

## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR PLUMBING

### What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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### Introduction

#### Qualifications Pack – Plumber (Maintenance & Servicing) Assistant

**SECTOR:** PLUMBING INDUSTRY

**SUB-SECTOR:**Contractors

**OCCUPATION:** Plumbing

**REFERENCE ID:** PSC/Q0109

**ALIGNED TO:** NCO-2004/7136.90

**Plumber (Maintenance & Servicing) Assistant:** Plumber (Maintenance & Servicing) Assistant is an important job role in assistance in service and maintenance of plumbing fittings and fixtures in 'contractors' segment.

**Brief Job Description:** A Plumber (Maintenance & Servicing) Assistant is responsible for assistance in maintenance and servicing of pipes and sanitary fixtures in housing, commercial and institutional setups.

**Personal Attributes:** He should be comfortable in performing laborious work. He should be a good listener. He should be good at taking and following instructions. He should be a good team player. He should be result oriented and positive in attitude.

Job Details	Qualifications Pack Code	PSC/Q0109		
	Job Role	Plumber (Maintenance & Servicing) Assistant		
	Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	0.1
	Sector	Plumbing	Drafted on	15/07/13
	Sub-sector	Contractors	Last reviewed on	30/07/13
	Occupation	Plumbing	Next review date	31/01/14

<b>Job Role</b>	<b>Plumber (Maintenance &amp; Servicing) Assistant</b>
<b>Role Description</b>	Responsible for assistance in maintenance and servicing of pipes and sanitary fixtures in housing, commercial and institutional setups.
<b>NVEQF/NVQF level</b>	2
<b>Minimum Educational Qualifications*</b>	5 <sup>th</sup> (To be revised to 9 <sup>th</sup> post 31 <sup>st</sup> December, 2017)
<b>Maximum Educational Qualifications*</b>	N.A.
<b>Training</b> (Suggested but not mandatory)	On-the-job training.
<b>Experience</b>	In lieu of minimum qualification the employee has worked as a semi-skilled helper for minimum 2 years in the same role.
<b>Applicable National Occupational Standards (NOS)</b>	<p><b>Compulsory:</b></p> <ol style="list-style-type: none"> <li>PSC/ N 0111 (<a href="#">Assistance in maintenance and servicing of plumbing systems</a>)</li> <li>PSC/ N 0108 (<a href="#">Coordinating with senior and other working team</a>)</li> <li>PSC/ N 0109 (<a href="#">Maintain a healthy, safe and secure working environment</a>)</li> </ol> <p><b>Optional:</b></p> <ol style="list-style-type: none"> <li>N.A.</li> </ol>
<b>Performance Criteria</b>	As described in the relevant OS units

