

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR GREEN JOBS



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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:
sscgreenjobs@gmail.com



Introduction

Qualifications Pack- Biomass Depot Operator

SECTOR: GREEN JOBS

SUB-SECTOR: Waste Management

OCCUPATION: Supply Chain Management

REFERENCE ID: SGJ/Q6207

ALIGNED TO: NCO-2015/1324.1201

Brief Job 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.

Personal Attributes: This job requires the individual 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.

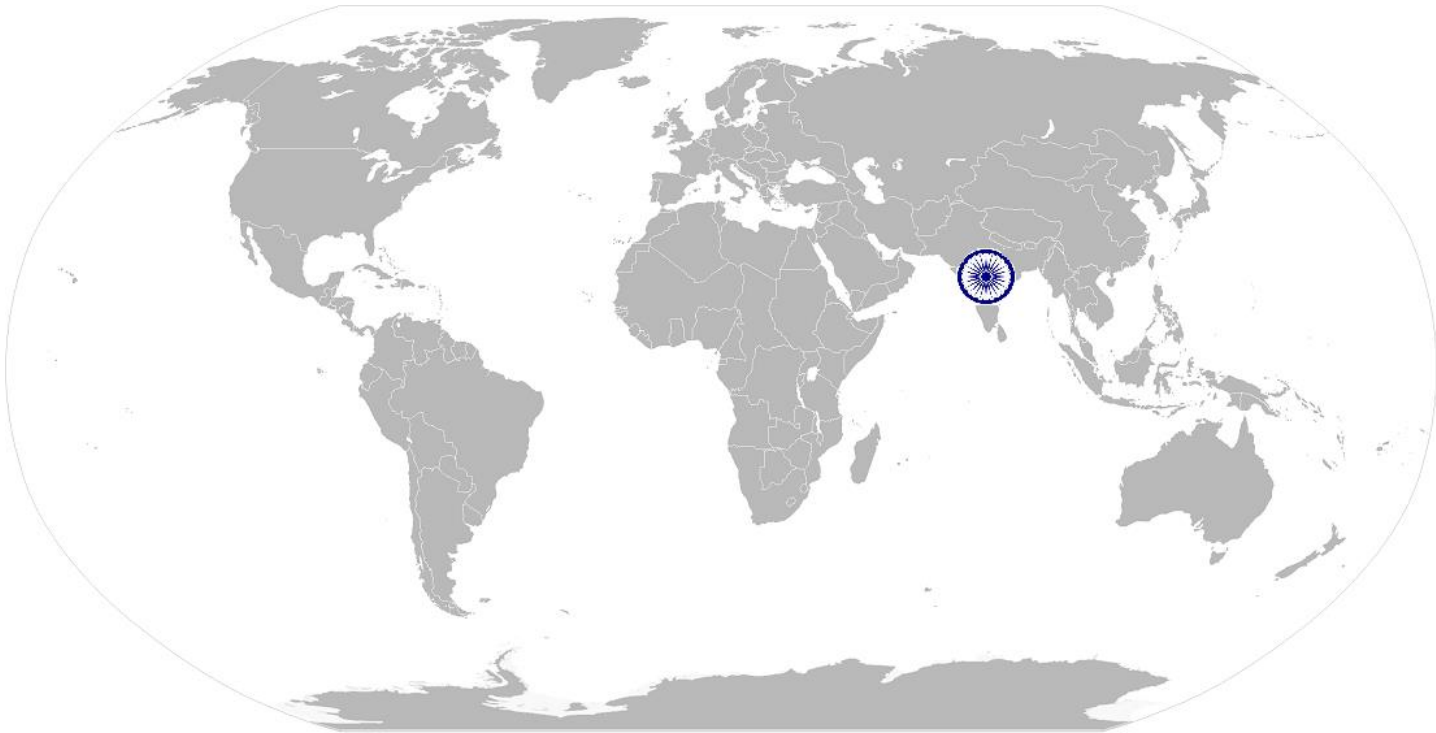


Job Details	Qualifications Pack Code	SGJ/Q6207		
	Job Role	Biomass Depot Operator This job role is applicable nationally only		
	Credits(NSQF)	TBD	Version number	1.0
	Sector	Green Jobs	Drafted on	22/06/2017
	Sub-sector	Waste Management	Last reviewed on	27/03/2018
	Occupation	Supply Chain Management	Next review date	26/05/2020
	NSQC Clearance on	N.A		

