

Qualification Pack



Plastic Recycling Operator

QP Code: SGJ/Q4005

Version: 1.0

NSQF Level: 3

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SGJ/Q4005: Plastic Recycling Operator

Brief Job Description

Plastic Recycling Operator is responsible for overall manufacturing of recycled products from plastic waste. He/ she is responsible for ensuring that workers in the unit are working effectively and machines/equipment are working efficiently. He/she is also responsible for making sure that right input in terms of raw material, energy, fuel, pressure, temperature, etc is fed in the machines. He/ she also keeps a check on the health of the machines. He/ she also monitors the quality of the process of recycling and recycled products. Once the products are ready, he/she ensure suitable packing of the products and for maintaining necessary documentation for facility and for dispatch of end product.

Personal Attributes

This job requires the individual to concentrate on the job at hand and complete the work safely. He/she should be able to communicate in local language. He / She must possess energy and strength for physical work. And also have a basic understanding of social and natural environment. He/she should possess very good interpersonal skills to work in Plastic Recycling plant.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [SGJ/N4033: Introduce Plastic recycling](#)
2. [SGJ/N4034: Describe tools and Equipment/machineries used for Plastic recycling](#)
3. [SGJ/N4035: Describe process line and products of plastic recycling](#)
4. [SGJ/N4036: Describe operation and maintenance of plastic recycling unit](#)
5. [SGJ/N4052: Maintain Personal Health & Safety in Plastic recycling facility](#)
6. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Green Jobs
Sub-Sector	Waste Management
Occupation	Technician
Country	India

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NSQF Level	3
Credits	12
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8143.9900 Plastic Moulding Technician or Operator
Minimum Educational Qualification & Experience	<p>10th grade pass with NA of experience OR 8th grade pass (with two year of (NTC/ NAC) after 8th) with NA of experience OR 8th grade pass (and pursuing continuous schooling in regular school with vocational subject) with NA of experience OR 8th grade pass with 2 Years of experience relevant experience OR 5th grade pass with 5 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 2.5) with 1-2 Years of experience 1.5 years of relevant experience OR Previous relevant Qualification of NSQF Level (Level 2) with 3 Years of experience relevant experience</p>
Minimum Level of Education for Training in School	Not Applicable
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	31/08/2026
NSQF Approval Date	31/08/2023
Version	1.0
Reference code on NQR	QG-03-ES-00914-2023-V1-SCGJ
NQR Version	1.0

Remarks:



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360 hours i.e. 12 credits 240 hours (Theory+ Practical)+30 hours Employability Skills+90 hours OJT

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SGJ/N4033: Introduce Plastic recycling

Description

This unit explain about Introduction of Plastic recycling

Scope

The scope covers the following :

- About plastic waste and its sources
- Functioning of a recycling unit

Elements and Performance Criteria

Introduction to Plastic Recycling Unit

To be competent, the user/individual on the job must be able to:

- PC1.** describe Brief introduction to 'Waste Stream' and different types of waste found
- PC2.** discuss about different types of plastic and its uses and exposure visits to landfills, MRFs, and open dumpsites
- PC3.** describe different types of plastics waste that exists in the waste stream and different conditions it is found in.
- PC4.** explain physical and chemical properties of different kinds of plastic waste
- PC5.** discuss different types of technologies/ machines for plastic recycling and show how to expose plastic recycling facility to have an overview of the operations
- PC6.** explain operational procedure of plastic waste recycling unit and expose plastic recycling facility to have an overview of the operations

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organizations reporting structure
- KU2.** organizations documentation policy
- KU3.** organizational culture
- KU4.** schedule of waste transportation vehicles
- KU5.** signs, symbols and colour codes used for solid waste management
- KU6.** different ways of handling and collecting of recyclable waste.
- KU7.** precautions in carrying and transportation of waste
- KU8.** basic skills required to perform the task of Recyclable waste collector and Segregator

Generic Skills (GS)

User/individual on the job needs to know how to:

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- GS1.** fill up relevant documents.
- GS2.** read vernacular language
- GS3.** understand the various colour codes used in waste management
- GS4.** express statements or information clearly so that others can understand
- GS5.** understand the main points of simple discussions
- GS6.** follow organization rule-based decision making process
- GS7.** planning and organization of work to meet schedule
- GS8.** work constructively and collaboratively with others.
- GS9.** communicate and create awareness.
- GS10.** recognize problems & approach relevant authority
- GS11.**
 - critically evaluate information obtained from supervisor and co-workers to perform day to
 - day activities.
- GS12.** ask questions for better understanding.