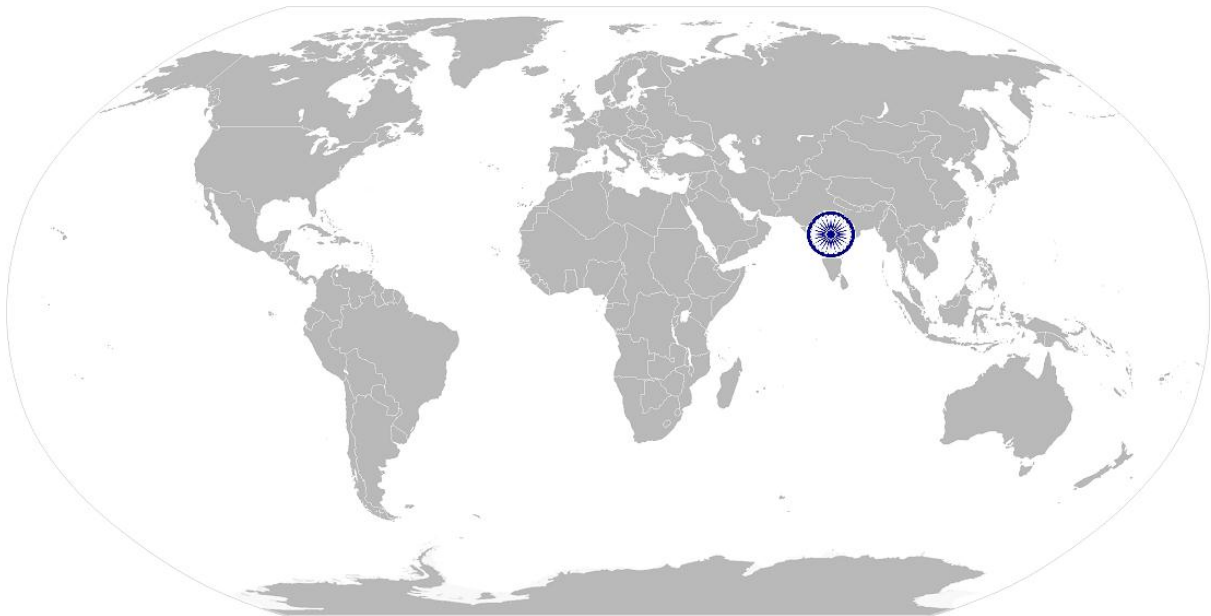
Definitions

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Job Role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
OS	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
NOS	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an Occupational Standard , which is denoted by an 'N'.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills or Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.

Acronyms	Keywords /Terms	Description
	IPSC	Indian Plumbing Skills council
	NOS	National Occupational Standards
	NSQF	National Skills Qualification Framework
	NVEQF	National Vocational Educational Qualification Framework
	NVQF	National Vocational Qualification Framework
	OS	Occupational Standards
	PC	Performance Criteria
	QP	Qualification Pack
SSC	Sector Skills Council	



# National Occupational Standard



## Overview

This unit is about assistance in maintenance and servicing of pipes and sanitary fixtures in housing, commercial and institutional setups.



**PSC/N0111 Assistance in maintenance and servicing of plumbing systems**

National Occupational Standard

<b>Unit Code</b>	<b>PSC/N0111</b>
<b>Unit Title (Task)</b>	<b>Assistance in maintenance and servicing of plumbing systems</b>
<b>Description</b>	This OS unit is about assistance in maintenance and servicing of pipes and sanitary fixtures in housing, commercial and institutional setups
<b>Scope</b>	<p>This unit/task covers the following:</p> <p>Maintenance and servicing</p> <ul style="list-style-type: none"> <li>assistance in diagnosing problems and/or failures in plumbing system and undertaking activities necessary to maintain the system</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Maintenance and Servicing</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. assist in diagnosis of problems and/or failures in plumbing system</p> <p>PC2. assist in test the joints and fixtures for proper functioning</p> <p>PC3. assist in replace and repair of defected parts in plumbing systems</p> <p>PC4. clear the work area and waste disposal</p> <p>PC5. assist in responding to emergency situations for the purpose of resolving immediate safety concerns</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's policies on: quality and delivery standards, safety and hazards, integrity, dress code, etc.</p> <p>KA2. risk and impact of not following defined procedures/work instructions</p> <p>KA3. how to assist in handover/ takeover of the equipment / work area as per the instructions</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. basic sanitary fittings (valves, clamps, elbows, etc.) and basic fixtures (showers, taps, basins, etc.)</p> <p>KB2. basic awareness of techniques related to cutting, bending and joining of fittings and fixtures</p> <p>KB3. relevant hand and power tools such as wrenches, pliers, screwdriver, power drill, pipe cutter, crimping tool, pipe bender, threading tool, hacksaw, metal file, hand auger, etc.</p> <p>KB4. basic units of measurement</p> <p>KB5. material disposal procedure</p>
<b>Skills (S)</b>	