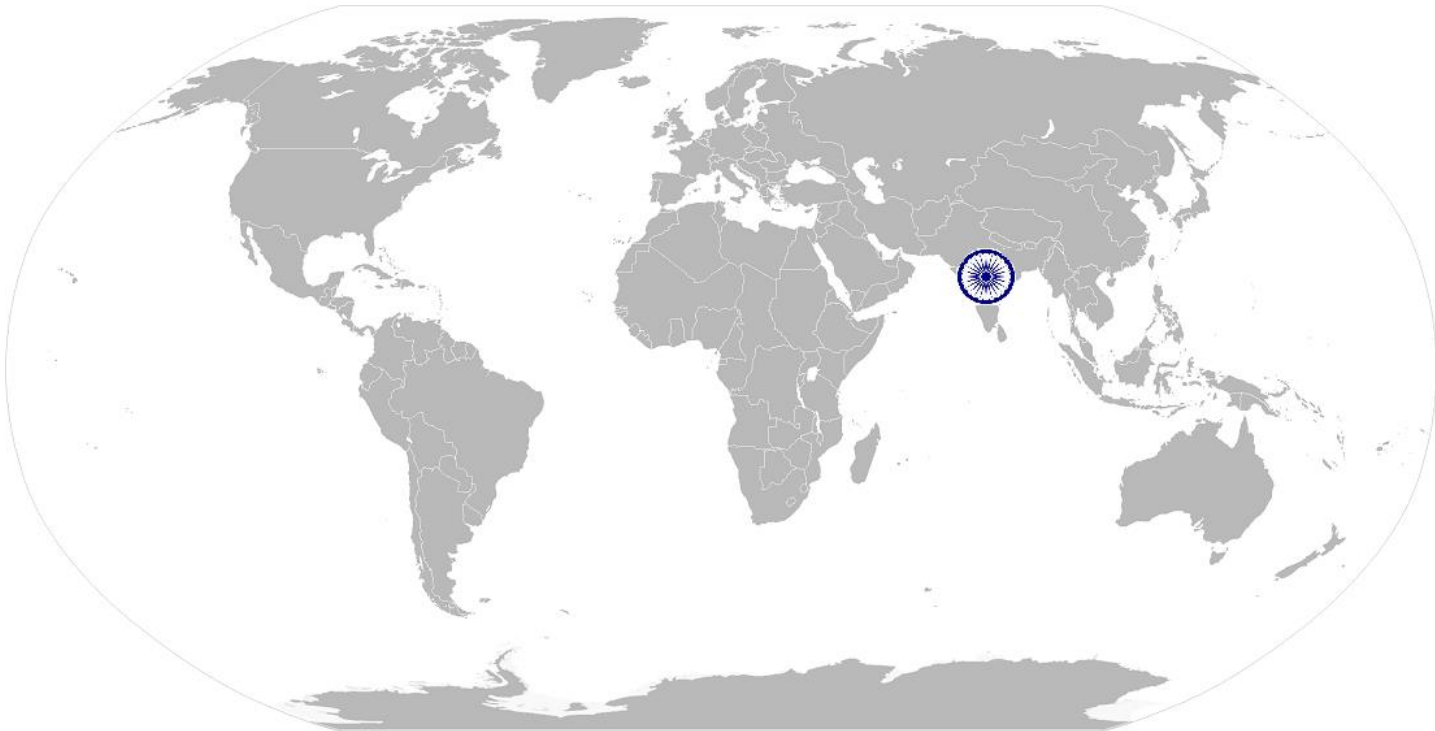
Job Role	Biomass depot operator
Role Description	Biomass depot operator is responsible for handling, storage and management of biomass at the storage depot. He/she looks after activities such as biomass receipt from suppliers, biomass pre-processing/densification and storage in a manner so as to ensure its quality and safety as per standards.
NSQF level	4
Minimum Educational Qualifications	10 th Pass
Maximum Educational Qualifications	Not Applicable.
Prerequisite License or Training	N/A
Minimum Job Entry Age	18 years
Experience	N/A
Applicable National Occupational Standards (NOS)	<p>Compulsory:</p> <p>SGJ/N6227: Purchase agri-residue biomass from farmers/aggregators for stocking</p> <p>SGJ/N6228: Re bale to densify and store agri-residue bales</p> <p>SGJ/N6205: Maintain basic health and workplace safety</p>
Performance Criteria	As described in the relevant OS units.

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interest. 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 function 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)	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification 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 needs in order 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 or Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.

Acronyms	Keywords /Terms	Description
	SCGJ	Skill Council for green jobs
	NOS	National Occupational Standards
	NSQF	National Skills Qualification Framework
	OS	Occupational Standards
	PC	Performance Criteria
	QP	Qualification Pack
	SSC	Sector Skills Council
	OHS	Occupational Health and Safety



National Occupational Standard



Overview

This unit is about purchase of agri-residue biomass from farmers/aggregators for stocking.

