

Model Curriculum

Biomass Depot Operator

SECTOR: GREEN JOBS
SUB-SECTOR: WASTE MANAGEMENT
OCCUPATION: SUPPLY CHAIN MANAGEMENT
REF ID: SGJ/Q6207, V1.0
NSQF LEVEL: 4

  

Certificate

**CURRICULUM COMPLIANCE TO
QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS**

is hereby issued by the
SKILL COUNCIL FOR GREEN JOBS

for
MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: **'Biomass Depot Operator'**
QP No. **'SGJ/Q6207 NSQF Level 4'**

Date of Issuance: July 5th 2018
Valid up to*: May 26th 2020

**Valid up to the next review date of the Qualification Pack or the
'Valid up to' date mentioned above (whichever is earlier)*


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Authorised Signatory
(Skill Council for Green Jobs)

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Biomass Depot Operator

CURRICULUM / SYLLABUS

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

Program Name	Biomass Depot Operator		
Qualification Pack Name & Reference ID	SGJ/Q6207, V1.0		
Version No.	1.0	Version Update Date	05.07.2018
Pre-requisites to Training	10th Pass		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Collect agri-residues from farmers/suppliers • Conduct physical inspection and weighing of agri-residue bales • Perform de-baling and re-bailing of low density agri-residue bales • Store and maintain agri-residue bale stocks • Maintain workplace health and safety 		

This course encompasses 3 out of 3 NOS (National Occupational Standards) of “Biomass Depot Operator” Qualification Pack issued by “Skill Council for Green Jobs”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Introduction to Biomass Depot</p> <p>Theory Duration (hh:mm) 05:00</p> <p>Practical Duration (hh:mm) 00:00</p> <p>Corresponding NOS Code Bridge Module</p>	<ul style="list-style-type: none"> Describe different types of farm waste and its source, supply chain and storage methodology Explain the structure and functioning of Biomass Depot Demonstrate involvement of Biomass Depot Operator in maintaining biomass supply chain and its progressive pathway 	<p>Pictorial charts, White Board, Marker, Projector, illustrative Pictures</p>
2	<p>Purchase agri-residue biomass from farmers/aggregators for stocking</p> <p>Theory Duration (hh:mm) 06:00</p> <p>Practical Duration (hh:mm) 12:00</p> <p>Corresponding NOS Code SGJ/N6227</p>	<ul style="list-style-type: none"> Identify methods of determining existing market demands & trading system Demonstrate the method of identifying suitable area for setting up of feed collection points to collect the stock from various farmers/aggregators Illustrate the setting up of feed collection points to collect the stock from suppliers Describe different ways of conducting physical inspection of agri-residue bales to check various physical parameters Illustrate the method of negotiation with aggregators/farmers for supply of agri-residues bales w.r.t appropriate price, quality, quantity, time and location Demonstrate inventory management system Explain agri-residue handling system for drying/binder section 	<p>Computer, Internet Facility White Board, Marker, Projector, Sickle</p>
3	<p>Rebale to densify and store agri-residue bales</p> <p>Theory Duration (hh:mm) 06:00</p> <p>Practical Duration (hh:mm) 30:00</p> <p>Corresponding NOS Code SGJ/N6228</p>	<ul style="list-style-type: none"> Illustrate the process of maintaining moisture content of de-baled agri-residue stock Illustrate the process of drying de-baled agri-residue stock to adjust the moisture content within permissible limit Explain types of Baler and its advantages & disadvantages Demonstrate the method of identifying appropriate Baler as per the density requirement of the agri-residue bale stock. Demonstrate the process of agri-residue feeding, baling and stitching 	<p>Demo Model of Baler</p>

Trainer Prerequisites for Job role: “Biomass Depot Operator” mapped to Qualification Pack: “SGJ/Q6207, V1.0”

Sr. No.	Area	Details
1	Description	Biomass Depot Operator is responsible for handling, storage and management of biomass at the storage depot. He/she looks after activities such as biomass receipt from suppliers, biomass pre-processing/densification and storage in a manner so as to ensure its quality and safety as per standards
2	Personal Attributes	Biomass Depot Operator requires to concentrate on the job at hand and complete it meticulously in a safe manner. He / She must possess energy and strength for physical work. He / She must also demonstrate strong work ethics and an ability to communicate courteously with workers and Customers
3	Minimum Educational Qualifications	12th Pass
4a	Domain Certification	Certified for Job Role: “Biomass Depot Operator” mapped to QP: “SGJ/Q6207, Version 1.0”. Minimum accepted score as per SCGJ guidelines is 80%
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “MEP/Q0102” or equivalent. Minimum accepted score as per SSC guidelines is 80%.
5	Experience	Minimum 2 years of relevant experience

Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Biomass Depot Operator
Qualification Pack	SGJ/Q6207, V1.0
Sector Skill Council	Green Jobs

Sr. No.	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: 130					
Assessment outcomes	Assessment Criteria for outcomes	Total Mark	Out Of	Theory	Skills Practical
SGJ/N6227: Purchase agri-residue biomass from farmers / aggregators for stocking	PC1. set-up feed collection area to collect the stock from various suppliers (farmers)	50	7	3	4
	PC2. ensure efficient management of the inventories that are procured		6	3	3
	PC3. physical inspection of agri-residue bales (to check condition of bales whether wet or dry)		6	2	4
	PC4. weighing of low density agri-residue bales received from farmers/suppliers to determine quantity		5	2	3
	PC5. ensure acquisition of goods at best possible cost to w.r.t quality, quantity, time and location		6	2	4
	PC6. undertake payments to suppliers (farmers) after assessing quantity and quality of agri-residues		5	2	3
	PC7. shift bales to area demarcated for de-baling operations		5	2	3
	PC8. conduct stitching removal on the agri-residue bales		5	2	3
	PC9. transfer bales to drying section / binder section as per the nature or agri-residue bale stock		5	2	3
	TOTAL	50	20	30	
SGJ/N6228: Rebale to densify and store agri-residue bales	PC1. dry debaled agri-residue stock to adjust the moisture content in the range of 30–50%	40	5	2	3
	PC2. add moisturizing binder such as molasses if agri-residues dry in nature with less than 10% moisture content		5	2	3
	PC3. select appropriate baler as per the density requirement of the agri-residue bale stock		4	2	2
	PC4. conduct and coordinate agri-straw feeding, agri-residue baling and bale stitching		5	2	3
	PC5. identify proper area/facilities for storage of agri-residue bales		4	2	2
	PC6. transfer densified agri-residue bales from baling area to the storage area		4	2	2
	PC7. store agri-residue bales in controlled conditions away from direct exposure to environment elements like rain till transport		5	2	3
	PC8. maintain appropriate quantity of agri-residue bale stock		4	2	2

	PC9. ensure on time delivery of agri-residue bale stock to transportation area		4	2	2
		TOTAL	40	18	22
SGJ/N6205: Maintain basic health and workplace safety	PC1. keep workplace clean, organized and safe for work	40	5	2	3
	PC2. follow and comply with workplace and job specific safety procedures		5	2	3
	PC3. ensure no accidents and damages take place at the workplace		4	1	3
	PC4. ensure proper hygiene and protection from dust and other infections		4	1	3
	PC5. communicate workplace hazards and associated emergencies to workers		4	2	2
	PC6. organize and attend fire drills and workplace safety workshops		4	1	3
	PC7. administer basic first aid and be aware of evacuation and emergency procedures		5	2	3
	PC8. ensure that PPE's requirement are identified and made available at workplace at all time		4	1	3
	PC9. demonstrate safe and accepted practices for personal protection		5	2	3
			TOTAL	40	14