

## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR GREEN JOBS

### 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

#### Contact Us:

**Skill Council for Green Jobs,**

CBIP Building, Malcha Marg, Chanakyapuri  
New Delhi – 110021  
Ph. 011- 41792866

E-mail:  
info@sscj.in



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## Introduction

### Qualifications Pack- Septic Tank Technician

**SECTOR:** GREEN JOBS

**SUB-SECTOR:** Waste Management

**OCCUPATION:** Operation & Maintenance

**REFERENCE ID:** SGJ/6402

**ALIGNED TO:** NCO-2015/7126.0101

#### Brief Job Description:

Septic Tank Technician is responsible for fabrication of different types of septic tanks/soak pit and install at the site (commercial/institutional/residential). He/ She is responsible for selecting suitable configuration of septic tanks as per client requirement and execute its fabrication and installation with fellow masons. He/ She also undertake the work of repair and maintenance of existing septic tanks.

**Personal Attributes:** The Individual is expected to be physically fit and should be able to work across various location/site conditions. He/ She should be self-motivated and able to produce good quality work. He/ She must have good communication skill, team spirit, be courteous and polite. He should be efficient in working with proper planning skills.



Job Details	<b>Qualifications Pack Code</b>	<b>SGJ/Q6402</b>		
	<b>Job Role</b>	<b>Septic Tank Technician</b>		
	<b>Credits(NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
	<b>Sector</b>	<b>Green Jobs</b>	<b>Drafted on</b>	<b>23/05/2018</b>
	<b>NSQ Clearance on Sub-sector</b>	<b>Waste Management</b>	<b>Last reviewed on</b>	<b>30/11/2018</b>
	<b>Occupation</b>	<b>Operation &amp; Maintenance</b>	<b>Next review date</b>	<b>29/11/2020</b>

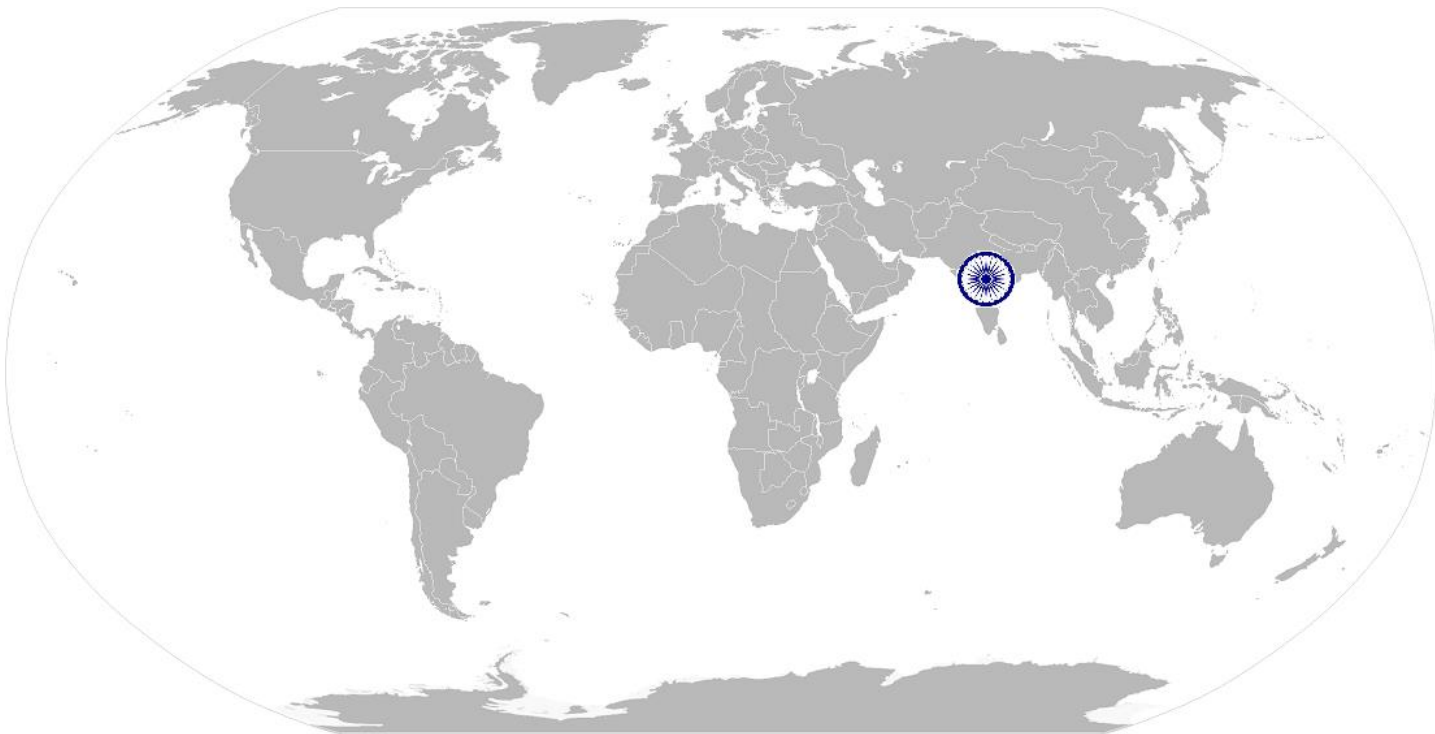
Job Role	Septic Tank Technician
<b>Role Description</b>	Septic Tank Technician is responsible for fabrication of different types of septic tanks/ soak pit and install fixed as well as prefabricated septic tank at the site (commercial/institutional /residential). He/ She is would assess the site and decide suitable design and size of the septic tanks as per client requirement. He/She would execute its fabrication including that of prefabricated septic tank with fellow masons. He/ She also undertake the work of repair and maintenance of existing septic tanks.
<b>NSQF level</b>	4
<b>Minimum Educational Qualifications</b>	5 <sup>th</sup> Pass
<b>Maximum Educational Qualifications</b>	Not Applicable
<b>Prerequisite License or Training</b>	N/A
<b>Minimum Job Entry Age</b>	19 years
<b>Experience</b>	Minimum experience of 3 year in masonry work
<b>Applicable National Occupational Standards (NOS)</b>	<p><b>Compulsory:</b></p> <p><a href="#">SGJ/N6406: Assessment of site and size of septic tank / soak pit</a></p> <p><a href="#">SGJ/N6407: Excavation, fabrication and installation of septic tank / soak pit</a></p> <p><a href="#">SGJ/N6408: Installation of prefabricated septic tank</a></p> <p><a href="#">SGJ/N6409: Repair and maintenance of septic tank /soak pit</a></p> <p><a href="#">SGJ/N6410: Maintain personal health &amp; safety in FSSM</a></p> <p><a href="#">SGJ/N0120: Work effectively with co-workers</a></p>
<b>Performance Criteria</b>	As described in the relevant Occupational Standards (OS) units

Keywords/Terms	Description
Sector	Sector is a conglomeration of different business operations having similar business 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.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
Occupational Standards (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.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OSs, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.
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.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding	Knowledge and understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual need 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/ Generic Skills	Core skills or generic skills are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. In the context of the OS, these include communication related skills that are applicable to most job roles.

Acronyms

Keywords /Terms	Description
CPHEEO	Central Public Health and Environmental Engineering Organization
FSSM	Faecal Sludge and Septage Management
NOS	National Occupational Standard
NSQF	National Skills Qualification Framework
NVEQF	National Vocational Educational Qualification Framework
NVQF	National Vocational Qualification Framework
NBO	National Building Code
OS	Occupational Standards
PC	Performance Criteria
QP	Qualification Pack
SCGJ	Skill Council for Green Jobs
SSC	Sector Skill Council

# National Occupational Standard



## Overview

This unit is about assessment of site and size of septic tank / soak pit as per norms of Central Public Health and Environmental Engineering Organisation (CPHEEO) Manual, IS:2470 and National Building Code

SGJ/N6406

Assessment of Site and Size of Septic Tank / Soak Pit

National Occupational Standard

<b>Unit Code</b>	<b>SGJ/N6406</b>
<b>Unit Title (Task)</b>	<b>Assessment of Site and Size of Septic Tank / Soak Pit</b>
<b>Description</b>	This unit is about assessment of site and size of septic tank / soak pit as per norms of Central Public Health and Environmental Engineering Organisation(CPHEEO) Manual, IS:2470 and National Building Code (NBO)
<b>Scope</b>	This unit/task covers the following: <ul style="list-style-type: none"> <li>• Survey and assessment of site</li> <li>• Type selection of septic tank/soak pit and identification of tools</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Survey and assessment of site</b>	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> <li>PC1. assess user requirement to position septic tank/soak pit</li> <li>PC2. estimate load as per the number of users in the family or as per usage at the commercial/institutional site</li> <li>PC3. assess the located site of septic tank / soak pit considering ground conditions, water table, water pipeline, underground water tank, etc.</li> </ul>
<b>Type selection of septic tank/soak pit and identification of tools</b>	<ul style="list-style-type: none"> <li>PC4. choose appropriate size and design of the septic tank /soak pit as per CPHEEO norms</li> <li>PC5. prepare cost estimates for fabrication and installation work</li> <li>PC6. identify tools, equipment, material and procedures required for masonry and installation of septic tank /soak pit</li> <li>PC7. stack and store materials and equipment appropriately at the site</li> </ul>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context (Knowledge of the company /organization and its processes)</b>	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KA1. organizations culture and setup if working in a group/organization</li> <li>KA2. rules and regulations of a gated community/ society</li> </ul>
<b>B. Technical Knowledge</b>	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KB1. various types of septic tank(s) /soak pit</li> <li>KB2. working principle of septic tank /soak pit</li> <li>KB3. costing of different types of septic tanks /soak pit</li> <li>KB4. norms of CPHEEO Manual, IS:2470 and National Building Code (NBO) related to fabrication and maintenance of septic tank /soak pit</li> <li>KB5. various geographical conditions and area required for septic tank /soak pit</li> <li>KB6. practitioner hand book</li> <li>KB7. components of septic tank /soak pit design, fabrication and Installation</li> <li>KB8. addition and subtraction</li> <li>KB9. selection, handling and repair of tools required for the operation</li> <li>KB10. use of following key tools and equipment for installing piping fixtures and fitting the prefabricated septic tank like, Tape/Laser measure, Hammers, Trowel, Hoe, Spirit level, Plumb and Right Angle etc.</li> <li>KB11. dos and don'ts while fabricating the septic tank /soak pit in various geographical condition</li> </ul>