SGJ/N6227

Purchase agri-residue biomass from farmers/aggregators for stocking

National Occupational Standard

Unit Code	SGJ/N6227
Unit Title (Task)	Purchase agri-residue biomass from farmers/aggregators for stocking
Description	This unit is about purchase of agri-residue biomass from farmers/aggregators for stocking.
Scope	This unit/task covers the following: <ul style="list-style-type: none"> • Collect agri-residues from farmers/aggregators • Physical inspection and weighing of agri-residue bales • Debaling of low density agri-residue bales
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Collect agri-residues from farmers/aggregator	To be competent, the user/ individual must be able to: PC1. set-up feed collection area to collect the stock from various farmers/aggregators. PC2. ensure efficient management of the inventories that are procured.
Physical inspection and weighing of agri-residue bales	To be competent, the user/ individual must be able to: PC3. physical inspection of agri-residue bales (to check condition of bales whether wet or dry). PC4. weighing of low density agri-residue bales received from farmers/suppliers to determine quantity. PC5. ensure acquisition of goods at best possible cost to w.r.t quality, quantity, time and location. PC6. undertake payments to suppliers (farmers) after assessing quantity and quality of agri-residues.
Debaling of low density agri- residue bales	To be competent, the user/ individual must be able to: PC7. shift bales to area demarcated for de-baling operations PC8. conduct stitching removal on the agri-residue bales PC9. transfer bales to drying section / binder section as per the nature or agri-residue bale stock.
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company /organization and its processes)	The user/individual on the job needs to know and understand: KA1. Company's policies on: incentives, delivery standards, and personnel. KA2. Company's documentation policy. KA3. Importance of the individual's role in the workflow. KA4. Quality standards set by the organization. KA5. Reporting structure of the organization.
B. Technical Knowledge	The individual on the job needs to know and understand the following aspects: KB1. Market trading systems. KB2. Customer's requirement. KB3. Availability of stock with respect to season, climate etc. KB4. Resources planning. KB5. Quality, quantity, price and source of the stock.

SGJ/N6227

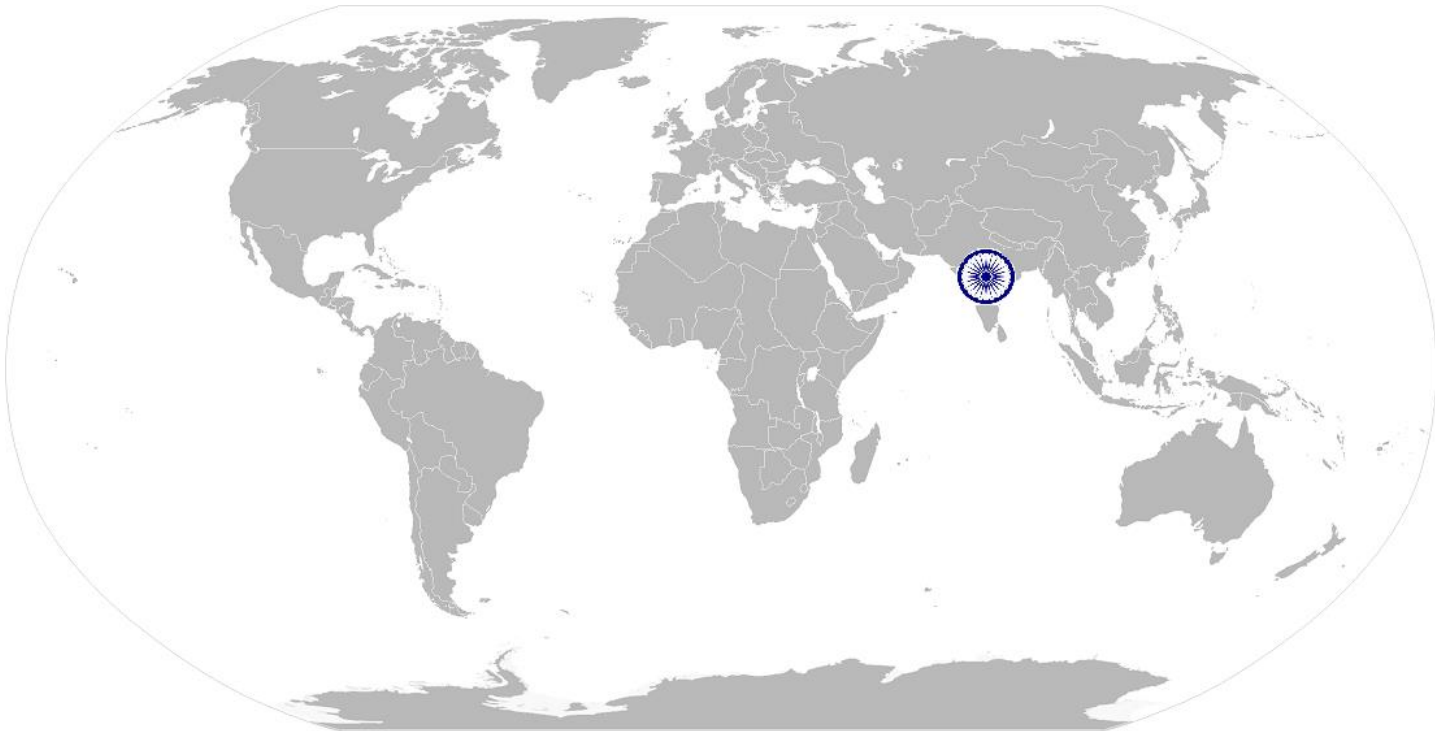
Purchase agri-residue biomass from farmers/aggregators for stocking

Skills	
A. Core Skills / Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: SA1. Fill up documentation applicable to one's role.
	Reading Skills
	The user/ individual on the job needs to know and understand how to: SA2. Read vernacular/English language. SA3. Read and understand manuals, health and safety instructions, memos, other company documents.
B. Professional Skills	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. Express statements or information clearly so that others can hear and understand. SA5. Respond appropriately to any queries. SA6. Communicate with workers.
	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Follow organization rule-based decision making process.
B. Professional Skills	Plan and Organize
	The user/ individual on the job needs to know and understand how to: SB2. Planning and organization of work to meet deadlines. SB3. Work constructively and collaboratively with others.
	Customer Centricity
	The user/ individual on the job needs to know and understand how to: SB4. Follow code of conduct. SB5. Manage relationships with customers with intent on satisfying its requirements for service delivery.
	Problem Solving
	The user/ individual on the job needs to know and understand how to: SB6. Recognize problems and search for solutions. SB7. Choose best methods to complete assigned tasks. SB8. Approach relevant authority when required.
	Analytical Thinking
	The user/ individual on the job needs to know and understand how to: SB9. Apply domain knowledge, observations and data to select course of action to perform job tasks.
	Critical Thinking
	The user/ individual on the job needs to know and understand how to: SB10. Ask questions and respond to any work related queries from workers for better understanding.