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Plastic Recycling Unit</i>	30	20	-	-
PC1. describe Brief introduction to 'Waste Stream' and different types of waste found	5	-	-	-
PC2. discuss about different types of plastic and its uses and exposure visits to landfills, MRFs, and open dumpsites	5	8	-	-
PC3. describe different types of plastics waste that exists in the waste stream and different conditions it is found in.	5	-	-	-
PC4. explain physical and chemical properties of different kinds of plastic waste	5	-	-	-
PC5. discuss different types of technologies/ machines for plastic recycling and show how to expose plastic recycling facility to have an overview of the operations	5	7	-	-
PC6. explain operational procedure of plastic waste recycling unit and expose plastic recycling facility to have an overview of the operations	5	5	-	-
NOS Total	30	20	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	SGJ/N4033
NOS Name	Introduce Plastic recycling
Sector	Green Jobs
Sub-Sector	Waste Management
Occupation	Technician
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

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SGJ/N4034: Describe tools and Equipment/machineries used for Plastic recycling

Description

This unit Describe the tools and Equipment/machineries used for Plastic recycling

Scope

The scope covers the following :

- About technologies for recycling different types/grades of plastic waste
- use of different tools
- operations of machinery of a recycling unit
- Identify each component of machinery

Elements and Performance Criteria

Describe tools and Equipment/machineries used for Plastic recycling

To be competent, the user/individual on the job must be able to:

- PC1.** discuss different types of machines/technologies used to recycle different types/grades of plastic and illustrate different machines and equipment used to recycle plastic
- PC2.** discuss raw material specification for each machinery
- PC3.** explain factors affecting the processing/ recycling of the plastic waste and list out factors affecting selection of machinery/ plastic waste at the unit
- PC4.** identify various tools used in the recycling unit and provide overview of various tools including safety tools used in the recycling unit
- PC5.** discuss specifications of machines/equipment
- PC6.** discuss specific requirement: electric load, temperature, pressure, feeding cycle and capacity, manpower requirement at each unit
- PC7.** discuss dos and don'ts while assembling components of machines
- PC8.** discuss requirements of end product so specific procedures can be followed accordingly and show how to calculate requirement of raw material, power load, human resource and other utility items for recycling of plastic waste
- PC9.** show the overview of the requirement of other utility items like electricity, water, boiler, space, etc

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organizations reporting structure
- KU2.** organizations documentation policy
- KU3.** organizational culture
- KU4.** schedule of waste transportation vehicles

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- KU5.** signs, symbols and colour codes used for solid waste management
- KU6.** different ways of handling and collecting of recyclable waste
- KU7.** precautions in carrying and transportation of waste
- KU8.** basic skills required to perform the task of Recyclable waste collector and Segregator

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** fill up relevant documents
- GS2.** read vernacular language
- GS3.** understand the various colour codes used in waste management
- GS4.** express statements or information clearly so that others can understand
- GS5.** understand the main points of simple discussions
- GS6.** follow organization rule-based decision making process
- GS7.** planning and organization of work to meet schedule
- GS8.** work constructively and collaboratively with others
- GS9.** communicate and create awareness
- GS10.** recognize problems & approach relevant authority
- GS11.**
 - critically evaluate information obtained from supervisor and co-workers to perform day to
 - day activities
- GS12.** ask questions for better understanding

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Describe tools and Equipment/machineries used for Plastic recycling</i>	30	20	-	-
PC1. discuss different types of machines/technologies used to recycle different types/grades of plastic and illustrate different machines and equipment used to recycle plastic	3	5	-	-
PC2. discuss raw material specification for each machinery	3	-	-	-
PC3. explain factors affecting the processing/ recycling of the plastic waste and list out factors affecting selection of machinery/ plastic waste at the unit	3	5	-	-
PC4. identify various tools used in the recycling unit and provide overview of various tools including safety tools used in the recycling unit	4	-	-	-
PC5. discuss specifications of machines/equipment	4	-	-	-
PC6. discuss specific requirement: electric load, temperature, pressure, feeding cycle and capacity, manpower requirement at each unit	3	-	-	-
PC7. discuss dos and don'ts while assembling components of machines	4	-	-	-
PC8. discuss requirements of end product so specific procedures can be followed accordingly and show how to calculate requirement of raw material, power load, human resource and other utility items for recycling of plastic waste	3	5	-	-
PC9. show the overview of the requirement of other utility items like electricity, water, boiler, space, etc	3	5	-	-
NOS Total	30	20	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	SGJ/N4034
NOS Name	Describe tools and Equipment/machineries used for Plastic recycling
Sector	Green Jobs
Sub-Sector	Waste Management
Occupation	Technician
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF Clearance Date	31/08/2023

