

Model Curriculum

Desludging Operator

SECTOR: GREEN JOBS
SUB-SECTOR: WASTE MANAGEMENT
OCCUPATION: OPERATION & MAINTENANCE
REF ID: SGJ/Q6403, 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: '**Desludging Operator**' QP No. '**SGJ/O6403 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)

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Desludging Operator

CURRICULUM / SYLLABUS

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

Program Name	Desludging Operator		
Qualification Pack Name & Reference ID	SGJ/Q6403, V 1.0		
Version No.	1.0	Version Update Date	30.11.2018
Pre-requisites to Training	5 th Pass		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Empty sludge from the septic tank • Transport sludge in a safe manner to dedicated sludge disposal sites • Dispose sludge safely at the dedicated sludge disposal site • Set up venture in emptying, transport and disposal of sludge • Work effectively with co-workers • Maintain health and safety while emptying, transport and disposal of sludge at the dedicated sludge disposal site. 		

This course encompasses 5 out of 5 Compulsory National Occupational Standards (NOS) of “Desludging Operator” Qualification Pack issued by “Skill Council for Green Jobs”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Emptying of Septic Tank Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 16:00 Corresponding NOS Code SGJ/N6411	<ul style="list-style-type: none"> • Identify the location of septic tank • Identify size and location of septic tank • Manage opening of the septic tank cover • Inspect the consistency of sludge • Install pipe in the septic tank connecting with sludge tank • Schedule meter check on the septic tank before pumping out the sludge • Manage to leave deep sludge left in the bottom of septic tank as per the industry standard and government norms • Manage closing of the septic tank cover • Practice to uninstall the suction pipes from the septic tank and clean surroundings and pipes before leaving the site • Demonstrate that sludge vehicle is not leaking during the transit process • Install suction pipe in the septic tank connecting with the sludge tank • Empty sludge from the septic tank • Uninstall suction pipe from the septic tank and close the access cover • Identify hazardous leakage of septic tank and ensure proper cleaning 	Vacuum tank with trucks, pumps, suction hoses, and other machinery/equipment to empty the septic tank, Hand gloves, helmet/cap, appropriate mask to cover face, reflective vest. (One for each candidate), gum boots
2	Preventive maintenance, transportation and safe disposal of sludge Theory Duration (hh:mm) 06:00 Practical Duration (hh:mm) 18:00 Corresponding NOS Code SGJ/N6412	<ul style="list-style-type: none"> • Carry out oil level check in the vacuum pump, oil-cooling tank, hydraulic tank and tanker engine • Carry out tanker fuel level and water levels checks in the tanker engine, windscreen water bottle, wash tank and water tank • Perform cooling radiator check for the hydraulic oil and pump oil • Perform checks on desludging tank rear door opening • Perform checks on tyre pressures, lights, indicators, horns of desludging tank 	Engine Oil, Vacuum tank with trucks, pumps, suction hoses, and other machinery/equipment to empty the septic tank, Hand gloves, helmet/cap, appropriate mask to cover face, reflective vest. (One for each candidate), gum boots

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> • Prevent tank overflow • Perform checks on contact between gaskets and seats • Perform checks on steel balls • Carryout leak check in hydraulic system and power take-off shafts • Identify the dedicated route to the sludge disposal site • Transport the sludge from source to sludge disposal site • Maintain log book of disposal site visit • Dispose sludge at the identified sludge disposal site • Carry out cleaning of sludge vacuum tank after disposal 	
3	<p>Health & safety of workplace while doing desludging services</p> <p>Theory Duration (hh:mm) 06:00</p> <p>Practical Duration (hh:mm) 14:00</p> <p>Corresponding NOS Code SGJ/N6413</p>	<ul style="list-style-type: none"> • Identify potential hazards such as atmospheric hazard, biological hazard and physical hazard • Monitor workplace and identify potential risks and threats • Report hazards and potential risks/ threats to authorized personnel • Handle Personal Protective Equipment • Follow health and safety protocols • Administer First Aid • Handle emergency situations like gas leakage, accident, etc. • Follow organization procedures for evacuation when required • Mitigate risks to people and property during emergencies • Carry out periodic walk-through inspections to keep work area free from hazards and obstructions • Demonstrate mock drills/ evacuation procedures at the workplace • Demonstrate fire-fighting and emergency response 	<p>Hand sanitizer/soap, Hand gloves, helmet/ cap, appropriate mask to cover face, reflective vest. (One for each candidate), gum boots</p>
4	<p>Work effectively with others</p> <p>Theory Duration (hh:mm) 08:00</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 	<p>Short-answer and fill-in-the-blank papers, rubrics and quizzes, internet connecting devices</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	<p>Practical Duration (hh:mm) 12:00</p> <p>Corresponding NOS Code SGJ/N0120</p>	<ul style="list-style-type: none"> • 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 	
5	<p>Entrepreneurship skills for FSSM services</p> <p>Theory Duration (hh:mm) 10:00</p> <p>Practical Duration (hh:mm) 20:00</p> <p>Corresponding NOS Code SGJ/N6414</p>	<ul style="list-style-type: none"> • Set up venture in desludging services • Identify key activities of desludging services • Explain licensing, certification and registration process • Identify potential customers from residential commercial & institutional areas • Identify size and configuration of key tools like sludge tank, truck and specific machinery / equipment required for desludging services business • Identify methods of emptying, transport and disposal of sludge • Procure human resource and vehicle • Fix rate of desludging services in residential, commercial and industrial areas. • Identify and manage the technical challenges of desludging business • Repair and maintain vehicle and sludge vacuum tank • Maintain the log book of disposal site visit • Carry out cleaning of sludge vacuum tank after disposal • Identify avenues to recycle and reuse of sludge 	Different types and sizes of vacuum tank with trucks, pumps, suction hoses, and other machinery/equipment to empty the septic tank, reference business registration documents

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	<p>Total Duration: 120:00</p> <p>Theory Duration 40:00</p> <p>Practical Duration 80:00</p>	<p>Unique Equipment Required:</p> <p>Different types and sizes of vacuum tank with trucks, pumps, suction hoses, and other machinery/equipment to empty the septic tank, 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: **120 Hours, 0 Minutes**

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

Trainer Prerequisites for Job role: “Desludging Operator” mapped to Qualification Pack: “SGJ/Q6403”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “SGJ/Q6403, Version 1.0”.
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: “Desludging Operator” mapped to QP: “SGJ/Q6403, 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 faecal sludge and septage management

CRITERIA FOR ASSESSMENT OF TRAINEES

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