SGJ/N6406

Assessment of Site and Size of Septic Tank / Soak Pit

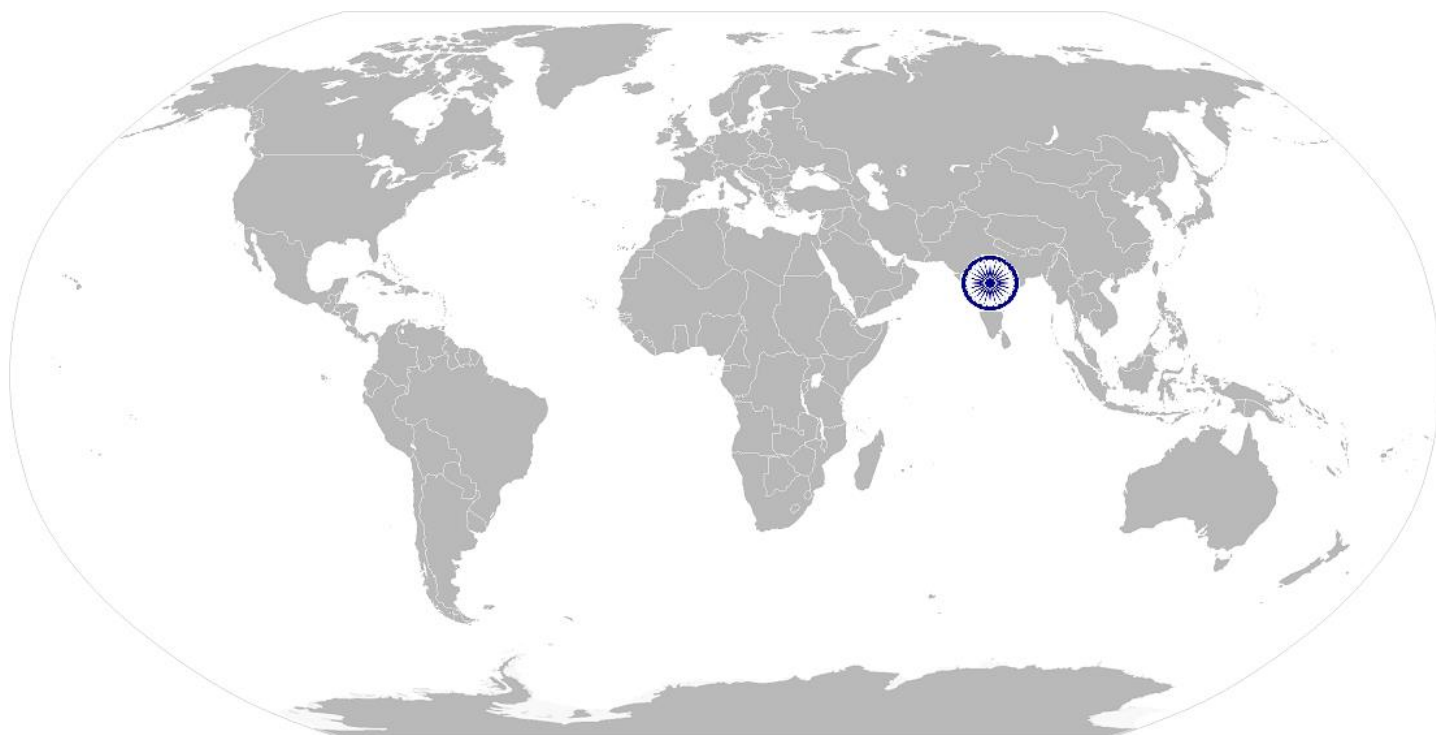
Skills	
<b>A. Core Skills / Generic Skills</b>	<b>Writing Skills</b>
	The user/individual on the job needs to know and understand how to: SA1. fill up documentation applicable to one's role
	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to: SA2. read and understand vernacular/ local language
	<b>Oral Communication (Listening and Speaking skills)</b>
<b>B. Professional Skills</b>	The user/individual on the job needs to know and understand how to: SA3. express statements or information clearly so that co-workers and customers can understand SA4. understand the main points of simple discussions
	<b>Decision making</b>
	The user/individual on the job needs to know and understand how to: SB1. follow the organisation rule-based decision-making process SB2. take decision with systematic course of actions and /or response
	<b>Plan and Organise</b>
	The user/individual on the job needs to know and understand how to: SB3. planning and organisation of work to meet deadline SB4. work constructively and collaboratively with the team
	<b>Customer centric</b>
	The user/individual on the job needs to know and understand how to: SB5. follow code of conduct SB6. manage relationships with clients
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB7. recognise problems and search for solution SB8. choose best methods to complete assigned tasks SB9. approach relevant authority when required
	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB10. apply domain knowledge, observation to select course of action to perform tasks related to fabrication of septic tanks /soak pit
	<b>Critical Thinking</b>
The user/individual on the job needs to know and understand how to: SB11. critically evaluate information obtained from customers and co-workers to perform day to day activities SB12. ask questions for better understanding	

SGJ/N6406

Assessment of Site and Size of Septic Tank / Soak Pit

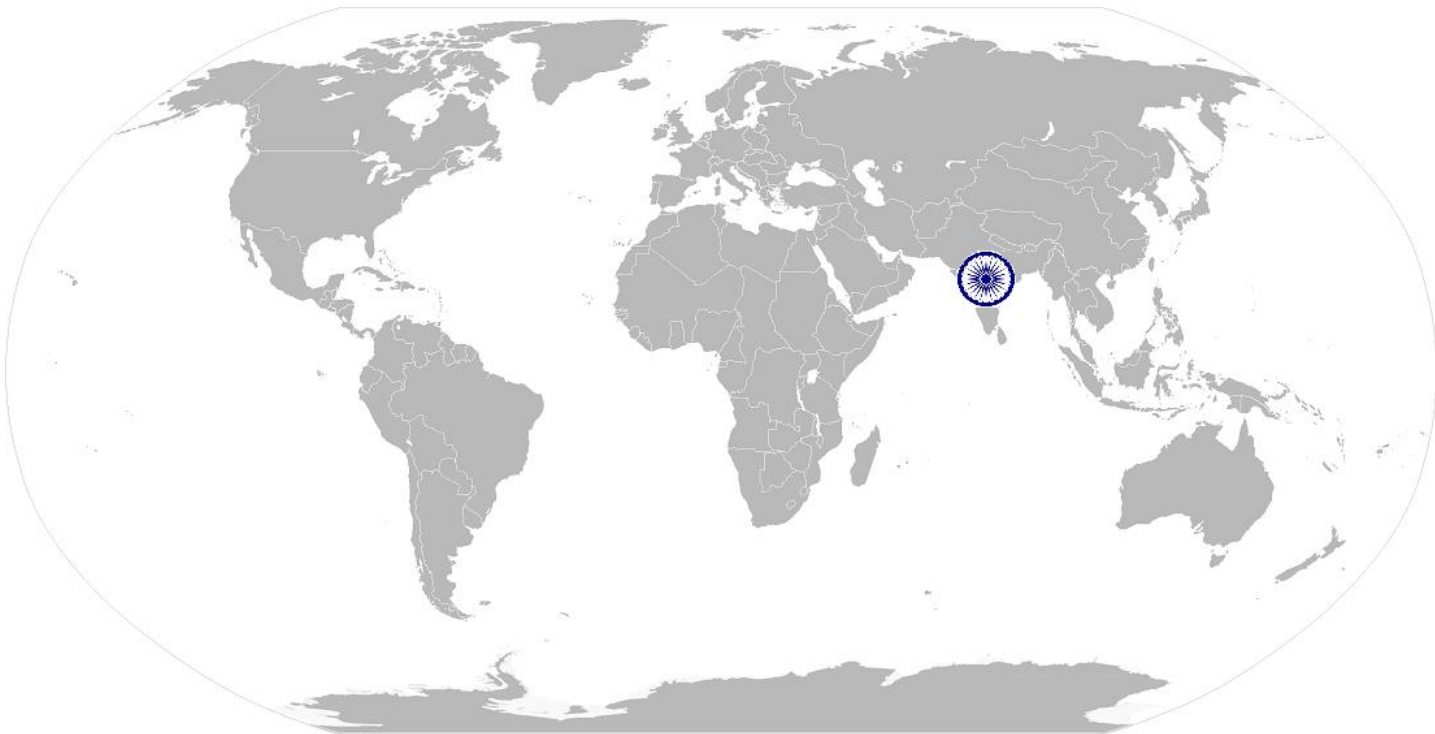
## NOS Version Control

<b>NOS Code</b>	<b>SGJ/N6406</b>		
<b>Credits (NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry Sector</b>	<b>Green Jobs</b>	<b>Drafted on</b>	<b>23/05/2018</b>
<b>Industry Sub-sector</b>	<b>Waste Management</b>	<b>Last reviewed on</b>	<b>30/11/2018</b>
<b>Occupation</b>	<b>Site Assessment</b>	<b>Next review date</b>	<b>29/11/2020</b>





# National Occupational Standard



## Overview

This unit is about excavation, fabrication and installation of the septic tank /soak pit.