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SGJ/N4035: Describe process line and products of plastic recycling

Description

This unit explain about process line and products of plastic recycling

Scope

The scope covers the following :

- Understanding of the process of converting plastic waste into chips
- Knowledge of procedure for preparing raw material quality report
- Knowledge of specific machinery, raw material and end product specification

Elements and Performance Criteria

Processing of plastic waste into chips

To be competent, the user/individual on the job must be able to:

- PC1.** discuss about Raw material specification of the chip- quality and quantity
- PC2.** discuss knowledge of procedures to conduct quality analysis of the raw material received at the unit
- PC3.** discuss procedure to prepare quality report of the raw material received
- PC4.** discuss about knowledge of pre- process requirements for preparing the feed stock for recycling
- PC5.** discuss about knowledge of machines and technology required for making chips- and showcase list of practical experience of day-to-day functioning of plastic grinding facility
- PC6.** discuss about knowledge of SOP (process of segregation, washing, grinding, and cleaning) for converting plastic waste into chips and demonstrate practical experience of all the theoretical training provided in the module
- PC7.** discuss packing of the end product for sale and demonstrate Packing of the end product for sale.
- PC8.** discuss how to Maintain necessary documentation for facility and for dispatch of end product and show how to prepare necessary documentation for facility and for dispatch of end product

Processing of plastic waste into granules

To be competent, the user/individual on the job must be able to:

- PC9.** discuss raw material specification of the granules- quality and quantity and showcase list of practical experience of day-to-day functioning of plastic grinding facility
- PC10.** discuss knowledge of procedures to conduct quality analysis of the raw material received at the unit
- PC11.** discuss procedure to prepare quality report of the raw material received
- PC12.** discuss knowledge of pre- process requirements for preparing the feed stock for recycling including the knowledge of other raw material like chemicals, pigments, etc required to produce the granules of specific requirement

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- PC13.** discuss about knowledge of machines and technology required for making granules and list out some practical experience of all the theoretical training provided in the module
- PC14.** discuss about knowledge of SOP (process of segregation, washing, grinding, and extrusion) for converting plastic waste into granules
- PC15.** discuss packing of the end product for sale and demonstrate Packing of the end product for sale.
- PC16.** explain how to Maintain necessary documentation for facility and for dispatch of end product and show how to prepare necessary documentation for facility and for dispatch of end product

Processing of plastic waste into board

To be competent, the user/individual on the job must be able to:

- PC17.** discuss raw material specification of the board- quality and quantity
- PC18.** discuss knowledge of procedures to conduct quality analysis of the raw material received at the unit and prepare list of practical experience of day-to-day functioning of plastic grinding facility
- PC19.** discuss procedure to prepare quality report of the raw material received
- PC20.** discuss knowledge of pre- process requirements for preparing the feed stock for recycling
- PC21.** discuss knowledge of machines and technology required for making boards and prepare list of practical experience of all the theoretical training provided in the module
- PC22.** discuss knowledge of SOP (process of segregation, washing, grinding, chiller, boiler, hot and cold press, cutter) for converting plastic waste into boards
- PC23.** discuss packing of the end product for sale and demonstrate Packing of the end product for sale.
- PC24.** discuss how to maintain necessary documentation for facility and for dispatch of end product and show how to prepare necessary documentation for facility and for dispatch of end product

Processing of LDPE plastic waste into LDPE Recycled Sheets

To be competent, the user/individual on the job must be able to:

- PC25.** discuss raw material specification of the sheet quality and quantity and list out practical experience of day-to-day functioning of LDPE plastic waste sheet press machinery, facility, and process
- PC26.** discuss knowledge of procedures to conduct quality analysis of the raw material received at the unit
- PC27.** discuss procedure to prepare quality report of the raw material received
- PC28.** discuss about knowledge of pre-process requirements for preparing the LDPE sheets for recycling known as 'Layering Process'
- PC29.** discuss about knowledge of machines and technology required for making LDPE sheets and list out practical experience of all the theoretical training provided in the module
- PC30.** discuss about knowledge of SOP (process of segregation, washing, cleaning, and cutting) for converting LDPE plastic waste into sheet
- PC31.** discuss about LDPE Plastic Waste Recycled sheet designing and production
- PC32.** discuss packing of the end product for sale and demonstrate Packing of the end product for sale.

