before they go into the site.	
			B.15	To take control of traffic order		B.15.5	To take measures to ensure that vehicles and pedestrians use different roads as much as possible.
						B.15.6	To check on vehicles' itineraries according to the number and types of vehicles
						B.15.7	To identify areas where there should be speed-limiters such speed bumps and ensure that these areas are equipped with proper speed ramps and warning signs
						B.15.8	To check whether sins of direction, speed and priority are properly placed.
						B.15.9	To check whether all vehicles are maintained and repaired accordingly.

Tasks		Action	S	Perform	Performance Criteria		
Code	Name	Code	Name	Code	Explanation		
В	To check the site for occupational health	B.16	To check on employees' behaviors and inform	B.16.1	To check whether employees work according to instructions.		
	and safety		them	B.16.2	To warn and inform in the case of any misconduct to help the employee correct it.		
		B.17	To check on openings and spaces in zones of dangers	B.17.1	To check whether necessary measures are taken against falling into dangerous openings and spaces.		
				B.17.2	To check if dangerous opening and spaces are marked properly.		
				B.17.3	To inform employees who work close to those dangerous openings and spaces.		
		B.18	To check on smoking areas	B.18.1	To check whether necessary measures are taken to ensure that there is no inflammable, combustible material or waste around smoking zones		
				B.18.2	To ensure that these zones are regularly cleaned		
				B.18.3	To take necessary measures to prevent smoking at the workplace		
		B.19	To check on restricted areas	B.19.1	To ensure that restricted areas are visibly marked through proper signs		
				B.19.2	To check whether the relevant personnel works only under the surveillance of the experts in restricted areas.		
		B.20	To check on lighting	B.20.1	To check on the adequacy of lighting (by measuring it himself or getting it measured)		
				B.20.2	To report to the superior areas not receiving adequate daylight where there is a need for additional lighting		
				B.20.3	To be informed on how much lighting is needed in what kind works		

Tasks		Action	Actions		Performance Criteria	
Code	Name	Code	Name	Code	Explanation	
С	To check work	C.I	To check on lifting	C.I.I	To ensure that instruction manuals on lifting machine and equipment are	
	equipment and		machine and equipment		handed over to the relevant employees or placed properly where necessary	
	machinery in terms of OHS (continues)			C.1.2	To check whether lifting machine and equipment are used according to instructions.	
				C.1.3	To check whether lifting machine and equipment are periodically maintained and repaired.	
				C.1.4	To keep records of periodical maintenance and repair processes of lifting machine and equipment.	
				C.1.5	To check whether lifting machine and equipment are used by the qualified	
				C.1.6	To check whether necessary measures are taken to prevent overloading of lifting	
		C.2	To check on construction equipment	C.2.1	To make a list of the existing construction equipment.	
				C.2.2	To ensure that instruction manuals on construction equipment are handed over to	
					the relevant employees or placed properly where necessary	
				C.2.3	To check whether construction equipment is used according to instructions.	
				C.2.4	To check whether construction equipment is periodically maintained and repaired	
				C.2.5	To keep records of periodical maintenance and repair processes.	
				C.2.6	To check whether construction equipment is used by the qualified personnel.	
				C.2.7	To ensure that necessary measures are taken to prevent employees working in areas excavated by means of construction equipment.	
		C.3	To check on passenger	C.3.1	To check whether the identified routes are allocated for passenger vehicles.	
			vehicles	C.3.2	To ensure that passenger vehicles use only routes allocated to them.	
				C.3.3	To check whether signs are put properly where necessary.	
				C.3.4	To ensure that passenger vehicles are authorized to enter and leave the construction site	