SGJ/N6407

**Excavation, fabrication and installation of septic tank /soak pit**

<b>Unit Code</b>	<b>SGJ/N6407</b>
<b>Unit Title (Task)</b>	<b>Excavation, fabrication and installation of Septic Tank / Soak Pit</b>
<b>Description</b>	This unit is about excavation, fabrication and installation of the septic tank /soak pit
<b>Scope</b>	This unit/task covers the following: <ul style="list-style-type: none"> <li>• Marking layout as per the CPHEEO norms</li> <li>• Excavation of the site</li> <li>• Fabrication and installation of septic tank /soak pit</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Marking layout as per the CPHEEO norms</b>	To be competent, the user/ individual must be able to: PC1. mark the specifications of the septic tank /soak pit layout on the ground PC2. carry out ground leveling, surfacing and sloping related tasks prior to fabrication of septic tank / soak pit
<b>Excavation of the site</b>	PC3. carry out excavation for foundation keeping in view adjacent buildings, ground water table and soil conditions PC4. carry out the excavation to the desired depth and required slope using appropriate tools and equipment such as spade, wheel barrows, pans etc. PC5. provide necessary support to vertical side of excavated area to avoid soil collapse as per applicability PC6. ensure appropriate disposal of the material from the excavated pit PC7. check for loose material, soil lumps, pebbles on achieving the desired earth level PC8. ensure surface dressing work is carried out by disposing loose material, gravels, plant roots, sludge, muck or debris as per requirement to the appropriate locations PC9. ensure compaction of base by ramming
<b>Fabrication and installation of septic tank /soak pit</b>	PC10. determine work requirement and sequence of masonry work PC11. mix cement using hoes, cement mixing equipment or hand tools PC12. break bricks and concrete using hammers, drill and hand tools PC13. lay bricks/mortar/concrete in septic tank /soak pit PC14. install proper ventilation pipe PC15. check and ensure re-filling and compaction of excavated trenches, pits surrounding the structures or at necessary location as per soil site conditions PC16. ensure proper finishing of work
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context (Knowledge of the company /organization and its processes)</b>	The user/individual on the job needs to know and understand: KA1. organization culture and setup if working in a group/organization KA2. rules and regulations of a gated community/ society KA3. importance of individual role in the organization KA4. risk and impact of not following defined procedures and work instructions



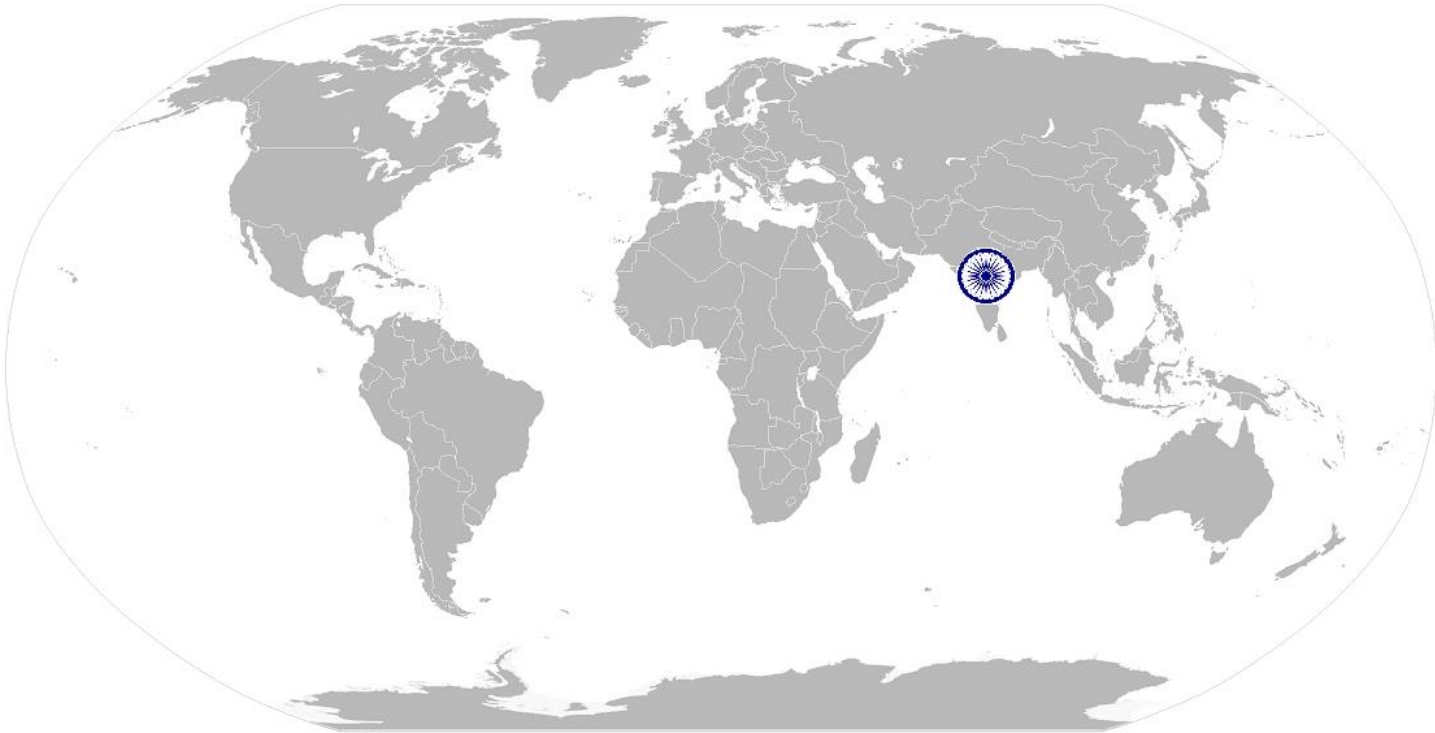
<p><b>B. Technical Knowledge</b></p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. different types of materials (bricks, cements, mortar, concrete)</p> <p>KB2. different types of fixtures (basins, WC pan, water, septic tank, soak pit and ventilation etc)</p> <p>KB3. basic principles of measurement of septic tank /soak pit</p> <p>KB4. different types of masonry terminology</p> <p>KB5. relevant tools for marking and fabrication like hoe, trowel float, hammer etc</p> <p>KB6. dos and don'ts while constructing the septic tanks /soak pit</p> <p>KB7. types of foundation, importance and purpose of foundation, knowledge about depth and height</p> <p>KB8. importance and purpose of septic tank /soak pit knowledge about their suitable location and depth</p> <p>KB9. work space requirement in excavated area, base preparation and levelling</p> <p>KB10. personal protection equipment including the use of related safety gears &amp; equipment</p>
<p><b>Skills</b></p>	
<p><b>A. Core Skills / Generic Skills</b></p>	<p><b>Writing Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA1. fill up documentation applicable to one's role</p> <p><b>Reading Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA2. read vernacular language</p> <p>SA3. understand various signs used on objects</p> <p>SA4. basic numeracy skills</p> <p><b>Oral Communication (Listening and Speaking skills)</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. express statements or information clearly so that other co-workers can understand</p> <p>SA6. understand the main points of simple discussions</p>
<p><b>B. Professional Skills</b></p>	<p><b>Decision Making</b></p> <p>The user/individual on the jobs needs to know and understand how to:</p> <p>SB1. decide on whether the workplace is safe for working</p> <p>SB2. decide on the depth of excavation based on ground water and soil conditions</p> <p><b>Plan and Organize</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB3. plan work and organize required resources</p> <p><b>Customer Centricity</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB4. communicate courteously with others in a polite manner</p> <p>SB5. complete work as per agreed time schedule and quality</p> <p><b>Problem Solving</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB6. approach local authorities, in case of emergency (police, doctor, etc.)</p>



SGJ/N6407

*Excavation, fabrication and installation of septic tank /soak pit*

	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB7. analyze day to day experience to correct future course of action
	<b>Critical Thinking</b>
	N.A.
	<b>Reflective Thinking</b>
	The user/individual on the job needs to know and understand how to: SB8. learn from past mistake regarding use of hazardous tools and equipment