## PSC/N0111 Assistance in maintenance and servicing of plumbing systems

<b>A. Core Skills/ Generic Skills</b>	<b>Communication skills</b>
	The user/individual on the job needs to know and understand how to: SA1. communicate in Hindi / regional language
	<b>Measurement/positioning skills</b>
	SA2. perform simple measurements and mark positions as per instructions
	<b>Teamwork</b>
	SA3. accept and interpret instructions and requirements correctly SA4. follow the instructions of the reporting authority SA5. co-ordinate with co-workers
<b>B. Professional Skills</b>	<b>Use of tools and machines</b>
	The user/individual on the job needs to know and understand how to: SB1. identify tools, equipment and procedures required for maintenance and servicing of piping fixtures and fittings SB2. assist in operating and maintaining tools and equipment
	<b>Material handling and preparation</b>
	SB3. carry out preparatory activities as per requirement SB4. stack and store materials and equipment appropriately at the task site SB5. dispose the waste as per the procedure/instructions

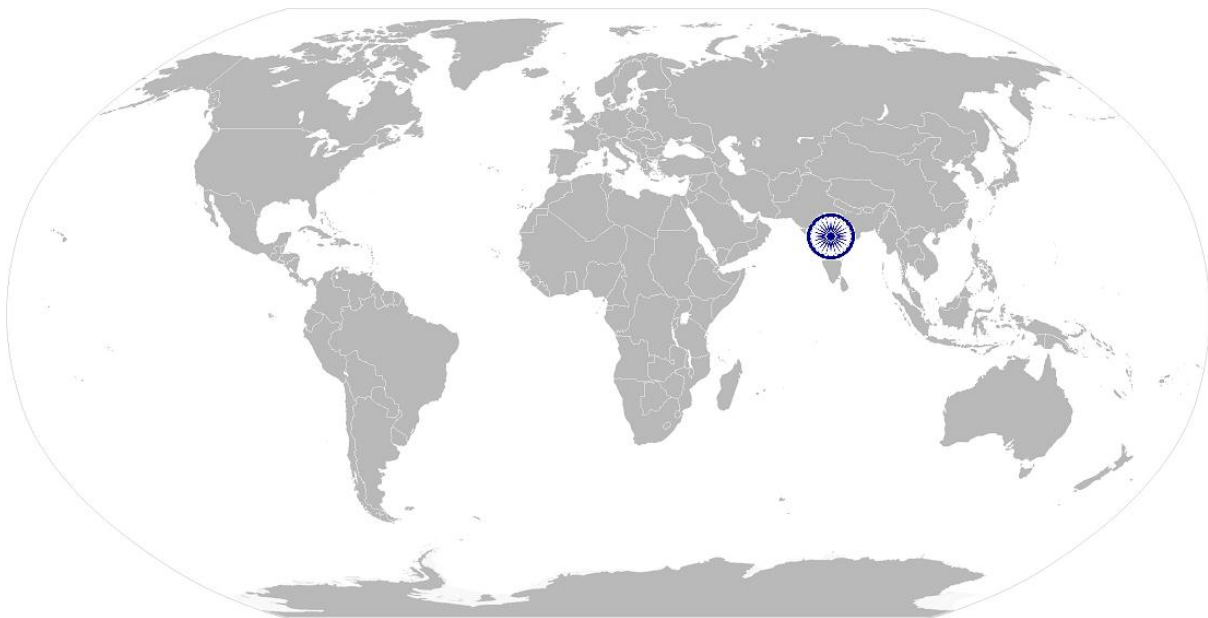




**PSC/N0111 Assistance in maintenance and servicing of plumbing systems**

**NOS Version Control**

<b>NOS Code</b>	<b>PSC/N0111</b>		
<b>Credits(NVEQF/NVQF/NSQF) [OPTIONAL]</b>	<b>TBD</b>	<b>Version number</b>	<b>0.1</b>
<b>Industry</b>	<b>Plumbing</b>	<b>Drafted on</b>	<b>15/07/13</b>
<b>Industry Sub-sector</b>	<b>Contractors</b>	<b>Last reviewed on</b>	<b>30/07/13</b>
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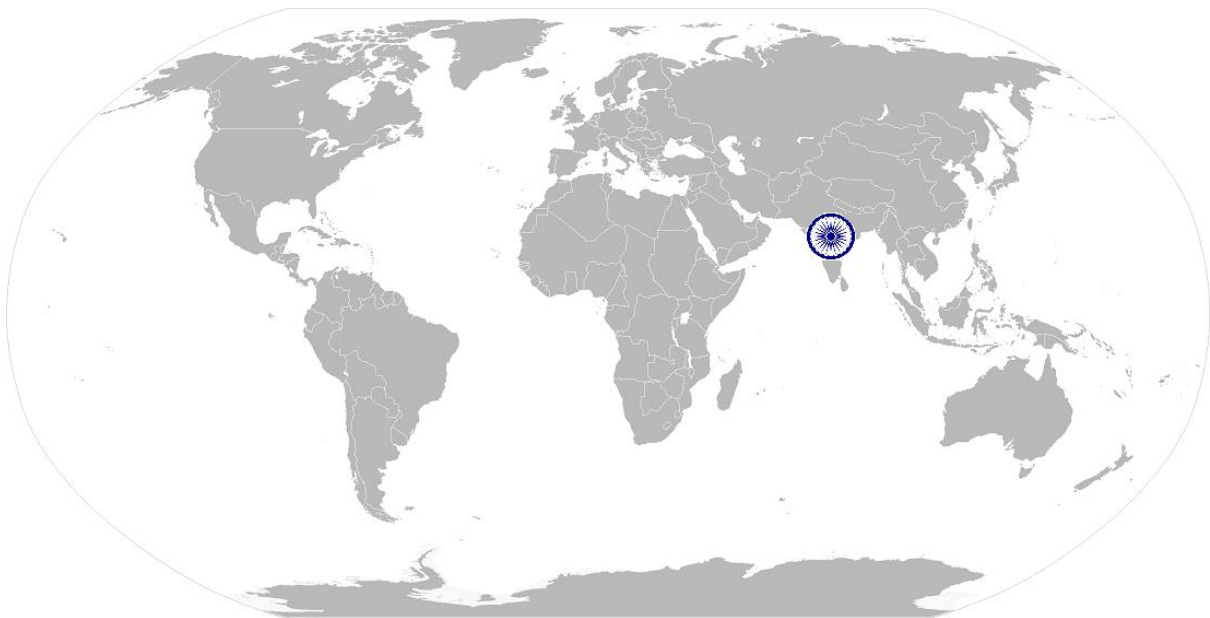




PSC/N0108 Coordinating with the senior and other working team

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# National Occupational Standard



## Overview

This unit is about team work and level of communication with colleagues or clients. It determines the ability to work as a team member, share work and multi-task in order to achieve the deliverables on schedule.




**PSC/N0108 Coordinating with the senior and other working team**

National Occupational Standard	<b>Unit Code</b>	<b>PSC/N0108</b>