Tasks	Tasks		Actions		Performance Criteria	
Code	Name	Code	Name	Code	Explanation	
С	To check work equipment and	C.4	To check on pressure materials	C.4.1	To check whether pressure materials are used by the trained personnel.	
	machinery in terms of			C.4.2	To check whether pressure materials are properly placed.	
	OHS (continues)			C.4.3	To check on protective components of moving parts.	
				C.4.4	To ensure that pressure materials are regularly maintained and repaired.	
				C.4.5	To keep records of periodical maintenance and repair processes	
		C.5	To check on electrical hand tools	C.5.1	To check whether electrical tools are used by the trained personnel.	
				C.5.2	To check on the protection mechanism against electricity leak.	
				C.5.3	To ensure that electrical tools are regularly maintained and repaired by the experts.	
				C.5.4	To take necessary actions to prevent the use of damaged tools.	
				C.5.5	To check whether plugs are isolated.	
		C.6	To check on the electrical wiring	C.6.1	To be knowledgeable about the electrical wiring on the site.	
				C.6.2	To ensure that the electrical wiring is regularly maintained and repaired by the experts.	
				C.6.3	To ensure regular inspection of the electrical wiring exposed to external effects	
				C.6.4	To ensure that necessary warning signs are properly placed where there are power lines	
				C.6.5	To ensure that enough space is left for safety reasons around power transmission lines.	
				C.6.6	To announce measures to be taken to ensure safe passage of vehicles under aerial lines.	

Tasks		Actions		Performance Criteria	
Code	Name	Code	Name	Code	Explanation
C	To check work equipment and	C.7	To check on pressure cylinders	C.7.1	To ensure that pressure cylinders are kept properly under suitable conditions
	machinery in terms of OHS (continues)			C.7.2	To ensure that cylinders are kept vertically or fixed if kept horizontally.
				C.7.3	To ensure that cylinders are kept with their valves closed when not in use.
				C.7.4	To ensure that cylinders hoses and other components are regularly maintained
				C.7.5	To ensure that fire extinguishers are easily accessible.
		C.8	To check on the equipment used under combustible and explosive circumstances	C.8.1	To be knowledgeable about the legislation on equipment to be employed under combustible and explosive conditions
				C.8.2	To check whether the relevant equipment complies with the legislation.
				C.8.3	To check if the employees to use the equipment are competent enough.
				C.8.4	To check whether the necessary measure are taken when sources of ignition such as static electricity
				C.8.5	To check if necessary measures are taken on possible interactions of the materials and processes in use.
		C.9 To check on war	To check on warning signs	C.9.1	To inform employees on safety and health signs used at the workplace.
				C.9.2	To check whether the instructions on what these signs mean and how to behave when they are around are followed.
				C.9.3	To check whether signs are located properly or not.

Tasks		Actions		Performa	Performance Criteria	
Code	Name	Code	Name	Code	Explanation	
С	To check work	C.10	To check on mechanic	C.10.1	To check whether sharp and pointed instruments are carried in their covers or not	
	equipment and machinery in terms of		hand tools	C.10.2	To ensure that broken hand tools are not used	
	OHS (continues)			C.10.3	To check whether instructions manuals are placed properly to ensure proper use of hand tools	
				C.10.4	To check whether employees use hand tools according to instructions.	
				C.10.5	To check whether hand tools are preserved properly when not in use.	
		C.II T n b	To check on machinery and benches	C.11.1	To check whether moving parts of the machinery and benches are protection covers	
				C.11.2	To ensure that machinery and benches are checked and maintained regularly.	
				C.11.3	To check whether machinery and benches are used by the trained/competent personnel.	
				C.11.4	To ensure that only the authorized employees take care of maintenance, repair, installation, testing and dismantling of the machinery and benches.	

Tasks		Actions		Perform	Perform Criteria	
Code	Name	Code	Name	Code	Explanation	
		D.I	To check on emergency lighting and warning systems	D.I.I	To check at regular intervals whether emergency lighting and warning systems properly function	
				D.1.2	To inform employees on these systems	
				D.1.3	To check on alternative systems to be active in the case of power cut.	
		D.2	To check whether emergency instructions are	D.2.1	To check whether emergency instructions that he has contributed are followed.	
	To carry out emergency procedures		followed.	D.2.2	To check if employees are sufficiently informed on these instructions.	
				D.2.3	To ensure that exits are marked visibly.	
		D.3	To check on emergency equipment	D.3.1	To check if the emergency equipment is easily accessible.	
				D.3.2	To check if the emergency equipment is fit for immediate use.	
D				D.3.3	To check if there is adequate emergency equipment	
		D.4	To check on emergency exits	D.4.1	To ensure that emergency exits are marked visibly.	
				D.4.2	To check the number, distribution and size of emergency according to the	
				D 10	equipment and number of employees on the site.	
				D.4.3	To check if there is any barrier in front of emergency exits.	
		D.5	To provide first aid	D.5.1	To check whether first aid services are sufficient	
				D.5.2	To check whether first aid kits are fit for immediate use.	
				D.5.3	To be in contact with first aid teams	
				D.5.4	To ensure that first aid kits are placed properly allowing easy access where necessary	