SGJ/N6227 *Purchase agri-residue biomass from farmers/aggregators for stocking*

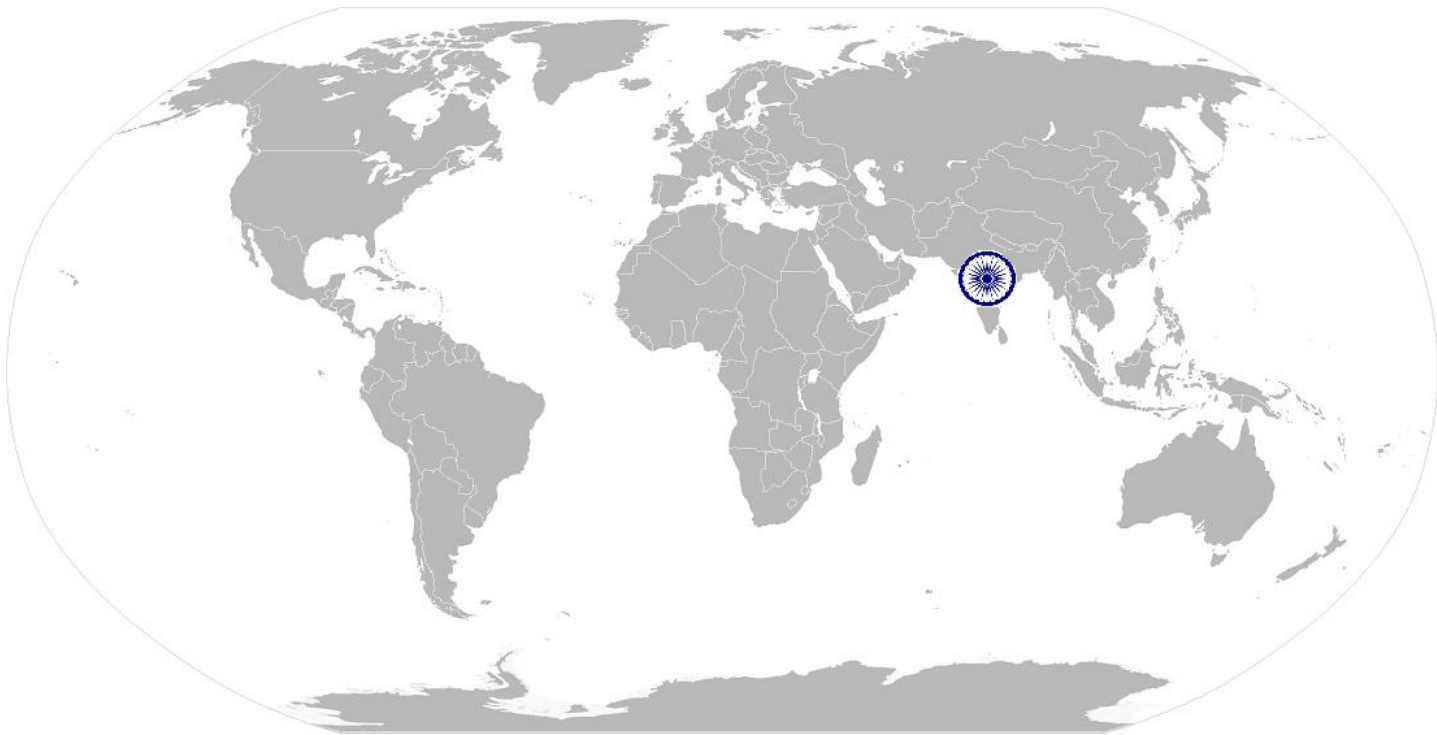
NOS Version Control

NOS Code	SGJ/N6227		
Credits (NSQF)	TBD	Version number	1.0
Industry Sector	Green Jobs	Drafted on	22/06/2017
Industry Sub-sector	Waste Management	Last reviewed on	27/03/2018
Occupation	Purchase and Debaling	Next review date	26/05/2020



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National Occupational Standard



Overview

This unit is about rebaling and storage of agri-residue bales.