	<b>Unit Title (Task)</b>	<b>Coordinating with the senior and other working team</b>
	<b>Description</b>	This OS unit is about communicating with colleagues and seniors in order to achieve smooth and hazard free work flow
	<b>Scope</b>	<p>This unit/task covers the following:</p> <p>Interact with senior</p> <ul style="list-style-type: none"> <li>• receive work instructions, discuss task status and receive feedback</li> </ul> <p>Interact with colleagues within and outside the team</p> <ul style="list-style-type: none"> <li>• communicate and discuss work flow, problems faced, possible solutions and pass on the learning within and outside the team</li> </ul>
	<b>Performance Criteria(PC) w.r.t. the Scope</b>	
	<b>Element</b>	<b>Performance Criteria</b>
	<b>Interaction with senior</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. receive work instructions and raw materials from reporting senior</p> <p>PC2. communicate to reporting senior about task status, repairs and maintenance of tools and equipment as required</p> <p>PC3. communicate any potential hazards and expected process disruptions</p> <p>PC4. handover completed task to reporting senior</p> <p>PC5. receive feedback from reporting senior</p> <p>PC6. report any anticipated reasons for delays</p>
	<b>Interact with colleagues within and outside the team</b>	<p>PC7. work as a team with colleagues and share work as per the work load and skills</p> <p>PC8. work with colleagues of other teams</p> <p>PC9. communicate and discuss work flow related difficulties in order to find solution with mutual agreement</p> <p>PC10. taking instructions from the reporting senior</p> <p>PC11. report problem/incident etc.</p> <p>PC12. put team over individual goals</p> <p>PC13. resolve conflicts</p>
	<b>Knowledge and Understanding (K)</b>	
	<b>A. Organizational Context</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's policies on: preferred language of communication, quality delivery standards and personnel management</p> <p>KA2. reporting structure</p>