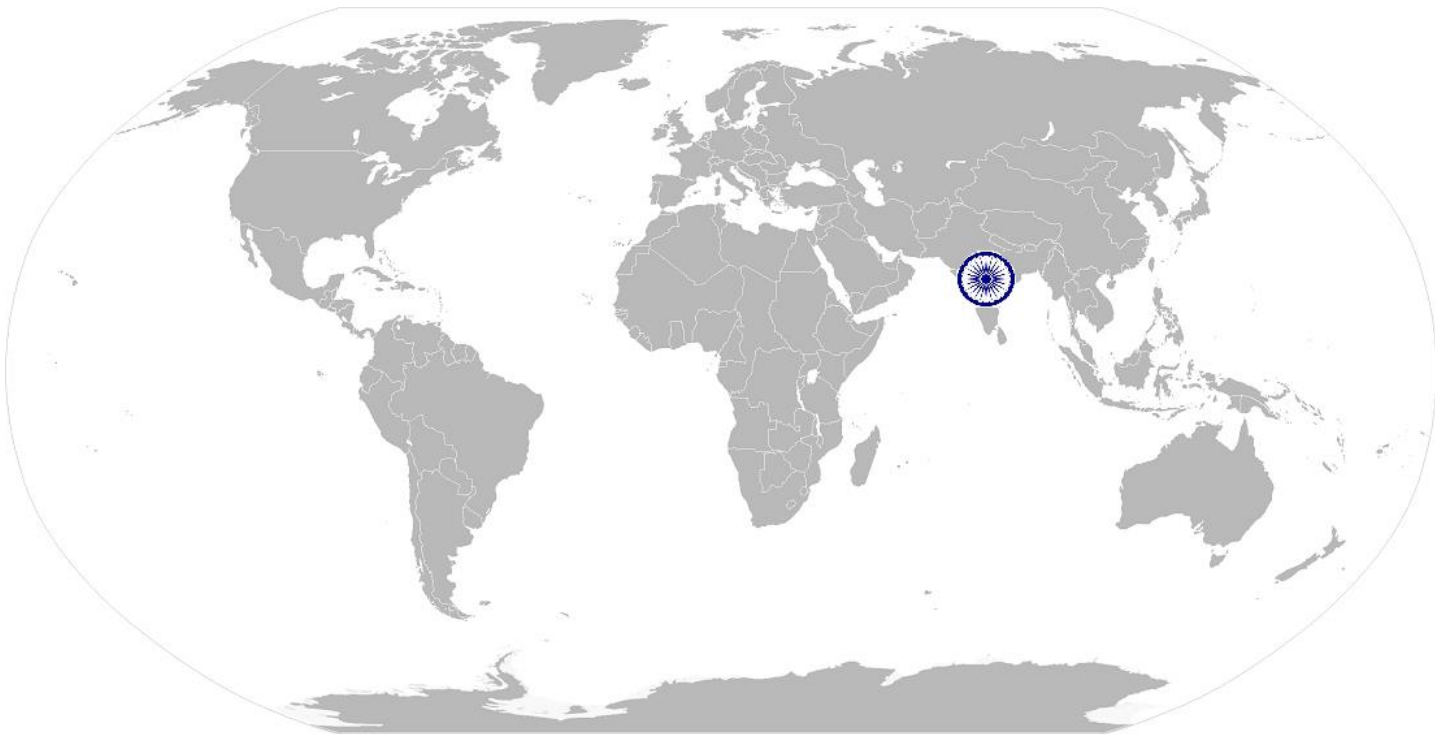


SGJ/N6407

Excavation, fabrication and installation of septic tank /soak pit

## NOS Version Control

NOS Code	SGJ/N6407		
Credits (NSQF)	TBD	Version number	1.0
Industry Sector	Green Jobs	Drafted on	23/05/2018
Industry Sub-sector	Waste Management	Last reviewed on	30/11/2018
Occupation	Fabrication and installation	Next review date	29/11/2020

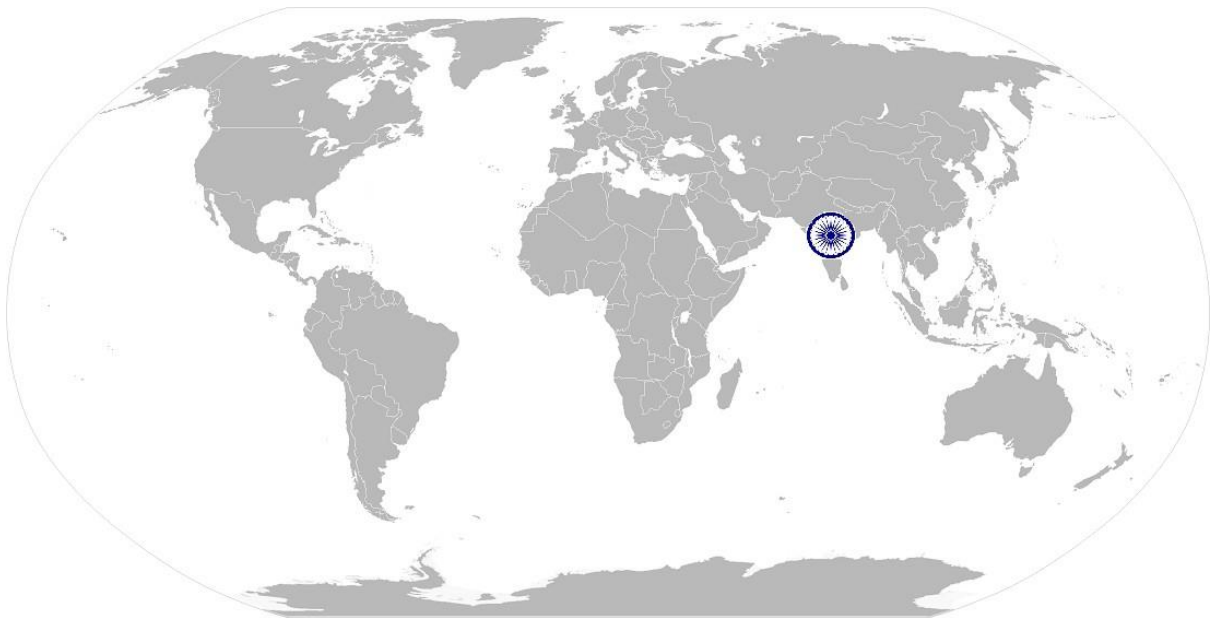


SGJ/N6408

*Installation of prefabricated septic tank*

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# National Occupational Standard



## Overview

The Unit is about installation and demonstration of prefabricated septic tanks.

**SGJ/N6408**

**Installation of prefabricated septic tank**

National Occupational Standard

<b>Unit Code</b>	<b>SGJ/N6408</b>
<b>Unit Title (Task)</b>	<b>Installation of prefabricated septic tank</b>
<b>Description</b>	The Unit is about installation and demonstration of prefabricated septic tanks.
<b>Scope</b>	This unit/task covers the following: <ul style="list-style-type: none"> <li>Installation of prefabricated septic tank</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Installation of prefabricated septic tank</b>	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> <li>PC1. outline layout area required for installation of prefabricated septic tank</li> <li>PC2. excavate the site based on the specifications</li> <li>PC3. undertake laying out intake pipe to the septic tank</li> <li>PC4. ensure proper fixation of septic tank</li> <li>PC5. install ventilation pipe</li> <li>PC6. check proper installation and leakage of the septic tank</li> <li>PC7. demonstrate functioning of septic tank</li> </ul>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context (Knowledge of the company /organization and its processes)</b>	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KA1. organizational culture and setup if working in a group/organization</li> <li>KA2. rules and regulations of a gated community/ society</li> </ul>
<b>B. Technical Knowledge</b>	The individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KB1. various geographical conditions and area required for installation of prefabricated septic tank</li> <li>KB2. various components of prefabricated septic tank and its Installation.</li> <li>KB3. working principle and procedure for installation of prefabricated septic tank</li> <li>KB4. selection and handling of tools required for the installation and fitting of the prefabricated septic tank</li> <li>KB5. dos and don'ts while installing the prefabricated septic tank in various geographical conditions.</li> </ul>
<b>Skills</b>	
<b>A. Core Skills / Generic Skills</b>	<b>Writing Skills</b>
	The user/individual on the job needs to know and understand how to: <ul style="list-style-type: none"> <li>SA1. fill up documentation applicable to one's role</li> </ul>
	<b>Reading Skills</b>
The user/individual on the job needs to know and understand how to: <ul style="list-style-type: none"> <li>SA2. read and understand vernacular/ local language</li> </ul>	

**SGJ/N6408**      **Installation of prefabricated septic tank**

	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/individual on the job needs to know and understand how to: SA3. express statements or information clearly so that others can understand SA4. understand the main points of simple discussions
<b>B. Professional Skills</b>	<b>Decision making</b>
	The user/individual on the job needs to know and understand how to: SB1. follow the organisation rule-based decision-making process SB2. take decision with systematic course of actions and /or response
	<b>Plan and Organise</b>
	The user/individual on the job needs to know and understand how to: SB3. plan and organise work to meet deadline SB4. work constructively and collaboratively with the team
	<b>Customer centric</b>
	The user/individual on the job needs to know and understand how to: SB5. follow code of conduct SB6. manage relationships with team and clients with intent on satisfying its requirement for assembly process
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB7. recognise problems and search for solution SB8. choose best methods to complete assigned tasks SB9. approach relevant authority when required
	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB10. apply domain knowledge, observation to select course of action to perform tasks related to installation of septic tanks
	<b>Critical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB11. critically evaluate information obtained from customers and co-workers to perform day to day activities SB12. ask questions for better understanding