SGJ/N6228

Rebale to densify and store agri-residue bales

National Occupational Standard

Unit Code	SGJ/N6228
Unit Title (Task)	Rebale to densify and store agri-residue bales
Description	This unit is about rebaling and storage of agri-residue bales.
Scope	This OS unit/task covers the following: <ul style="list-style-type: none"> • Conduct rebaling of agri-residues • Storage of agri-residue bales • Maintain agri-residue bale stock
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Conduct rebaling of agri-residues	To be competent, the user/ individual must be able to: <p>PC1. dry de-baled agri-residue stock to adjust the moisture content in the range of 30–50%.</p> <p>PC2. add moisturizing binder such as molasses if agri-residues dry in nature with less than 10% moisture content.</p> <p>PC3. select appropriate baler as per the density requirement of the agri-residue bale stock.</p> <p>PC4. conduct and coordinate agri-straw feeding, agri-residue baling and bale stitching.</p>
Storage of agri-residue bales	To be competent, the user/ individual must be able to: <p>PC5. identify proper area/facilities for storage of agri-residue bales.</p> <p>PC6. transfer densified agri-residue bales from baling area to the storage area.</p> <p>PC7. store agri-residue bales in controlled conditions away from direct exposure to environment elements like rain till transport.</p>
Maintain agri-residue bale stock	To be competent, the user/ individual must be able to: <p>PC8. maintain appropriate quantity of agri-residue bale stock.</p> <p>PC9. ensure on time delivery of agri-residue bale stock to transportation area.</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company /organization and its processes)	The user/individual on the job needs to know and understand: <p>KA1. Company's policies on: incentives, delivery standards, and personnel.</p> <p>KA2. Company's documentation policy.</p> <p>KA3. Importance of the individual's role in the workflow.</p> <p>KA4. Quality standards set by the organization.</p> <p>KA5. Reporting structure of the organization.</p>
B. Technical Knowledge	The individual on the job needs to know and understand the following aspects: <p>KB1. Market trading systems.</p> <p>KB2. Customer's requirement.</p> <p>KB3. Availability of stock with respect to season, climate etc.</p> <p>KB4. Resources planning.</p> <p>KB5. Quality, quantity, price and source of the stock.</p>
Skill	
A. Core Skills/ Generic Skills	Writing Skills
	The user/ individual on the job needs to know and understand how to: <p>SA1. Fill up documentation applicable to one's role.</p>

SGJ/N6228

Rebale to densify and store agri-residue bales

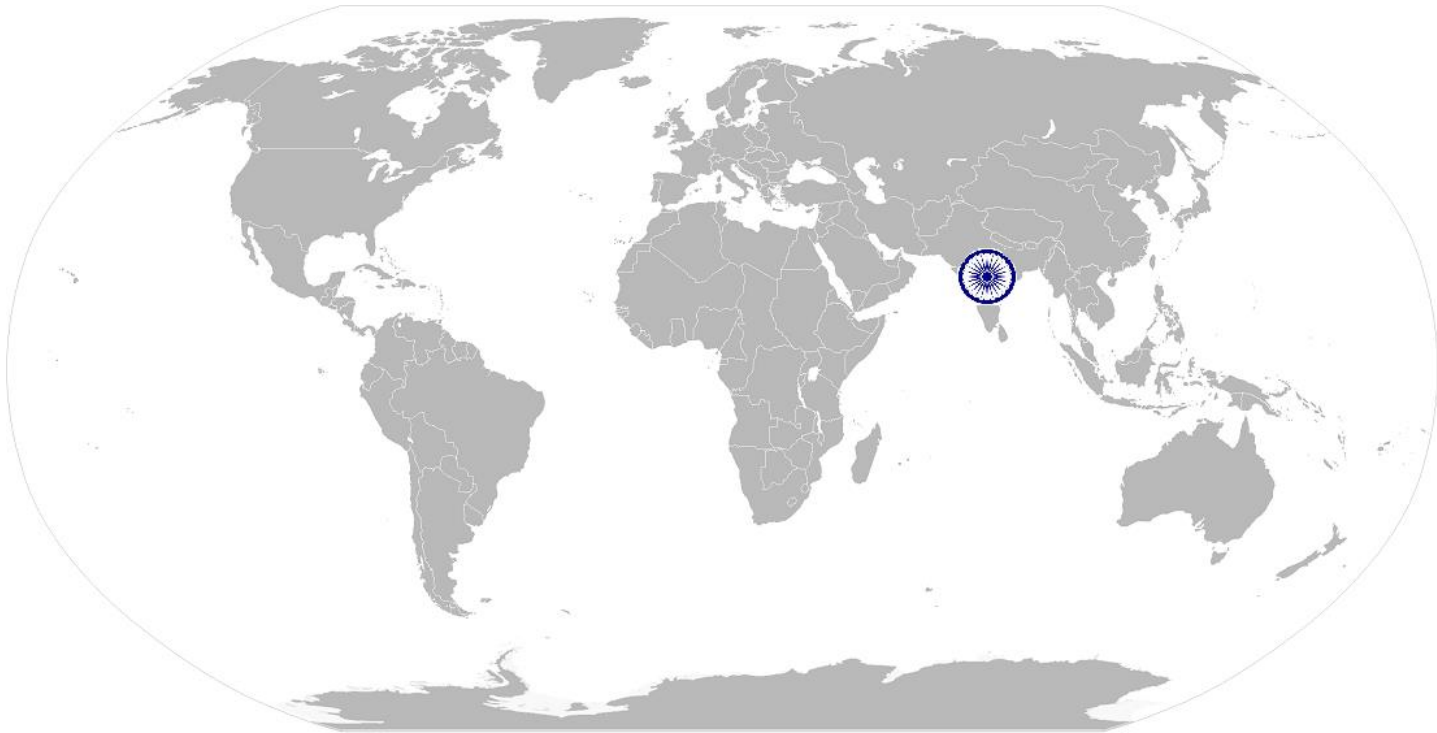
	Reading Skills
	The user/ individual on the job needs to know and understand how to: SA2. Read instruction and safety manuals.
	Oral Communication (Listening and Speaking skills)
	The user/ individual on the job needs to know and understand how to: SA4. Express statements or information clearly so that others can hear and understand. SA5. Participate in and understand the main points of simple discussions. SA6. Effectively communicate the danger.
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Follow organization rule-based decision making process. SB2. Take decision with systematic course of actions and/or response.
	Plan and Organize
	The user/ individual on the job needs to know and understand how to: SB3. Planning and organization of work to meet deadlines. SB4. Work constructively and collaboratively with others.
	Customer Centricity
	The user/ individual on the job needs to know and understand how to: SB5. Follow code of conduct. SB6. Manage relationships with customers with intent on satisfying its requirements for service delivery.
	Problem Solving
	The user/ individual on the job needs to know and understand how to: SB7. Recognize problems and search for solutions. SB8. Choose best methods to complete assigned tasks. SB9. Approach relevant authority when required.
	Analytical Thinking
	The user/ individual on the job needs to know and understand how to: SB10. Apply domain knowledge, observations and data to select course of action to perform job tasks.
	Critical Thinking
The user/ individual on the job needs to know and understand how to: SB11. Critically evaluate information obtained from customers, supervisor and co-workers to perform day to day activities. SB12. Ask questions for better understanding.	