### PSC/N0108 Coordinating with the senior and other working team

<b>B. Technical Knowledge</b>	The user/individual on the job needs to know and understand: KB1. effective ways of communication KB2. building team co-ordination
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Communication skills</b>
	The user/individual on the job needs to know and understand how to: SA1. communicate in Hindi / regional language
	<b>Teamwork</b>
	SA2. share work load as required SA3. accept and interpret instructions and requirements correctly SA4. co-ordinate with co-workers and sub-ordinates
<b>B. Professional Skills</b>	<b>Decision making</b>
	The user/individual on the job needs to know and understand: SB1. how to spot and communicate potential areas of disruptions to work process and report the same SB2. when to report to senior and when to deal with a colleague individually, depending on the type of concern 
	<b>Reflective thinking</b>
	SB3. improve work processes by interacting with others and adopting best practices

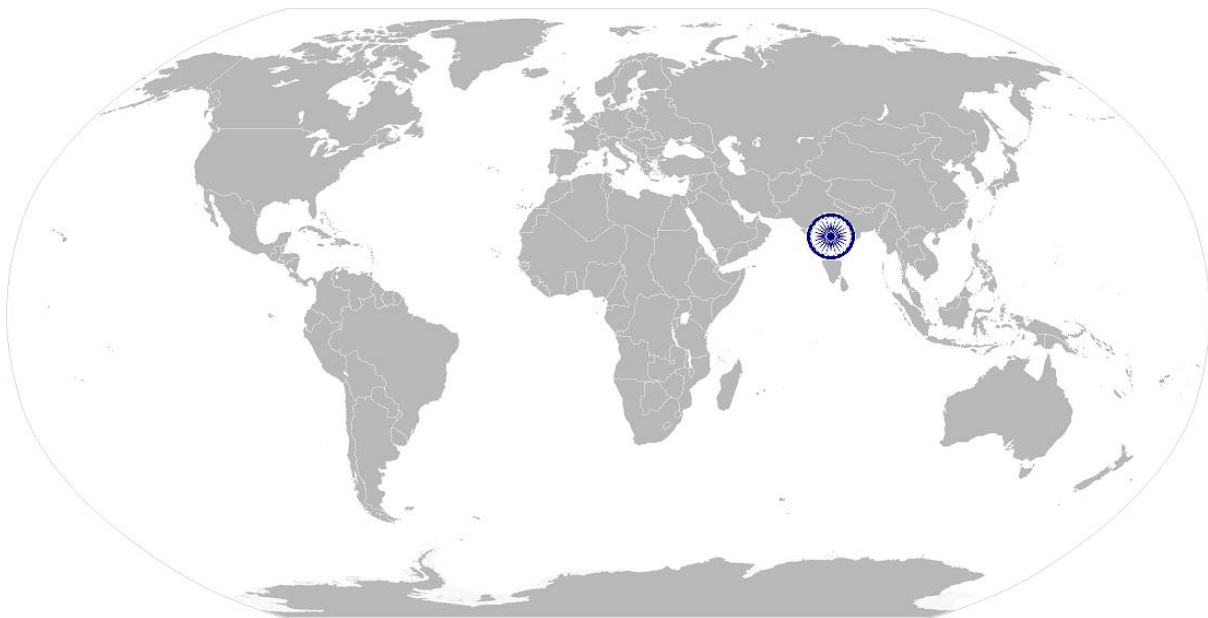




**PSC/N0108 Coordinating with the senior and other working team**

**NOS Version Control**

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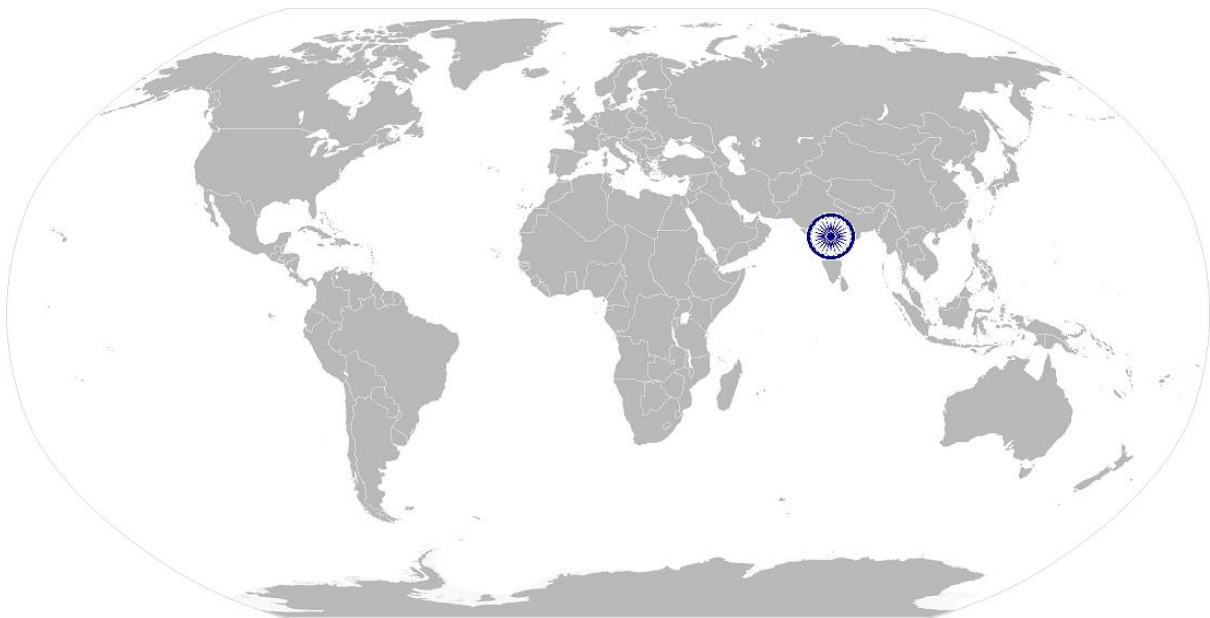




PSC/N0109 Maintain a healthy, safe and secure working environment

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# National Occupational Standard



## Overview

This unit is about being aware of, communicating and taking steps towards minimizing potential hazards and dangers of accidents on the job and maintaining occupational health and safety.