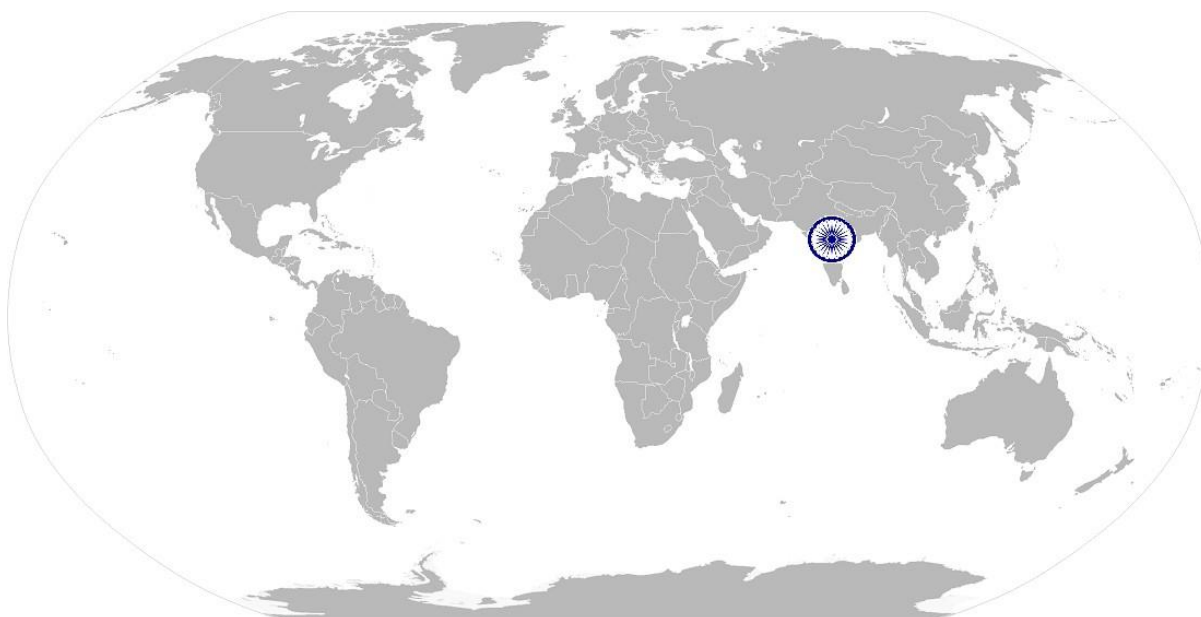


**SGJ/N6408**

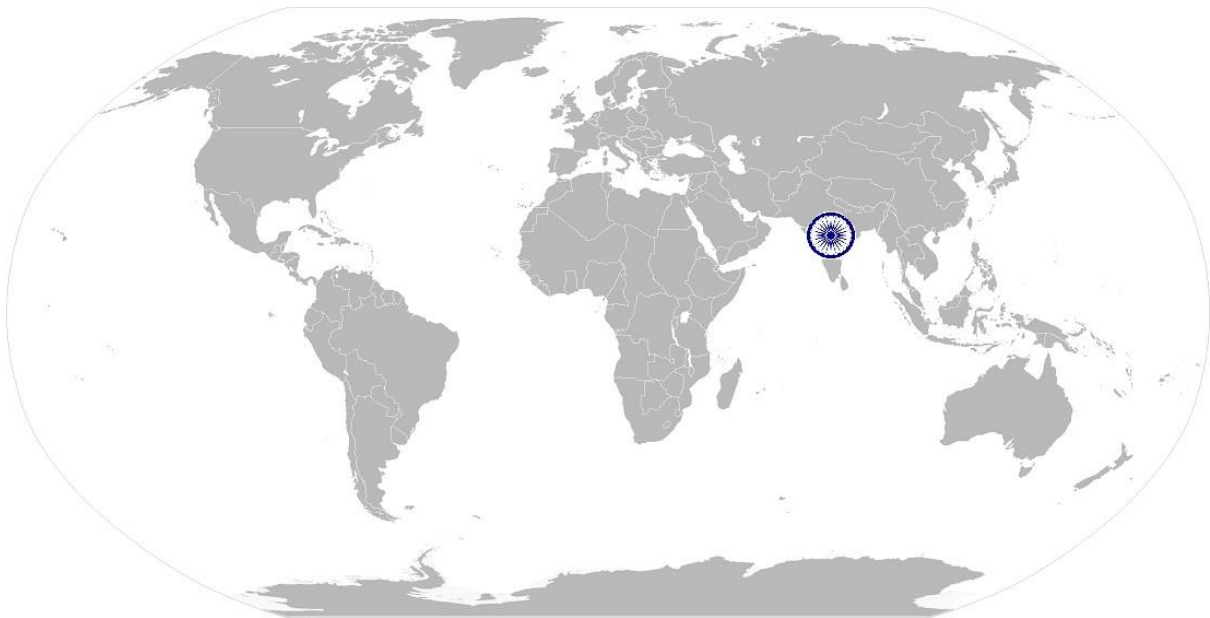
***Installation of prefabricated septic tank***

## **NOS Version Control**

NOS Code		SGJ/N6408	
Credits (NSQF)	TBD	Version number	1.0
Industry Sector	Green Jobs	Drafted on	23/05/2018
Industry Sub-sector	Waste Management	Last reviewed on	30/11/2018
Occupation	Installation	Next review date	29/11/2020



# National Occupational Standard



## Overview

This unit is about diagnosing, repair and maintenance of septic tanks /soak pits including civil work, plumbing work such as pipes fitting and sanitary fixtures in residential, commercial and institutional areas.

**SGJ/N6409**

**Repair and maintenance of septic tank /soak pit**

National Occupational Standard

<b>Unit Code</b>	<b>SGJ/N6409</b>
<b>Unit Title (Task)</b>	<b>Repair and maintenance of septic tank / soak pit</b>
<b>Description</b>	This unit is about diagnosing, repair and maintenance of septic tanks /soak pits including civil work, plumbing work such as pipes fitting and sanitary fixtures in residential, commercial and institutional areas
<b>Scope</b>	This unit/task covers the following: <ul style="list-style-type: none"> <li>• Repair and maintenance of septic tank /soak pit as per the CPHEEO norms</li> <li>• Testing of functionality of septic tank post repair</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Repair and maintenance of septic tank /soak pit as per the CPHEEO norms</b>	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> <li>PC1. identify and diagnose the problems and /or failures in the septic tank / soak pit</li> <li>PC2. empty septic tank /soak pit before repair work</li> <li>PC3. estimate the materials required and number of hours/days required to complete the repair work</li> <li>PC4. prepare cost estimates and timeline for repair work</li> <li>PC5. schedule the repair activities and deliver the task within stipulated time</li> <li>PC6. carry out repair of plumbing work including inlet and outlet baffle, partition wall, access opening and cover, ventilation or vent pipe, outlet pipe</li> <li>PC7. respond to emergency situations for resolving immediate safety concerns</li> <li>PC8. ensure minimum wastage of materials and damage to the septic tank /soak pit during repair and maintenance</li> <li>PC9. clear the work area and ensure proper waste disposal after completion of repair work</li> </ul>
<b>Testing of functionality of septic tank /soak pit post repair</b>	To be competent, the user/ individual must be able to: <ul style="list-style-type: none"> <li>PC10. ensure the system of water flow, sewage flow, etc</li> <li>PC11. test the functionality of the septic tank / soak pit (post repair work)</li> </ul>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context (Knowledge of the company /organization and its processes)</b>	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KA1. organizations culture and setup of working in a group/organization</li> <li>KA2. rules and regulations of a gated community/ society</li> <li>KA3. importance of the individual's role in the work flow</li> </ul>

**SGJ/N6409**

**Repair and maintenance of septic tank /soak pit**

<p><b>B. Technical Knowledge</b></p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. local language</p> <p>KB2. plumbing and masonry terminologies</p> <p>KB3. simple mathematical calculation for quantity of material required and its costing</p> <p>KB4. relevant hand and power tools for repair works such as wrecking bar, pliers, power drill, pipe cutter, pipe bender, threading tool, hacksaw, measure tape etc.</p> <p>KB5. different types of materials required for basic sanitary fittings and necessary fixtures</p> <p>KB6. various components of septic tank /soak pit designs and fabrication such as inlet and outlet baffle, partition wall, access opening and cover, ventilation or vent pipe, outlet pipe</p> <p>KB7. identification of various types of defects such as leakages, improper alignment, damage of inlet and outlet pipes etc.</p>
<p><b>Skills</b></p>	
<p><b>A. Core Skills / Generic Skills</b></p>	<p><b>Writing Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA1. filling of forms as required for seeking approval of repair work</p> <p>SA2. read vernacular language</p> <p>SA3. express statements or information clearly so that co-worker can understand</p> <p>SA4. understand the crux of discussions</p> <p><b>Reading skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. measure and mark as required</p> <p><b>Oral Communication (Listening and Speaking Skills)</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA6. delegate work to co-workers/team as required</p> <p>SA7. interpret instructions and requirement correctly</p> <p>SA8. co-ordinate with co-workers</p>
<p><b>B. Professional Skills</b></p>	<p><b>Decision Making</b></p> <p>The user/individual on the jobs needs to know and understand how to:</p> <p>SB1: report potential sources of danger and emergency</p> <p>SB2: follow prescribed procedure in the event of an accident</p> <p>SB3: wear appropriate safety gear to avoid an accident</p> <p><b>Plan and Organize</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB4: plan schedule of work</p>

**SGJ/N6409**

***Repair and maintenance of septic tank /soak pit***

	<b>Customer Centricity</b>
	The user/individual on the job needs to know and understand how to: SB5: communicate courteously with others in a polite manner
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB6: approach local authorities, in case of emergency (police, doctor, etc.)
	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB7: analyze day to day experience to correct future course of action
	<b>Critical Thinking</b>
	N.A.
<b>Reflective Thinking</b>	
The user/individual on the job needs to know and understand how to: SB8: Learn from past mistake regarding use of hazardous tools and equipment	