Tasks		Actions		Perform	Performance Criteria	
Code	Name	Code	Name	Code	Explanation	
Е	To carry out fire prevention and implementation procedures	E.I	To check whether fire extinguishers are placed	E.I.I	To ensure that fire extinguishers are easily accessible by the personnel	
			properly	E.1.2	To check whether user manuals are placed together with equipment.	
				E.1.3	To ensure regular control and maintenance of fire fighting systems.	
				E.1.4	To ensure that necessary procedures are followed for the equipment not to fit for use	
				E.1.5	To ensure regular control and maintenance of fire fighting systems, fire detectors and alarm/warning systems.	
		E.2	To check out inflammable and	E.2.1	To check whether necessary safety measures are taken at inflammable and combustible material stores	
			combustible material stores	E.2.2	To check if inflammable and combustible materials are properly stored according to their physical and chemical properties	
				E.2.3	To take necessary measures to discharge surplus materials of the above mentioned type out of a work field. To check if the measures taken are in place.	
		E.3	To ensure safety of the workplace in the case of fire	E.3.1	To check on the safety measures taken to prevent fire	
			possibility	E.3.2	To check whether fire extinguishers are ready for immediate use.	
				E.3.3	To check whether all employees are informed on the use of fire extinguishers.	
				E.3.4	To ensure that emergency exits are visibly signed and open.	
				E.3.5	To check whether the conditions are set up for an easy access by a fire crew in the case of fire	
				E.3.6	To check on the adequacy of the fire fighting equipment.	
		E.4	To check on fire fighting	E.4.1	To regularly check if fire alarm and warning systems function properly.	
			systems, fire detectors and alarm/warning systems.	E.4.2	To inform employees on fire detectors and alarm/warning systems.	
		E.5	To contribute to fire fighting activities	E.5.1	To actively participate in fire drills.	

Tasks		Actions		Perforn	Performance Criteria	
Code	Name	Code	Name	Code	Explanation	
F	To carry out record	F.I	To fill in check lists	F.I.I	To contribute to the preparation of check –lists.	
	keeping and reporting			F.1.2	To fill in check-lists accurately and without fail.	
		F.2	To keep record of	F.2.1	To keep record of nonconformities and report them to the relevant units.	
			OHS and report them	F.2.2	To follow-up measures taken on nonconformities and their consequences.	
		F.3	To follow inspectional and disciplinary practices.	F.3.1	To warn on an oral or written basis all employees who do not follow the rules set in occupational health and safety and fire and emergency situations and use PPEs improperly and to propose even transfer of any such	
				F.3.2	To archive admonitions and disciplinary committee documents and follow them.	
				F.3.3	To report those employees having been subject to oral or written admonition or disciplinary committee punishment to their supervisors,	
				F.3.4	To follow them closely those subject to oral or written admonition or disciplinary committee punishment and ensure their training and supervision	
		F.4	To keep record of and report employees' opinions and recommendations on OHS.	F.4.1	To check the efficiency of methods used to receive feedback from personnel.	
				F.4.2	To keep record of feedbacks and participate in their assessment.	
		F.5	To follow and report surveys and similar practices	F.5.1	To actively participate in activities on survey and similar practices	
				F.5.2	To participate in assessment activities on the above mentioned practices.	
				F.5.3	To follow activities conducted according to the outcomes of the assessment.	
		F.6	To keep record of and report near-miss accidents	F.6.1	To contribute to the assessment of outcomes of near-miss accidents.	
		F.7	To contribute to the preparation of accident,	F.7.1	To keep record of accidents, illnesses and incidents.	
			sickness and event investigation reports	F.7.2	To assess them according to their frequency and provide feedback.	
		F.8	To recommend on awarding and similar practices	F.8.1	To objectively assess impacts of such practices on employees.	
			and similar practices	F.8.2	To communicate their outcomes to the relevant units.	

