

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/Q6403 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	After completing this programme, participants will be able to: <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 	Hand sanitizer/soap, Hand gloves, helmet/ cap, appropriate mask to cover face, reflective vest. (One for each candidate), gum boots
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 	Short-answer and fill-in-the-blank papers, rubrics and quizzes, internet connecting devices

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Practical Duration (hh:mm) 12:00 Corresponding NOS Code SGJ/N0120	<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	Entrepreneurship skills for FSSM services Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 20:00 Corresponding NOS Code SGJ/N6414	<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
	Total Duration: 120:00 Theory Duration 40:00 Practical Duration 80:00	Unique Equipment Required: 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.	

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.