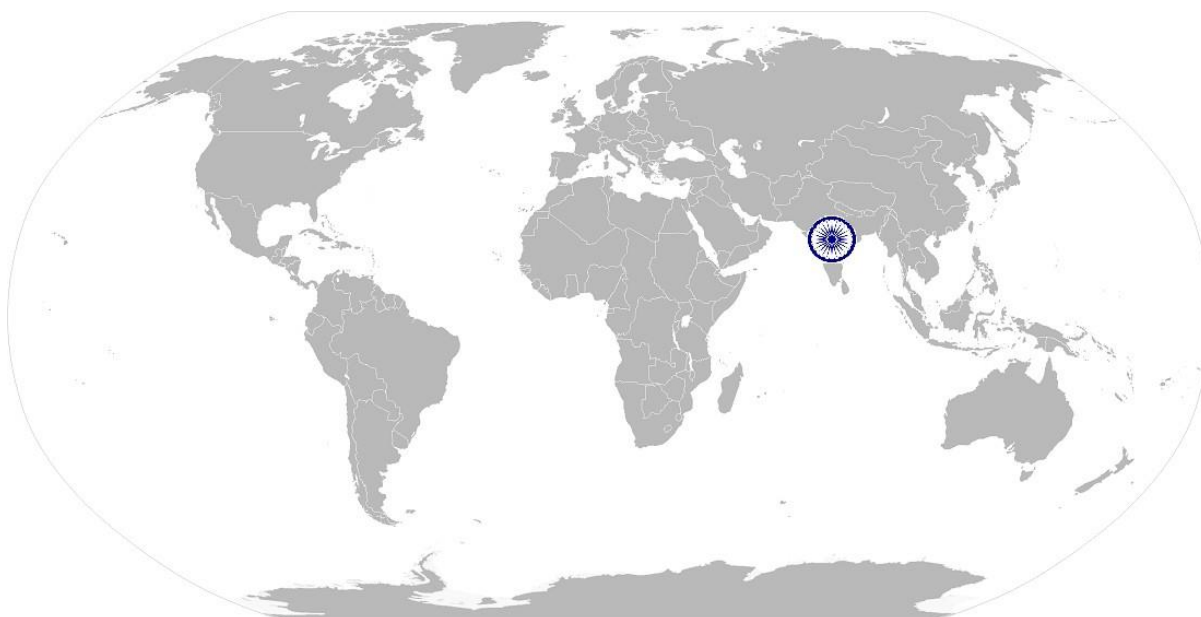


SGJ/N6409

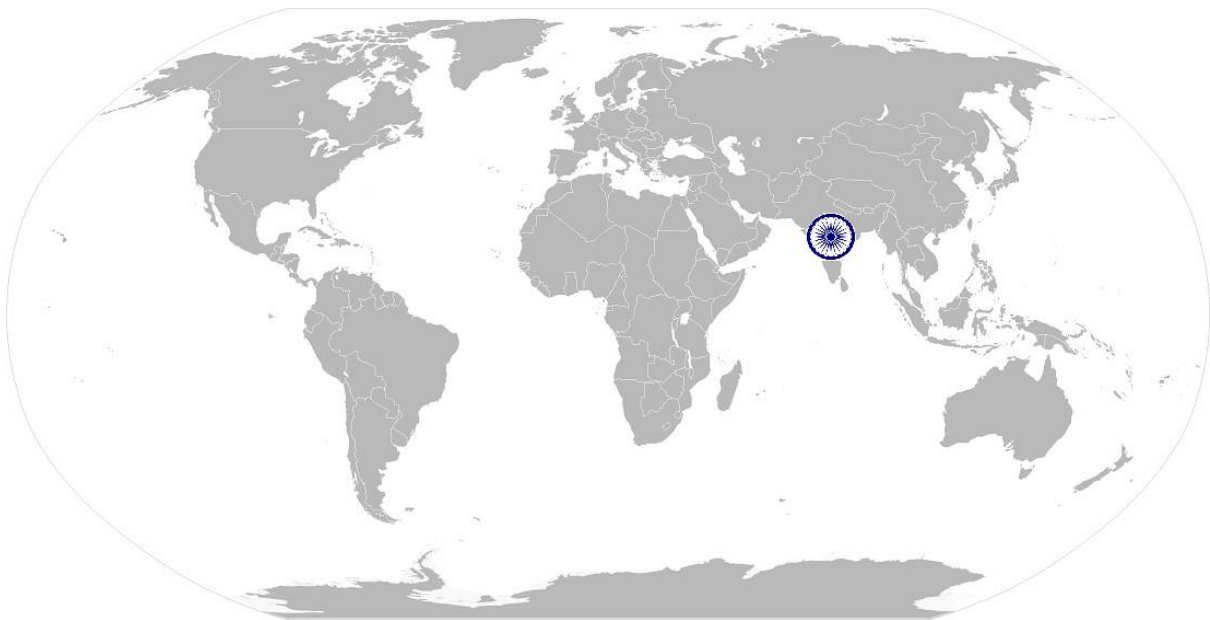
Repair and maintenance of septic tank /soak pit

**OS Version Control**

<b>NOS Code</b>	<b>SGJ/N6409</b>		
<b>Credits (NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry Sector</b>	<b>Green Jobs</b>	<b>Drafted on</b>	<b>23/05/2018</b>
<b>Industry Sub-sector</b>	<b>Waste Management</b>	<b>Last reviewed on</b>	<b>30/11/2018</b>
<b>Occupation</b>	<b>Repair and maintenance</b>	<b>Next review date</b>	<b>29/11/2020</b>



# National Occupational Standard



## Overview

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

SGJ/N6410

Maintain personal health & safety in FSSM

National Occupational Standard

<b>Unit Code</b>	SGJ/N6410
<b>Unit Title (Task)</b>	Maintain Personal Health & Safety in FSSM
<b>Description</b>	This unit is about being aware of, communicating & taking steps towards minimizing potentials hazards and dangers of accidents on the job and maintaining occupational health & safety.
<b>Scope</b>	This unit/task covers the following: <ul style="list-style-type: none"> <li>Establish and follow safe work procedure</li> <li>Handling of tools and equipment for health and safety purpose</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Establish and follow safe work procedure</b>	To be competent, the user/individual on the job must be able to: <ul style="list-style-type: none"> <li>PC1. display sign boards/caution such as “Work in progress” or “Danger” to avoid accidents related to use of sharp tools and equipment</li> <li>PC2. identify contact person when workplace safety policies are violated</li> <li>PC3. provide information about incident/violation</li> <li>PC4. identify the location of first aid materials and administer first-aid</li> <li>PC5. identify personal safety hazards or work site hazards</li> </ul>
<b>Handling of tools and equipment for health and safety purpose</b>	To be competent, the user/individual on the job must be able to: <ul style="list-style-type: none"> <li>PC6. identify the personal protection equipment required for specific work activity and location</li> <li>PC7. attend safety drills organised by the company or any other authority</li> <li>PC8. demonstrate safe and accepted practices for personal protection</li> <li>PC9. learn first-aid procedure</li> <li>PC10. use insect repellents and safe drinking water</li> </ul>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context (Knowledge of the organization and its processes)</b>	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KA1. organization’s documentation policy on safety and hazards and personnel management</li> <li>KA2. organization’s reporting structure &amp; organization culture</li> <li>KA3. organization’s different department and concerned authority</li> </ul>
<b>B. Technical Knowledge</b>	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KB1. how to use tools and equipment without suffering any physical harm</li> <li>KB2. first-aid procedure</li> <li>KB3. diseases caused due to unsafe water, biting of insects and following unhygienic practices</li> <li>KB4. evacuation and emergency procedures</li> <li>KB5. occupational health and safety (OHS) standards</li> <li>KB6. importance of personal protective equipment (PPE)</li> </ul>