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- PC33.** discuss how to maintain necessary documentation for facility and for dispatch of end product and show how to prepare necessary documentation for facility and for dispatch of end product

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organizations reporting structure
- KU2.** organizations documentation policy
- KU3.** organizational culture
- KU4.** schedule of waste transportation vehicles
- KU5.** signs, symbols and colour codes used for solid waste management
- KU6.** different ways of haprecautions in carrying and transportation of wastending and collecting of recyclable
- KU7.** basic skills required to perform the task of Recyclable waste collector and Segregator

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** fill up relevant documents.
- GS2.** read vernacular language
- GS3.** understand the various colour codes used in waste management
- GS4.** express statements or information clearly so that others can understand
- GS5.** understand the main points of simple discussions
- GS6.** follow organization rule-based decision making process
- GS7.** planning and organization of work to meet schedule
- GS8.** work constructively and collaboratively with others
- GS9.** communicate and create awareness
- GS10.** recognize problems & approach relevant authority
- GS11.** critically evaluate information obtained from supervisor and co-workers to perform day to day activities

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Processing of plastic waste into chips</i>	15	8	-	-
PC1. discuss about Raw material specification of the chip- quality and quantity	2	-	-	-
PC2. discuss knowledge of procedures to conduct quality analysis of the raw material received at the unit	2	-	-	-
PC3. discuss procedure to prepare quality report of the raw material received	2	-	-	-
PC4. discuss about knowledge of pre- process requirements for preparing the feed stock for recycling	2	-	-	-
PC5. discuss about knowledge of machines and technology required for making chips- and showcase list of practical experience of day-to-day functioning of plastic grinding facility	2	2	-	-
PC6. discuss about knowledge of SOP (process of segregation, washing, grinding, and cleaning) for converting plastic waste into chips and demonstrate practical experience of all the theoretical training provided in the module	2	2	-	-
PC7. discuss packing of the end product for sale and demonstrate Packing of the end product for sale.	2	2	-	-
PC8. discuss how to Maintain necessary documentation for facility and for dispatch of end product and show how to prepare necessary documentation for facility and for dispatch of end product	1	2	-	-
<i>Processing of plastic waste into granules</i>	17	10	-	-
PC9. discuss raw material specification of the granules- quality and quantity and showcase list of practical experience of day-to-day functioning of plastic grinding facility	2	2	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. discuss knowledge of procedures to conduct quality analysis of the raw material received at the unit	2	-	-	-
PC11. discuss procedure to prepare quality report of the raw material received	2	-	-	-
PC12. discuss knowledge of pre- process requirements for preparing the feed stock for recycling including the knowledge of other raw material like chemicals, pigments, etc required to produce the granules of specific requirement	2	2	-	-
PC13. discuss about knowledge of machines and technology required for making granules and list out some practical experience of all the theoretical training provided in the module	2	2	-	-
PC14. discuss about knowledge of SOP (process of segregation, washing, grinding, and extrusion) for converting plastic waste into granules	2	-	-	-
PC15. discuss packing of the end product for sale and demonstrate Packing of the end product for sale.	2	2	-	-
PC16. explain how to Maintain necessary documentation for facility and for dispatch of end product and show how to prepare necessary documentation for facility and for dispatch of end product	3	2	-	-
<i>Processing of plastic waste into board</i>	16	8	-	-
PC17. discuss raw material specification of the board- quality and quantity	2	-	-	-
PC18. discuss knowledge of procedures to conduct quality analysis of the raw material received at the unit and prepare list of practical experience of day-to-day functioning of plastic grinding facility	2	2	-	-
PC19. discuss procedure to prepare quality report of the raw material received	2	-	-	-
PC20. discuss knowledge of pre- process requirements for preparing the feed stock for recycling	2	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC21. discuss knowledge of machines and technology required for making boards and prepare list of practical experience of all the theoretical training provided in the module	2	2	-	-
PC22. discuss knowledge of SOP (process of segregation, washing, grinding, chiller, boiler, hot and cold press, cutter) for converting plastic waste into boards	2	-	-	-
PC23. discuss packing of the end product for sale and demonstrate Packing of the end product for sale.	2	2	-	-
PC24. discuss how to maintain necessary documentation for facility and for dispatch of end product and show how to prepare necessary documentation for facility and for dispatch of end product	2	2	-	-
<i>Processing of LDPE plastic waste into LDPE Recycled Sheets</i>	18	8	-	-
PC25. discuss raw material specification of the sheet quality and quantity and list out practical experience of day-to-day functioning of LDPE plastic waste sheet press machinery, facility, and process	2	2	-	-
PC26. discuss knowledge of procedures to conduct quality analysis of the raw material received at the unit	2	-	-	-
PC27. discuss procedure to prepare quality report of the raw material received	2	-	-	-
PC28. discuss about knowledge of pre-process requirements for preparing the LDPE sheets for recycling known as 'Layering Process'	2	-	-	-
PC29. discuss about knowledge of machines and technology required for making LDPE sheets and list out practical experience of all the theoretical training provided in the module	2	2	-	-
PC30. discuss about knowledge of SOP (process of segregation, washing, cleaning, and cutting) for converting LDPE plastic waste into sheet	2	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC31. discuss about LDPE Plastic Waste Recycled sheet designing and production	2	-	-	-
PC32. discuss packing of the end product for sale and demonstrate Packing of the end product for sale.	2	2	-	-
PC33. discuss how to maintain necessary documentation for facility and for dispatch of end product and show how to prepare necessary documentation for facility and for dispatch of end product	2	2	-	-
NOS Total	66	34	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	SGJ/N4035
NOS Name	Describe process line and products of plastic recycling
Sector	Green Jobs
Sub-Sector	Waste Management
Occupation	Technician
NSQF Level	3
Credits	4
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF Clearance Date	31/08/2023