**PSC/N0109 Maintain a healthy, safe and secure working environment**

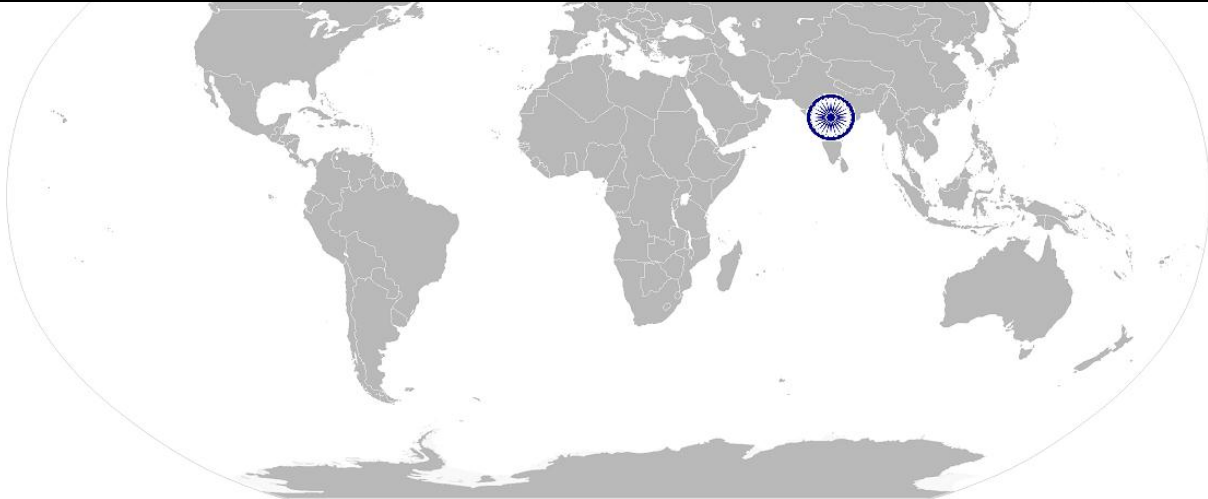
National Occupational Standard

<b>Unit Code</b>	<b>PSC/N0109</b>
<b>Unit Title (Task)</b>	<b>Maintain a healthy, safe and secure working environment</b>
<b>Description</b>	This OS unit is about monitoring your working environment and making sure it meets requirements for health and safety
<b>Scope</b>	<p>This unit/task covers the following:</p> <p>Communicate to reporting senior about</p> <ul style="list-style-type: none"> <li>• process flow improvements that can reduce anticipated or repetitive hazards</li> <li>• mishandling of tools and equipment</li> <li>• electrical or any other problem at the construction site that could result in accident</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Communicating potential accident points</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. to avoid accidents related to use of sharp tools and equipment</p> <p>PC2. attend and actively participate in the health and safety campaigns organized by the company or any other authority</p>
<b>Using safety gear and following healthy practices</b>	<p>PC3. use or wear safety gear (helmet, gloves, goggles, safety shoes, ear plugs, etc.) as per the rules of the company</p> <p>PC4. attend fire drills or any other safety drills organized by the company or any other authority</p> <p>PC5. learn first-aid procedure</p> <p>PC6. use insect repellents and safe drinking water</p> <p>PC7. use site toilets and follow other hygienic practices</p> <p>PC8. understand the evacuation and emergency procedures</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's policy on: safety and hazards and personnel management</p> <p>KA2. reporting structure</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. how to use tools and equipment without suffering any physical harm</p> <p>KB2. first-aid procedure</p> <p>KB3. diseases caused due use of unsafe water, biting of insects and following unhygienic practices</p> <p>KB4. evacuation and emergency procedures</p>



## PSC/N0109 Maintain a healthy, safe and secure working environment

Skills (S)	
<b>A. Core Skills/ Generic Skills</b>	<b>Communication skills</b>
	The user/individual on the job needs to know and understand how to: SA1. effectively communicate the danger
	<b>Organising skills</b>
	SA2. keep all the tools in an organised manner so as to avoid accidents SA3. keep the work environment safe and clean
<b>B. Professional Skills</b>	<b>Decision making</b>
	The user/individual on the job needs to know and understand how to: SB1. report potential sources of danger SB2. follow prescribed procedure in the event of an accident SB3. wear appropriate safety gear to avoid an accident
	<b>Reflective thinking</b>
	SB4. learn from past mistakes regarding use of hazardous tools and equipment