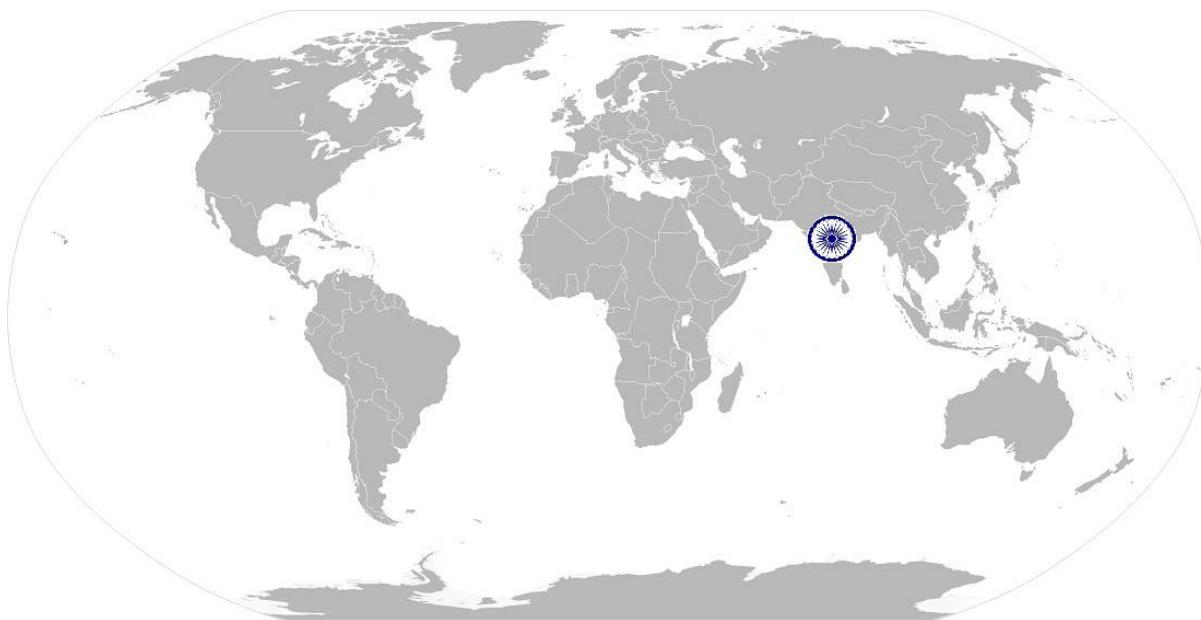
SGJ/N6410

Maintain personal health & safety in FSSM

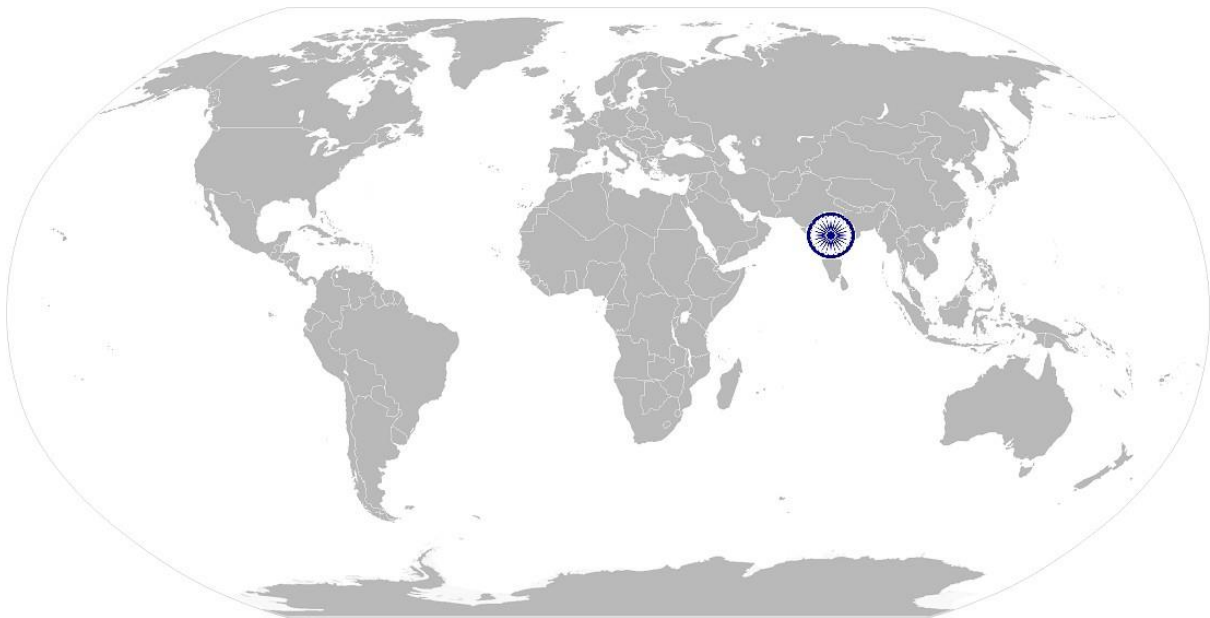
Skills (S)	
<b>A. Core Skills/ Generic Skills</b>	<b>Oral Communication skills (Listening and Speaking Skills)</b>
	The user/ individual on the job needs to know and understand how to: SA1. effectively communicate the danger and emergency SA2. express statements to inform clearly so that others can understand SA3. understand the main points of simple discussions
	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to: SA4. read from different sources SA5. understand the various colour codes used in safety
<b>B. Professional Skills</b>	<b>Organising Skills</b>
	The user/individual on the job needs to know and understand how to: SA6. keep all the tools in an organised manner so as to avoid accidents SA7. keep the work environment safe and clean
	<b>Decision Making</b>
	The user/individual on the jobs needs to know and understand how to: SB1: report potential sources of danger and emergency SB2: follow prescribed procedure in the event of an accident SB3: wear appropriate safety gear to avoid an accident
	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand how to: SB4: plan safety check schedules
	<b>Customer Centricity</b>
	The user/individual on the job needs to know and understand how to: SB5: communicate courteously with others in a polite manner
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB6: approach local authorities, in case of emergency (police, doctor, etc.)
<b>Analytical Thinking</b>	
The user/individual on the job needs to know and understand how to: SB7: analyze day to day experience to correct future course of action	
<b>Critical Thinking</b>	
N.A.	
<b>Reflective Thinking</b>	
The user/individual on the job needs to know and understand how to: SB8: learn from past mistake regarding use of hazardous tools and equipment	

## **NOS Version Control**

<b>NOS Code</b>	<b>SGJ/N6410</b>		
<b>Credits (NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry</b>	<b>Green Jobs</b>	<b>Drafted on</b>	<b>23/05/2018</b>
<b>Industry Sub-sector</b>	<b>Waste Management</b>	<b>Last reviewed on</b>	<b>30/11/2018</b>
<b>Occupation</b>	<b>Health and safety</b>	<b>Next Review Date</b>	<b>29/11/2020</b>



# National Occupational Standard



## **Overview**

**This unit covers basic practices that improves the effectiveness of working with co-workers.**

Work effectively with co-workers

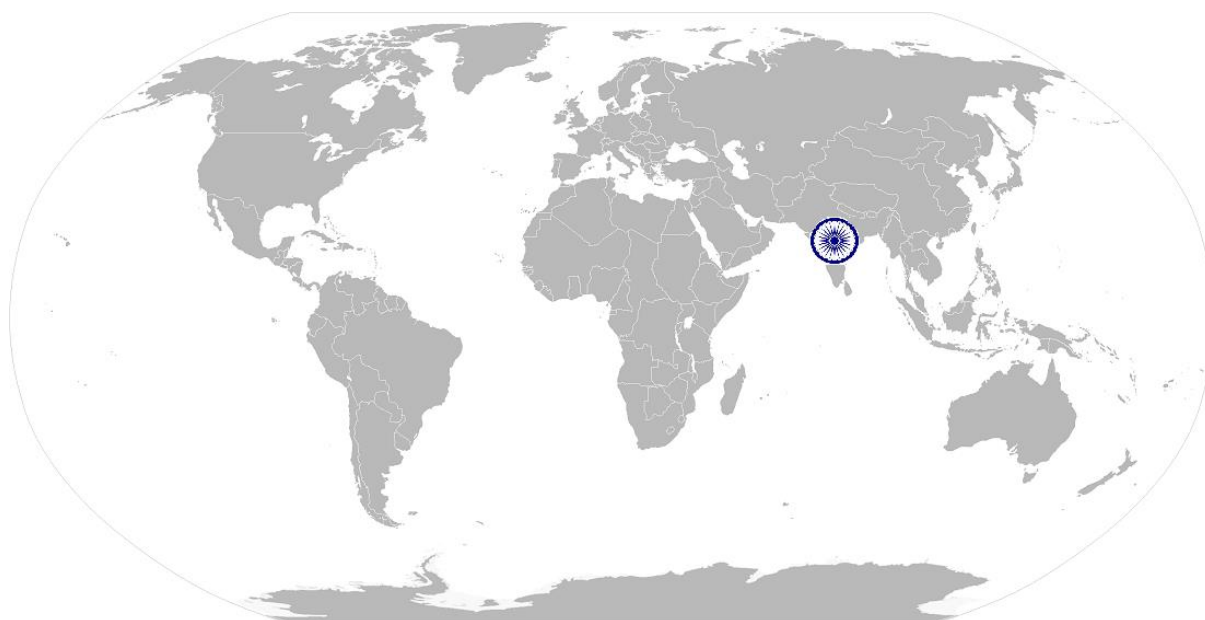
<b>Unit Code</b>	<b>SGJ/N0120</b>
<b>Unit Title (Task)</b>	<b>Work effectively with co-workers</b>
<b>Description</b>	This unit covers basic practices that improves the effectiveness of working with co-workers.
<b>Scope</b>	This unit/task covers the following: <ul style="list-style-type: none"> <li>Working effectively with co-workers</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Working effectively with co-workers</b>	The user/individual on the job should be able to: <ul style="list-style-type: none"> <li>PC1. assist other colleagues in performing tasks in a positive manner where required and possible</li> <li>PC2. consult and assist others to maximize effectiveness and efficiency in carrying out tasks</li> <li>PC3. demonstrate appropriate communication etiquette while working</li> <li>PC4. demonstrate active listening skills while interacting with others at work</li> <li>PC5. demonstrate responsible and disciplined behaviors at the workplace</li> <li>PC6. escalate grievances and problems to appropriate authority as per procedure to resolve them and avoid conflict</li> <li>PC7. ensure collaboration and group participation to achieve common goals</li> </ul>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational context (Knowledge of the company / organization and its processes)</b>	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KA1. relevant people and their responsibilities within the work area</li> </ul>
<b>B. Technical Knowledge</b>	The user/individual on the job needs to know and understand: <ul style="list-style-type: none"> <li>KB1. importance of effective communication in the workplace</li> <li>KB2. importance of teamwork in organizational and individual success</li> <li>KB3. various components of effective communication</li> <li>KB4. key elements of active listening</li> <li>KB5. value and importance of active listening and assertive communication barriers to effective communication</li> <li>KB6. importance of tone and pitch in effective communication</li> <li>KB7. importance of avoiding casual expletives and unpleasant terms while communicating professional circles</li> <li>KB8. how poor communication practices can disturb people, environment and cause problems for the employee, the employer and the customer</li> <li>KB9. key elements and importance of non-verbal communication</li> <li>KB10. importance of ethics for professional success</li> <li>KB11. importance of discipline for professional success</li> <li>KB12. what constitutes disciplined behavior for a working professional</li> <li>KB13. common reasons for interpersonal conflict</li> <li>KB14. importance of developing effective working relationships for professional success</li> <li>KB15. expressing and addressing grievances appropriately and effectively</li> <li>KB16. importance and ways of managing interpersonal conflict effectively</li> <li>KB17. importance of teamwork and collaboration</li> </ul>

Skills (S)	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	The user/ individual on the job needs to know and understand how to: SA1. note the information communicated SA2. record the readings of various parameters in the prescribed format SA3. note down observations related to the activity SA4. write information documents to internal departments/ internal teams
	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to: SA5. read from different sources- books, screens in machines and signage. SA6. read internal information documents sent by internal teams
	<b>Oral Communication (Listening and Speaking skills)</b>
The user/individual on the job needs to know and understand how to: SA7. express statements or information clearly so that others can hear and understand SA8. participate in and understand the main points of simple discussions SA9. respond appropriately to any queries SA10. communicate effectively with supervisor, peers and subordinates	
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/individual on the job needs to know and understand how to: SB1. follow organization rule-based decision-making process SB2. analyze critical points in day to day tasks and identify control measures to solve the issue SB3. handle issues in case the superior is not available (as per the authority matrix defined by the organization)
	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand how to: SB4. plan and organize work to meet deadlines SB5. work constructively and collaboratively with others SB6. support the superiors in scheduling tasks
	<b>Customer Centricity</b>
	The user/individual on the job needs to know and understand how to: SB7. follow organization code of conduct SB8. manage relationships with public with intent of satisfying its requirements for service delivery
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB9. recognize problems and search for solutions SB10. choose best methods to complete assigned tasks SB11. approach relevant authority when required
	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB12. apply domain knowledge, observations and data to select course of action to perform tasks
	<b>Critical Thinking</b>
	N.A.
	<b>Reflective Thinking</b>
The user/individual on the job needs to know and understand how to: SB13: learn from past mistake regarding use of hazardous tools and equipment	

Work effectively with co-workers

## NOS Version Control

NOS Code	SGJ/N0120		
Credits (NSQF)	TBD	Version number	1.0
Industry	Green Jobs	Drafted on	23/05/2018
Industry Sub-sector	Waste Management	Last reviewed on	30/11/2018
Occupation	Human Resource Development	Next review date	29/11/2020