Tasks		Actions		Performance Criteria		
Code	Name	Code	Name	Code	Explanation	
G	To attend professional development activities	G.I	To attend in-service and on-the-job trainings etc on the profession.	G.1.1	To actively participate in professional trainings.	
		G.2	To follow professional innovations and technological	G.2.1	To demand trainings on all professional innovations and technological developments.	
			de veropments.	G.2.2	To put into practice what s/he learns	
				G.2.3	To share information with other employees.	
		G.3	To contribute to the assessment of employees' training needs	G.3.1	To employ different methods (survey, face-to-face interview, surveillance etc) to assess employees' training needs.	
			training needs.	G.3.2	To check on the efficiency of trainings offered to employees.	
				G.3.3	To check whether employees work safely according to trainings offered to them.	
				G.3.4	To take record of trainings documents and ensure that they are kept.	

3.2. Necessary Materials

- 1. Lighting generator
- 2. Barriers
- 3. Binoculars
- 4. Hand tools (wrench set, binding wire, hammer, nail, test light, meter)
- 5. Hand held detector
- 6. Hand lamp
- 7. Camera
- 8. Safety equipment (safety rope, safety tape)
- 9. Hose
- 10. Warning equipment (warning light, warning strip, stoplights, whistle etc)
- 11. Communication instruments (handheld transceiver, phone, loud-hailer)
- 12. Personal Protective Equipment (helmet, dust-mask, safety belt, gloves, work shoes, work clothes, ear plug, ear protector, rubber boots, protective mask, facial masks etc)
- 13. Office supplies (computer, stationary supplies.)
- 14. Measurement tools (dust, noise etc)
- 15. Fire fighting equipment (fire blanket, asbestos suit, fire extinguishers etc)
- 16. Other tools and equipment necessary according to the nature of tasks

3.3. Knowledge and Skills

- 1. Knowledge of states of emergency
- 2. Analytical skills
- 3. Knowledge of materials and equipment to be used
- 4. Computer skills
- 5. Knowledge of environmental arrangements
- 6. Knowledge of environmental protection standards
- 7. Hand skills
- 8. Ability to work within a team
- 9. Visual skills
- 10. Information on hygiene
- 11. Planning knowledge of caution and alarm systems
- 12. Ability of persuasion
- 13. Ability to use communication instruments
- 14. Communication skills
- 15. Knowledge of First aid
- 16. Knowledge of human psychology
- 17. Knowledge of construction
- 18. Knowledge of occupational health and safety measures
- 19. Knowledge of OHS control procedures
- 20. Knowledge of signs
- 21. Knowledge of operational work procedures
- 22. Knowledge of quality assurance systems
- 23. Decision making skills
- 24. Record keeping skills
- 25. Knowledge of materials
- 26. Knowledge of material catalogues/manuals
- 27. Ability to estimate distance and weight
- 28. Knowledge of occupational legal regulations
- 29. Knowledge of occupational electricity
- 30. Occupational electronic knowledge
- 31. Occupational mechanical knowledge
- 32. Knowledge of occupational technical terminology
- 33. Ability to work within a team and organization
- 34. Ability to convey what s/he learns
- 35. Ability to learn and self-improve
- 36. Problem solving skills
- 37. Reporting skills
- 38. Risk assessment skills
- 39. Knowledge of standard measures
- 40. Knowledge of intervention methods to fire and use of fire extinguishers
- 41. Knowledge of the legislation on combustible and inflammable substances
- 42. Knowledge of spare parts

