

Model Curriculum

Septic Tank Technician

SECTOR: GREEN JOBS
SUB-SECTOR: WASTE MANAGEMENT
OCCUPATION: OPERATION & MAINTENANCE
REF ID: SGJ/Q6402, V 1.0
NSQF LEVEL: 4



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

SKILL COUNCIL FOR GREEN JOBS

for the

MODEL CURRICULUM

Complying to National Occupational Standards of

Job Role/ Qualification Pack: **'Septic Tank Technician'** QP No. **'SGJ/Q6402 NSQF Level 4'**

Date of Issuance: **November 30th, 2018**

Valid up to: **November 29th, 2020**

* Valid up to the next review date of the Qualification Pack


Authorised Signatory
(Skill Council for Green Jobs)

TABLE OF CONTENTS

1. Curriculum	01
2. Trainer Prerequisites	05
3. Annexure: Assessment Criteria	06

Septic Tank Technician

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Septic Tank Technician”, in the “Green Jobs” Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Septic Tank Technician		
Qualification Pack Name & Reference ID	SGJ/Q6402, V 1.0		
Version No.	1.0	Version Update Date	30.11.2018
Pre-requisites to Training	5 th Pass with minimum experience of three years in masonry work		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Assess the site and size of the septic tanks • Excavate, fabricate and install fixed septic tanks as per Central Public Health and Environmental Engineering Organization(CPHEEO) norms • Install prefabricated septic tanks • Repair and maintain septic tanks • Work effectively with co-workers • Maintain Health and safety in septic tank fabrication and installation 		