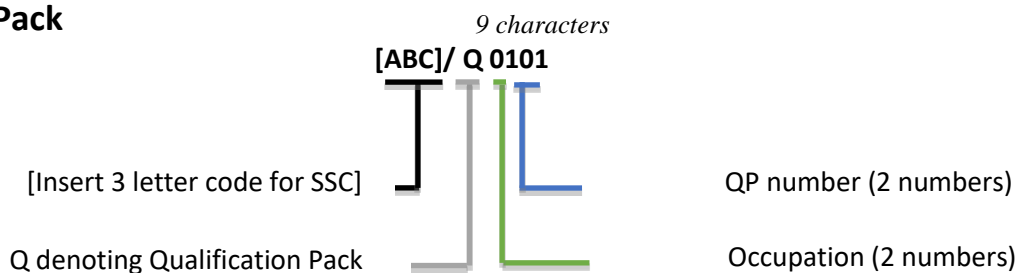


“Qualification Pack for “Septic Tank Technician”

Annexure

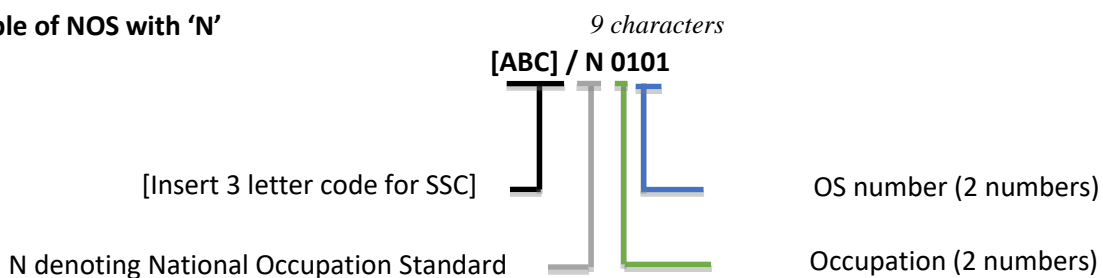
**Nomenclature for QP and NOS**

**Qualifications Pack**



**Occupational Standard**

**An example of NOS with ‘N’**



*“Qualification Pack for “Septic Tank Technician”*

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

Sub-sector		Range of Occupation numbers
<b>Renewable Energy (01-35)</b>	<b>Solar Photovoltaic</b>	01-05
	<b>Solar Thermal</b>	06-10
	<b>Wind</b>	11-15
	<b>Hydro</b>	16-20
	<b>Biomass</b>	21-25
	<b>Geothermal</b>	26-30
	<b>All Renewables (Cross-cutting/ Enabling Activities)</b>	31-35
<b>Green Transportation (36 - 40)</b>	<b>Alternative Fuel Transportation</b>	36-40
	<b>Bio-fuels and Farming</b>	40-45
	<b>Other Green Transportation</b>	46-50
<b>Green Fabrication (51- 60)</b>	<b>Green Buildings</b>	51-55
	<b>Energy Efficiency</b>	56-60
<b>Waste Management (61- 65)</b>	<b>Waste Management</b>	61-65
<b>Water Management ( 66-70)</b>	<b>Water and Wastewater Management</b>	66-70
<b>Co- Generation (71 - 75)</b>	<b>Co-generation</b>	71-75
<b>Other Green Jobs (76- 99)</b>	<b>Carbon Sinks</b>	76-80
	<b>Environmental Compliance and Sustainability Planning</b>	81-85
	<b>Other Green Jobs</b>	85-99

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



**“Qualification Pack for “Septic Tank Technician”**

**CRITERIA FOR ASSESSMENT OF TRAINEES**

**Job Role** Septic Tank Technician

**Qualification Pack** SGJ/Q 6402

**Sector Skill Council** Green Jobs

**Guidelines for Assessment**

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
7. In case of *unsuccessful completion*, the trainee may seek reassessment on the Qualification Pack

Compulsory NOS		Marks Allocation			
Total Marks: 270		Total Marks	Out Of	Theory	Skills Practical
Assessment outcomes	Assessment Criteria for outcomes				
SGJ/N6406: Assessment of site and size of septic tank / soak pit	PC1. assess user requirement to position septic tank/soak pit	56	5	2	3
	PC2. estimate load as per the number of users in the family or as per usage at the commercial/institutional site		5	2	3
	PC3. assess the located site of septic tank / soak pit considering ground conditions, water table, water pipeline, underground water tank, etc.		7	3	4
	PC4. choose appropriate size and design of the septic tank /soak pit as per CPHEEO norms		6	2	4
	PC5. prepare cost estimates for fabrication and installation work		5	2	3
	PC6. identify tools, equipment, material and procedures required for masonry and installation of septic tank /soak pit		5	2	3
	PC7. stack and store materials and equipment appropriately at the site		3	1	2
	<b>TOTAL</b>	<b>36</b>	<b>14</b>	<b>22</b>	
SGJ/N6407: Excavation,	PC1. mark the specifications of the septic tank /soak pit layout on the ground	76	5	2	3

**“Qualification Pack for “Septic Tank Technician”**

fabrication and installation of septic tank / soak pit	PC2. carry out ground leveling, surfacing and sloping related tasks prior to fabrication of septic tank / soak pit		7	2	5
	PC3. carry out excavation for foundation keeping in view adjacent buildings, ground water table and soil conditions		3	1	2
	PC4. carry out the excavation to the desired depth and required slope using appropriate tools and equipment such as spade, wheel barrows, pans etc.		5	2	3
	PC5. provide necessary support to vertical side of excavated area to avoid soil collapse as per applicability		6	2	4
	PC6. ensure appropriate disposal of the material from the excavated pit		3	1	2
	PC7. check for loose material, soil lumps, pebbles on achieving the desired earth level		5	2	3
	PC8. ensure surface dressing work is carried out by disposing loose material, gravels, plant roots, sludge, muck or debris as per requirement to the appropriate locations		5	2	3
	PC9. ensure compaction of base by ramming		3	1	2
	PC10. determine work requirement and sequence of masonry work		5	2	3
	PC11. mix cement using hoes, cement mixing equipment or hand tools		5	2	3
	PC12. break bricks and concrete using hammers, drill and hand tools		5	2	3
	PC13. lay bricks/mortar/concrete in septic tank /soak pit		5	2	3
	PC14. Install proper ventilation pipe		6	2	4
	PC15. check and ensure re-filling and compaction of excavated trenches, pits surrounding the structures or at necessary location as per soil site conditions		5	2	3
	PC16. ensure proper finishing of work		3	1	2
			<b>TOTAL</b>	<b>76</b>	<b>28</b>
SGJ/N6408: Installation of prefabricated septic tank	PC1. outline the layout area required for installation of prefabricated septic tank	<b>33</b>	6	2	4
	PC2. excavate the site based on the specifications		5	2	3
	PC3. undertake laying out intake pipe to prefabricated septic tank		5	2	3
	PC4. ensure proper fixation of septic tank		4	2	2

**“Qualification Pack for “Septic Tank Technician”**

	PC5. install ventilation pipe		6	2	4
	PC6. check the proper installation and leakage from prefabricated septic tank		3	1	2
	PC7. demonstrate the functioning of prefabricated septic tank		4	1	3
		<b>TOTAL</b>	<b>33</b>	<b>12</b>	<b>21</b>
SGJ/N6409: Repair and maintenance of septic tank /soak pit	PC1. identify and diagnose the problems and /or failures in the septic tank / soak pit	<b>50</b>	5	2	3
	PC2. empty septic tank /soak pit before repair work of the septic tank / soak pit (post repair work)		5	2	3
	PC3. estimate the materials required and number of hours/days required to complete the repair work		5	2	3
	PC4. prepare cost estimates and timeline for repair work		5	2	3
	PC5. schedule the repair activities and deliver the task within stipulated time		4	2	2
	PC6. carry out repair of plumbing work including inlet and outlet baffle, partition wall, access opening and cover, ventilation or vent pipe, outlet pipe		4	1	3
	PC7. respond to emergency situations for resolving immediate safety concerns		4	2	2
	PC8. ensure minimum wastage of materials and damage to the septic tank /soak pit during repair and maintenance		3	1	2
	PC9. clear the work area and ensure proper waste disposal after completion of repair work		5	2	3
	PC10. ensure the system of water flow, sewage flow, etc		5	2	3
	PC11. test the functionality		5	2	3
		<b>TOTAL</b>	<b>50</b>	<b>20</b>	<b>30</b>
SGJ/N6410: Maintain personal health & safety in FSSM	PC1. display sign boards/caution such as “Work in progress” or “Danger” to avoid accidents related to use of sharp tools and equipment	<b>40</b>	6	2	4
	PC2. identify contact person when workplace safety policies are violated		5	2	3
	PC3. provide information about incident/violation		4	2	2
	PC4. identify the location of first aid materials and administer first-aid		3	1	2
	PC5. identify personal safety hazards or work site hazards		3	1	2
	PC6. identify the personal protection equipment required for specific work activity and location		4	1	3
	PC7. attend safety drills organised by the company or any other authority		3	1	2

**“Qualification Pack for “Septic Tank Technician”**

	.				
	PC8. demonstrate safe and accepted practices for personal protection		5	2	3
	PC9. learn first-aid procedure		3	1	2
	PC10. use insect repellents and safe drinking water		4	2	2
		<b>TOTAL</b>	<b>40</b>	<b>15</b>	<b>25</b>
SGJ/N0120: Work effectively with co-worker	PC1. assist other colleagues in performing tasks in a positive manner where required and possible	<b>35</b>	5	2	3
	PC2. consult and assist others to maximize effectiveness and efficiency in carrying out tasks		5	2	3
	PC3. demonstrate appropriate communication etiquette while working		5	2	3
	PC4. demonstrate active listening skills while interacting with others at work		5	2	3
	PC5. demonstrate responsible and disciplined behaviors at the workplace		5	2	3
	PC6. escalate grievances and problems to appropriate authority as per procedure to resolve them and avoid conflict		5	2	3
	PC7. ensure collaboration and group participation to achieve common goals		5	2	3
		<b>TOTAL</b>	<b>35</b>	<b>14</b>	<b>21</b>