SGJ/N6228

Rebale to densify and store agri-residue bales

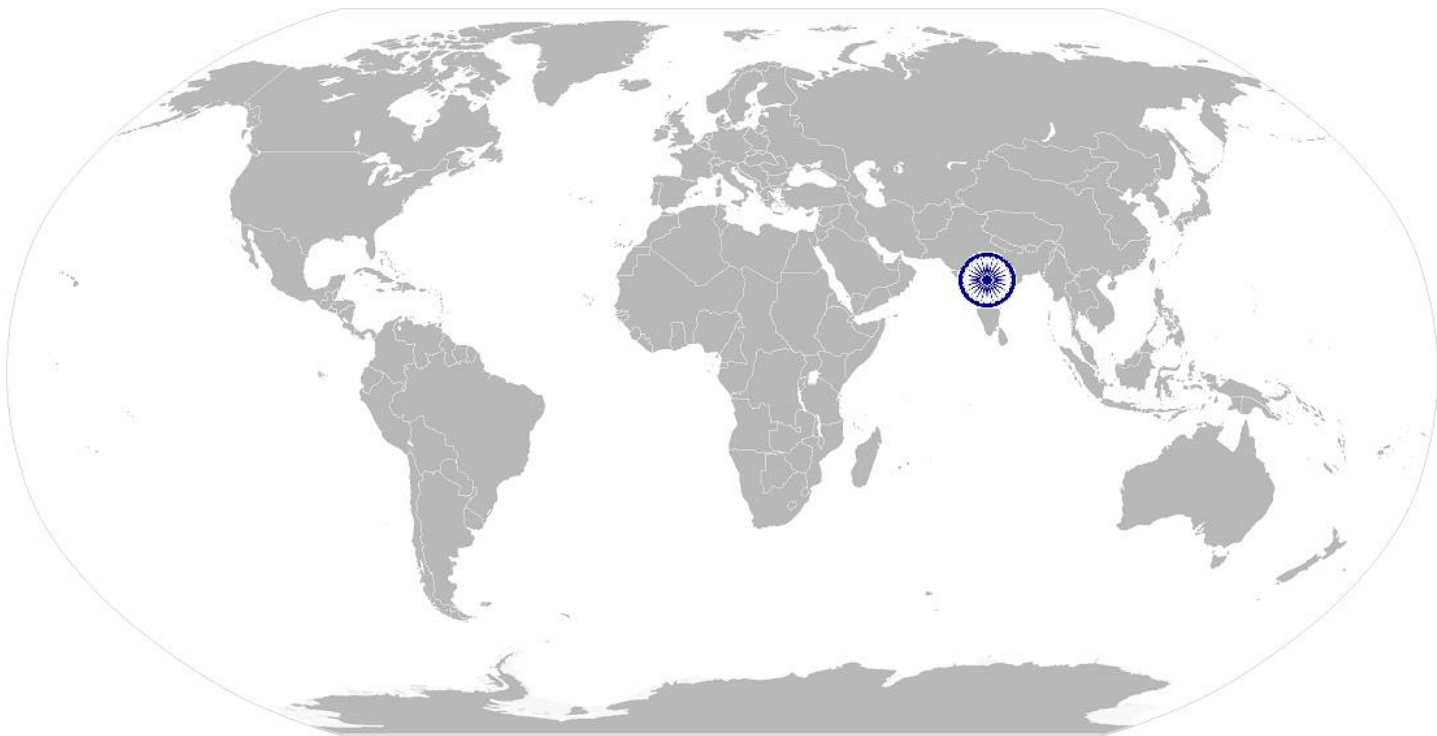
NOS Version Control

NOS Code	SGJ/N6228		
Credits (NSQF)	TBD	Version number	1.0
Industry Sector	Green Jobs	Drafted on	22/06/2017
Industry Sub-sector	Waste Management	Last reviewed on	27/03/2018
Occupation	Rebaling & storage	Next review date	26/05/2020



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National Occupational Standard



Overview

This unit is about maintaining basic health and workplace safety.