3.4. Attitudes and Behaviors

- 1. To take good care of materials and equipment
- 2. To be inquiring
- 3. To be hard-working
- 4. To be environmentally sensitive
- 5. To be knowledgeable about environment, quality and OHS rules
- 6. To be detail oriented
- 7. To be attentive
- 8. To be honest
- 9. To have ability to work harmoniously within a team
- 10. To speak with eloquence
- 11. To be observer
- 12. To be friendly
- 13. To take initiatives
- 14. To establish good interpersonal relations
- 15. To be disciplined at work
- 16. To pay attention to occupational safety
- 17. To comply with operational procedures
- 18. To be determined
- 19. To have professional ethics
- 20. To be planned and organized
- 21. To consider risk factors
- 22. To be patient
- 23. To be respectful
- 24. To be calm
- 25. To be responsible
- 26. To be attentive to the process quality
- 27. To be attentive to cleaning and organization at the workplace
- 28. To be easy going
- 29. To be open-minded
- 30. To work at height
- 31. To use time efficiently

4. ASSESSMENT AND CERTIFICATION

Assessment and certification processes to be carried out according to the Occupational Health and Safety Officer (Level 4) occupational standard will cover written and/or oral theory and performance based examinations to be performed at test and certification centers which meet the necessary conditions.

The national qualifications to be developed will elaborate on the assessment method and performance principles to be employed. All assessment and certification related procedures are performed within the framework of the Regulation on Vocational Qualifications Testing and Certification of the Vocational Qualifications Authority.

<u>Annex:</u> Participants of the Occupational Stand Development Process

l. Occupational Standard Team of the Occupational Standard Development Institution

İNTES – Secretary General
İNTES – Civil engineer, Msc
INTES - Statistician
İNTES - Economist
İNTES – Construction Technician
İNTES - Economist
İNTES – Human Resources Specialist

2. Members of Technical Working Group

Ali TURAN	Mechanical Engineer A Class Occupational	Freelancer Specialist
	Safety Specialist	
Bahadır ERTUĞRUL	Civil Engineer / A	Aktürk Yapı Endüstrisi Ve Ticaret A.Ş.
	Class Occupational	
	Safety Specialist	
MüjdatAYDIN	A Class Occupational	KMO Ankara Branch
	Safety Specialist	
Özkan ÖZGÜR	OHS Specialist	DETAM Consultancy
Ruhi ÖKTEM	Health, Safety and	Attila Doğan İnş. Tes. A.Ş.
	Environment	
	Management. –	
	Occupational Health and	
	Safety Engineer	
	A Class Occupational	
	Safety Specialist	
Şule ALKAN	OHS Coordinator	Hattat Construction
Ümit TARHAN	Head of Department	Ministry of Labor and Social Security
		Directorate General for OHS

3. People, Institutions and Organizations Consulted

3.1. Institutions/Organizations/Companies

Ankara Chamber of Industry (ASO) Ankara Chamber of Commerce (ATO) Ministry of Public Works and Settlement (General Directorate of Construction Affairs) Ministry of Public Works and Settlement (Higher Scientific Board) Ministry of Environment and Forest Ministry of Labor and Social Security Ministry of Labor and Social Security, Directorate General for Labor Ministry of Labor and Social Security, Center for Labor and Social Security Training and Research Ministry of Labor and Social Security, Directorate General for Occupational Health and Safety Ministry of Labor and Social Security, Turkish Employment Institution Ministry of Labor and Social Security, Social Security Institution (SSI) Ministry of Labor and Social Security, Directorate General for SSI Social Security Affairs Confederation of Progressive Trade Unions (DISK) Directorate General for State Hydraulic Works (Project and Construction Office) Confederation of Turkish Real Trade Unions (HAK-İŞ) Turkish Construction and Installation Workers Training Foundation (INISEV) Chamber of Civil Engineers Member Companies of INTES (125 companies) Istanbul Chamber of Industry (ISO) Istanbul Chamber of Commerce (ITO) **Chamber of Mechanical Engineers** Ministry of National Education (MoNE) Ministry of National Education, Educational Research and Development Directorate Ministry of National Education (General Directorate of Apprenticeship and Non-formal Education) MoNE, General Directorate of Technical and Vocational Education for Boys **SVET** Foundation for the Promotion of Vocational Training and Small Industry (MEKSA) Turkish Employers' Association of Metal Industries (MESS) **MESS** Education Foundation Independent Industrialists and Businessmen's Association (MÜSİAD)