This course encompasses 6 out of 6 Compulsory National Occupational Standards (NOS) of “Septic Tank Technician” Qualification Pack issued by “Skill Council for Green Jobs”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Assessment of site and size of septic tank / soak pit</p> <p>Theory Duration (hh:mm) 04:00</p> <p>Practical Duration (hh:mm) 06:00</p> <p>Corresponding NOS Code SGJ/N6406</p>	<ul style="list-style-type: none"> Assess user requirement to position septic tank at the site considering ground conditions, water table, water pipeline, underground water tank, etc. Determine the estimated load as per the user requirement or the estimated usage at the commercial/institutional site List CPHEEO norms for appropriate size and design of the septic tanks Choose appropriate size and design of the septic tank as per the CPHEEO Norms Identify tools, equipment and material required for fabrication and installation of septic tank Prepare cost estimation for fabrication of septic tank Prepare cost estimation of installation work Prepare cost estimation for material required Stack and store materials and equipment appropriately at the site Apply do's and don'ts while doing assessment of the site and size of the septic tank 	<p>Tape/Laser measure, Hammers, Trowel, Hoe, Spirit level, Plumb and Right Angle, Hand gloves, helmet/ cap, appropriate mask to cover face, reflective vest</p>
2	<p>Excavation, fabrication and installation of septic tank / soak pit</p> <p>Theory Duration (hh:mm) 06:00</p> <p>Practical Duration (hh:mm) 14:00</p> <p>Corresponding NOS Code SGJ/N6407</p>	<ul style="list-style-type: none"> Mark the specifications of the septic tank /soak pit layout on the ground Carry out ground levelling, surfacing and sloping Excavate for foundation as per design chosen in participant hand book Apply necessary support to vertical side of excavated area to avoid soil Dispose material from the excavated site Ensure surface dressing and compaction of base by ramming Fabricate septic tank in sequence of masonry work Install proper ventilation pipe Check re-filling, compaction of excavated trenches, pits surrounding the structures as per soil site conditions Ensure proper finishing of work Apply do's and don'ts while fabricating septic tank 	<p>Different types and size of 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.</p> <p>Hand gloves, helmet/ cap, appropriate mask to cover face, reflective vest. (One for each candidate), gum boots etc.</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
3	<p>Installation of prefabricated septic tank</p> <p>Theory Duration (hh:mm) 03:00</p> <p>Practical Duration (hh:mm) 07:00</p> <p>Corresponding NOS Code SGJ/N6408</p>	<ul style="list-style-type: none"> • Mark layout area for installation of prefabricated septic tank • Excavate the site based on the specifications • Lay intake pipe to the septic tank • Install ventilation pipe • Check proper installation and leakage of the septic tank • Demonstrate functioning of prefabricated septic tanks • Apply do's and don'ts while installing the prefabricated septic tank 	<p>Different types and size of 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.</p> <p>Hand gloves, helmet/ cap, appropriate mask to cover face, reflective vest. (One for each candidate), gum boots etc.</p>
4	<p>Repair and maintenance of septic tank /soak pit</p> <p>Theory Duration (hh:mm) 04.00</p> <p>Practical Duration (hh:mm) 10.00</p> <p>Corresponding NOS Code SGJ/N6409</p>	<ul style="list-style-type: none"> • Identify and diagnose the issue of the septic tank • Estimate materials and hours/days required to complete the repair work • Prepare cost estimates and timeline for repair work • Schedule the repair activities • Carry out repair of plumbing work including inlet and outlet baffle, partition wall, access opening and cover, ventilation or vent pipe, outlet pipe with minimum wastage of material • Test the functionality of septic tanks post repair • Ensure the system of water flow, sewage flow, etc. • Apply do's and don'ts while repairing septic tank 	<p>Tape/Laser measure, Hammers, Trowel, Hoe, Spirit level, Plumb and Right Angle etc</p> <p>Hand gloves, helmet/ cap, appropriate mask to cover face, reflective vest. (One for each candidate), gum boots etc.</p>
5	<p>Maintain personal health & safety in FSSM</p> <p>Theory Duration (hh:mm) 04.00</p> <p>Practical Duration (hh:mm) 08.00</p> <p>Corresponding NOS Code SGJ/N6410</p>	<ul style="list-style-type: none"> • Identify contact person when workplace safety policies are violated • Identify the location of first aid materials • Administer first-aid • Identify personal safety hazards or work site hazards • Identify the personal protective equipment • Demonstrate safety drills i.e emergency drill, fire drill, etc. • Demonstrate safe and accepted practices for personal protection 	<p>Hand sanitizer/soap, Hand gloves, helmet/ cap, appropriate mask to cover face, reflective vest. (One for each candidate), gum boots etc.</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> Identify and use insect repellents and safe drinking water at work place Identify sign boards/caution such as "Work in progress" or "Danger" to avoid accidents related to use of sharp tools and equipment 	
6	<p>Work effectively with others</p> <p>Theory Duration (hh:mm) 04.00</p> <p>Practical Duration (hh:mm) 10.00</p> <p>Corresponding NOS Code SGJ/N0120</p>	<ul style="list-style-type: none"> Identify ways to assist colleagues positively to maximize effectiveness and efficiency in carrying out tasks Discuss importance of work culture Demonstrate appropriate communication etiquette and dressing at work place Express responsible and disciplined behaviours at the workplace Identify ways to put up grievances and problems to appropriate authority Cite collaboration and group participation to achieve common goals 	Short-answer and fill-in-the-blank papers, rubrics and quizzes, internet connecting devices
	<p>Total Duration: 80:00</p> <p>Theory Duration 25:00</p> <p>Practical Duration 55:00</p>	<p>Unique Equipment Required: Different types and size of 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, Hand sanitizer/soap, Hand gloves, helmet/ cap, appropriate mask to cover face, reflective vest. (One for each candidate), gum boots, Short-answer and fill-in-the-blank papers, rubrics and quizzes, internet connecting devices, etc.</p>	

Grand Total Course Duration: **80 Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [Skill Council for Green Jobs](#))

Trainer Prerequisites for Job role: “Septic Tank Technician” mapped to Qualification Pack: “SGJ/Q6402”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “ <u>SGJ/Q6402, Version 1.0</u> ”.
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field
3	Minimum Educational Qualifications	10th Pass
4a	Domain Certification	Certified for Job Role: “Septic Tank Technician” mapped to QP: “SGJ/Q6402, Version 1.0”. Minimum accepted score as per SCGJ guidelines is 70%.
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “MEP/Q2601” or equivalent. Minimum accepted score as per SSC guidelines is 80%.
5	Experience	Minimum 2 years of experience in supervising masons and installation of septic tanks.

CRITERIA FOR ASSESSMENT OF TRAINEES

Please refer to the QP-NOS for the Assessment Criteria.