SGJ/N6205

Maintain basic health and workplace safety

National Occupational Standard

Unit Code	SGJ/N6205
Unit Title (Task)	Maintain basic health and workplace safety
Description	This unit is about maintaining basic health and workplace safety.
Scope	This unit/task covers the following: <ul style="list-style-type: none"> • Maintain standard health and workplace safety • Organize safety awareness sessions and participate in safety drills • Use and maintain protective safety gears
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Maintain standard health and workplace safety	To be competent, the user/ individual must be able to: PC1. keep workplace clean, organized and safe for work. PC2. follow and comply with workplace and job specific safety procedures. PC3. ensure no accidents and damages take place at the workplace. PC4. ensure proper hygiene and protection from dust and other infections.
Organize safety awareness sessions and participate in safety drills	To be competent, the user/ individual must be able to: PC5. communicate workplace hazards and associated emergencies to workers. PC6. organize and attend fire drills and workplace safety workshops. PC7. administer basic first aid and be aware of evacuation and emergency procedures.
Use and maintain protective safety gears	To be competent, the user/ individual must be able to: PC8. ensure that PPE's requirement are identified and made available at workplace at all time. PC9. demonstrate safe and accepted practices for personal protection.
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The individual on the job needs to understand: KA1. Company's occupational safety and health policy. KA2. Company's medical policy. KA3. Company's safety and emergency preparedness procedures.
B. Technical Knowledge	The individual needs to know and understand the following aspects: KB1. Personal protective equipment's (PPE's) required for safe operation. KB2. Occupational health and safety (OHS) standards for workplace and machine safety. KB3. Risk identification and mitigation procedures. KB4. Workplace safety procedures including emergency evacuation, first aid procedures among others.
Skills	
A. Core Skills/ Generic Skills	Writing Skills
	The user/individual on the job needs to know and understand how to: SA1. How to be able to read safety instructions and warning signage. SA2. Fill up documentation applicable to one's role.
	Reading Skills
	The user/individual on the job needs to know and understand how to: SA3. Read instruction and safety manuals.

SGJ/N6205

Maintain basic health and workplace safety

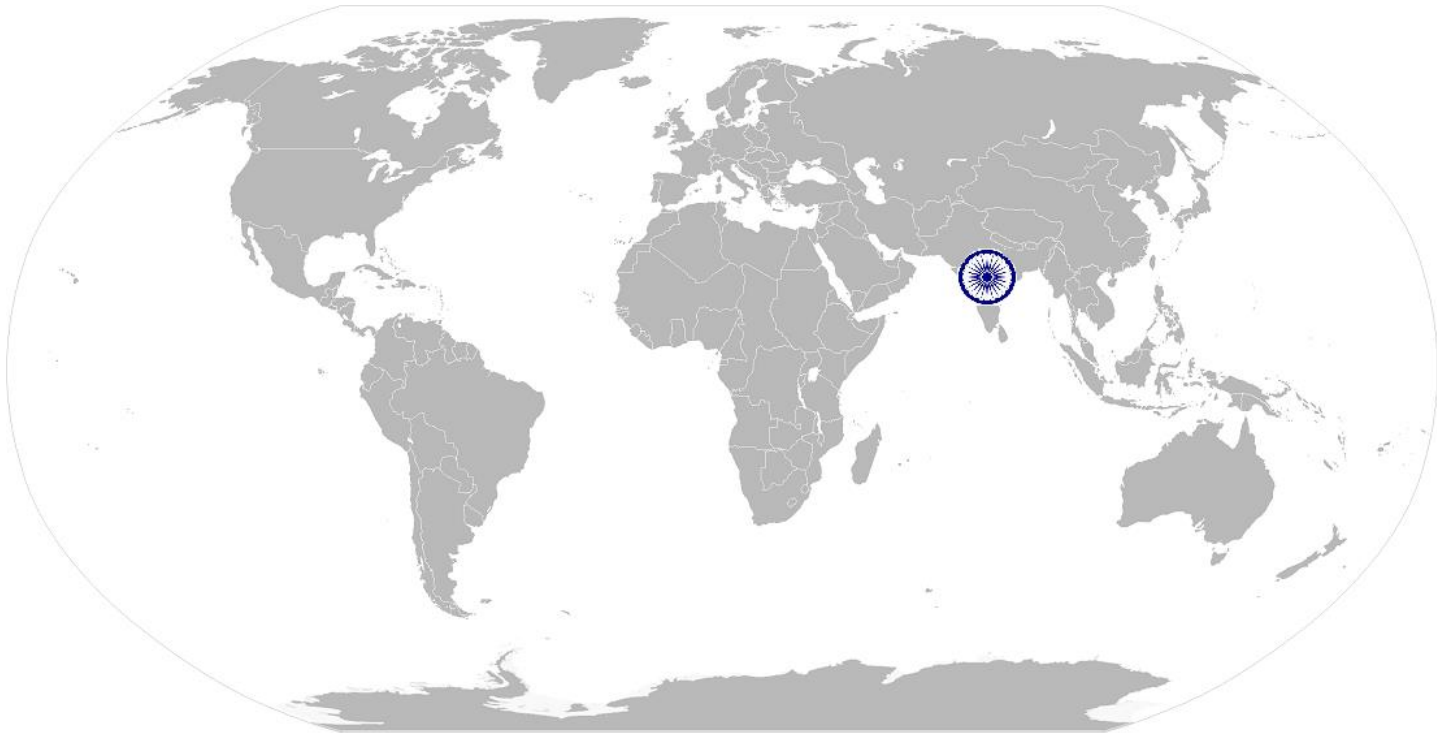
B. Professional Skills	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. Express statements or information clearly so that others can hear and understand. SA5. Participate in and understand the main points of simple discussions. SA6. Effectively communicate the danger.
	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. Make decisions pertaining to safety procedures at workplace. SB2. Identify need of first aid and render it accordingly. SB3. Report potential sources of danger and wear appropriate safety gear to avoid accidents.
	Plan and Organize
	The user/individual on the job needs to know and understand how to: SB4. Planning of work and using tools in an organized manner to avoid accidents/incidents. SB5. Schedule daily activities and drawing up priorities related to workplace safety. SB6. Use of safety equipment's such as fire extinguisher during fire accidents. SB7. Use personal protective equipment's (PPE's) such as protective gear, goggles, caps, shoes, etc.
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB8. Follow code of conduct. SB9. Manage relationships with co-workers and managers of the who may be stressed, frustrated, confused or angry.
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB10. Recognize problems and search for solutions. SB11. Choose best methods to complete assigned tasks. SB12. Identify problems immediately and take up solutions quickly to resolve delays.
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB13. Assess situation & identify appropriate control measures.
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB14. Critically evaluate information obtained from customers, supervisor and co-workers to perform day to day activities. SB15. Initiate and take-up own working and learning.