General Directorate of Turkish State Railways (TCDD) General Directorate of Highways (TCK) Confederation of Turkish Tradesmen and Craftsmen (TESK) Turkish Confederation of Employers' Unions (TİSK) Union of Chambers and Commodity Exchanges of Turkey (TOBB) Turkish Standards Institution (TSE) Association of Turkish Consulting Architects and Engineer - TMMMB Turkish Accreditation Agency (TÜRKAK) Confederation of Turkish Trade Unions (TURK-İŞ) Association of Turkish Construction Contractors and Employers (TİM-SE) Turkish Contractors Association-TMB Association of Turkish Official Sector Construction Contractors and Employers (TÜRK-ÍNSA) Turkish Industry and Business Association (TÜSİAD) Ministry of Transport Ministry of Transport, General Directorate of State Airports Authority of Turkey (DHMI) Ministry of Transport, General Directorate of Railways, Harbors, and Airports Yol-İş Council of Higher Education (YÖK)

3.2. Universities

Boğaziçi University – Faculty of Civil Engineering Gazi University – Faculty of Technical Education Istanbul Technical University – Faculty of Civil Engineering Black Sea Technical University - Faculty of Civil Engineering Middle East Technical University - Faculty of Civil Engineering Yıldız Technical University - Faculty of Civil Engineering

3.3. Other Institutions and Organizations

Ankara Metropolitan Municipality Antalya Metropolitan Municipality Eskişehir Metropolitan Municipality İstanbul Metropolitan Municipality İzmir Metropolitan Municipality Kayseri Metropolitan Municipality Konya Metropolitan Municipality Ministry of Labor and Social Security – General Directorate of Occupational Health and Safety Yeditepe University – Post-graduate degree on (Prof. Hilmi Sabuncu Yıldız Technical University, Department of OHS DETAM Companies KAYAYAPIAS. ISTANBUL ARTI – Health, Environment and Quality Consultancy, Training, Organizations

4. Members of VQA Sector Committee and Experts

Mustafa DEMİR, Turkish Confederation of Employers' Unions	President
K.Haluk GÜLHAN, Ministry of Public Works and Settlement	V.President
Kemal AYDOĞAN, Ministry of Labor and Social Security	Member
Ekrem DİRİER, Ministry of National Education	Member
Mehmet SAĞ, Ministry of Transport	Member
Doç.Dr.Rifat SÖNMEZ, Council of Higher Education	Member
H.Necati ERSOY, Union of Chambers and Commodity Exchange	s Member
of Turkey	
Mustafa ARSLAN, Confederation of Turkish Tradesmen and	Member
Craftsmen	
Hacı ÜSTUNDAL, Confederation of Turkish Real Trade Unions	Member
Muzaffer YÖNTEM, Vocational Qualifications Authority	Member
Firuzan SİLAHŞÖR, Vocational Qualifications	Head of Department
Authority	
Aylin RAMANLI, Vocational Qualifications	Sector Officer
Authority	
Sinan GERGIN, Directorate of Administration	Representative of Sector
for the Disabled	Committee

5. Members of VQA Board of Directors

Bayram AKBAŞ, Rep. of the Ministry of Labor and Social Security	Chairman
Prof.Dr. Oğuz BORAT, Rep. of the Ministry of National Education	Deputy C.
Assoc. Prof. Dr. Ömer AÇIKGÖZ, Rep. of the Council of Higher Education	Member
Prof. Dr. Yücel ALTUNBAŞAK, Rep. of the Professional Organizations	Member
Dr. Osman YILDIZ, Rep. of the Confederation of Trade Unions	Member
Celal KOLOĞLU, Rep. of the Confederation of Employers' Unions	Member