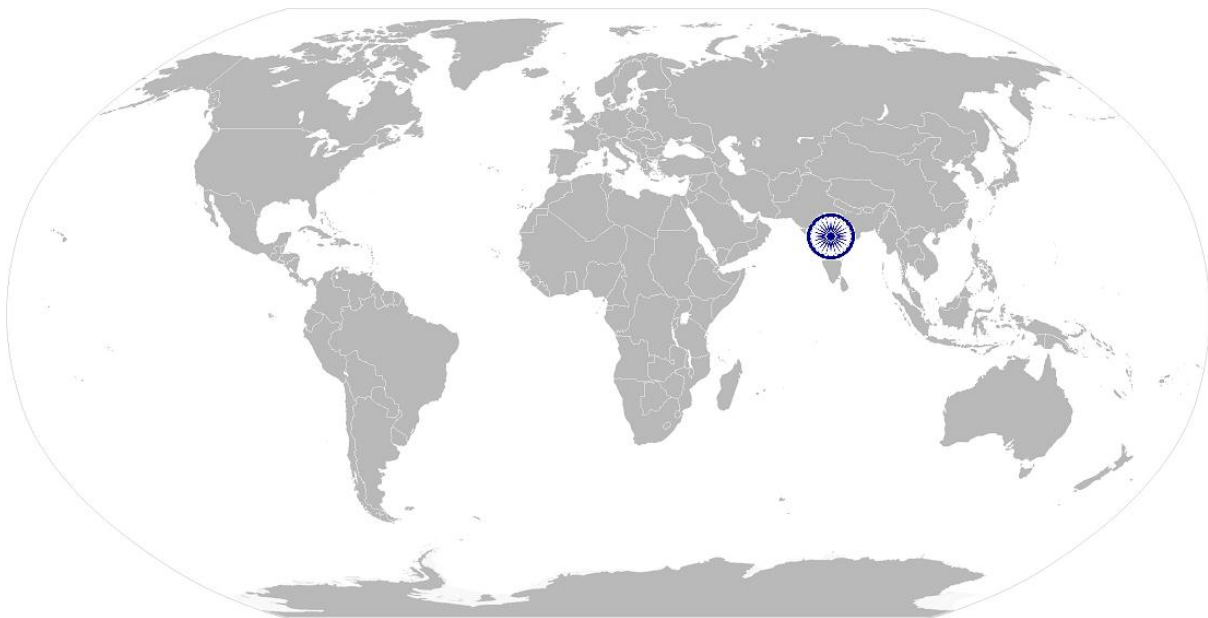




**PSC/N0109 Maintain a healthy, safe and secure working environment**

**NOS Version Control**

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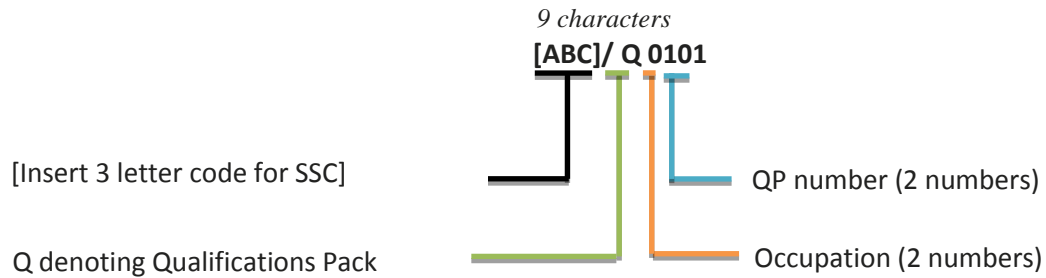




## Annexure

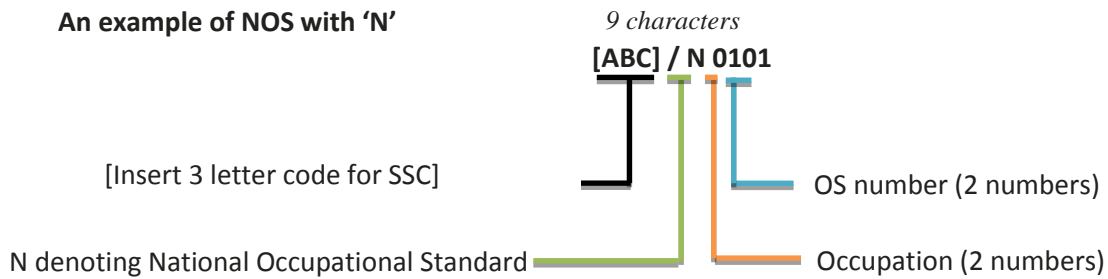
### Nomenclature for QP and NOS

#### Qualifications Pack



#### Occupational Standard

##### An example of NOS with 'N'



The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
<b>Contractors</b>	01-10
<b>Consultants</b>	11-20
<b>Manufacturers</b>	21-30

Sequence	Description	Example
<b>Three letters</b>	Industry name	PSC
<b>Slash</b>	/	/
<b>Next letter</b>	Whether <b>QP</b> or <b>NOS</b>	N
<b>Next two numbers</b>	Occupation code	01
<b>Next two numbers</b>	OS number	01