SGJ/N6205

Maintain basic health and workplace safety

NOS Version Control

NOS Code	SGJ/N6205		
Credits (NSQF)	TBD	Version number	1.0
Industry Sector	Green Jobs	Drafted on	26/05/2017
Industry Sub-sector	Waste Management	Last reviewed on	27/03/2018
Occupation	Health and Workplace Safety	Next review date	26/05/2020



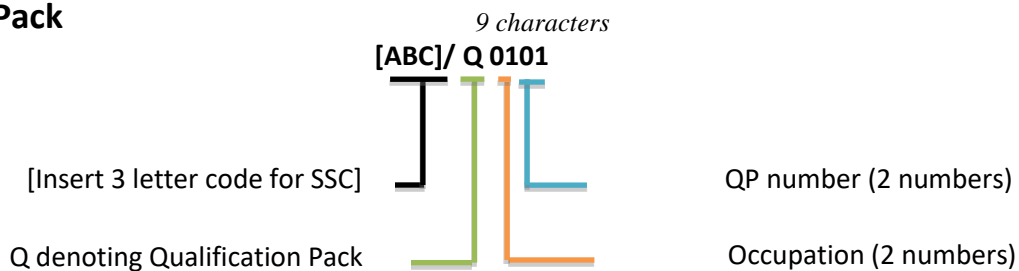
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Qualification Pack for "Biomass Depot Operator"

Annexure

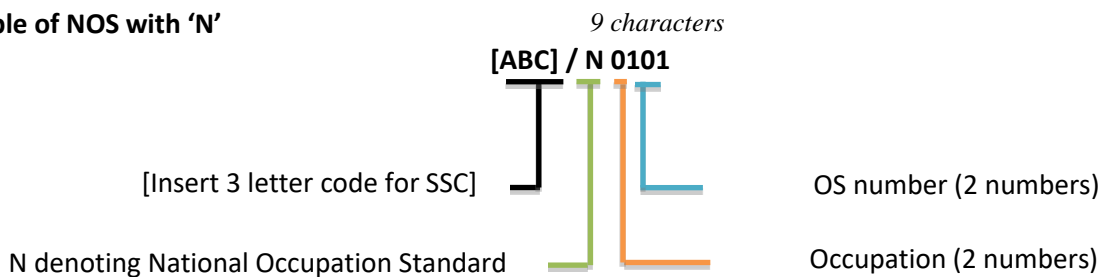
Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard

An example of NOS with 'N'



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Qualification Pack for “Biomass Depot Operator”

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

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

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

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Qualification Pack for “Biomass Depot Operator”

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Biomass Depot Operator

Qualification Pack SGJ/Q6207

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: 130		Total Mark	Out Of	Theory	Skills Practical
Assessment outcomes	Assessment Criteria for outcomes				
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

Qualification Pack for "Biomass Depot Operator"

	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