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SGJ/N4036: Describe operation and maintenance of plastic recycling unit

Description

this unit describe operation and maintenance of plastic recycling unit

Scope

The scope covers the following :

- Understanding of health of the machinery and its components
- Skill to identify dysfunctions in the machinery in the early phases

Elements and Performance Criteria

Maintenance of machinery

To be competent, the user/individual on the job must be able to:

- PC1.** discuss about skill to check the health of machinery and equipment
- PC2.** discuss about ability to figure out dysfunctionality of parts of machinery and show how to differentiate between critical and non-critical issues related to machineries and the unit
- PC3.** discuss about ability to identify problem in the machinery at initial phases and show how the guidance of experts, exposure to identify dysfunctions in machines
- PC4.** discuss about ability to identify technicians to repair the dysfunctional part of the machinery
- PC5.** discuss about ability to resolve the issue at the earliest in the most efficient manner and show how to get the machinery repaired and in proper shape in due time
- PC6.** show how to re-address the issues related to machinery

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organizations reporting structure
- KU2.** organizations documentation policy.
- KU3.** organizational culture
- KU4.** schedule of waste transportation vehicles
- KU5.** signs, symbols and colour codes used for solid waste management
- KU6.** different ways of handling and collecting of recyclable waste
- KU7.** precautions in carrying and transportation of waste
- KU8.** basic skills required to perform the task of Recyclable waste collector and Segregator

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** fill up relevant documents

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- GS2.** read vernacular language
- GS3.** understand the various colour codes used in waste management
- GS4.** express statements or information clearly so that others can understand
- GS5.** understand the main points of simple discussions
- GS6.** follow organization rule-based decision making process
- GS7.** planning and organization of work to meet schedule
- GS8.** work constructively and collaboratively with others
- GS9.** communicate and create awareness
- GS10.** recognize problems & approach relevant authority
- GS11.** recognize problems & approach relevant authority
- GS12.** critically evaluate information obtained from supervisor and co-workers to perform day to day activities

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintenance of machinery</i>	30	20	-	-
PC1. discuss about skill to check the health of machinery and equipment	5	-	-	-
PC2. discuss about ability to figure out dysfunctionality of parts of machinery and show how to differentiate between critical and non-critical issues related to machineries and the unit	5	5	-	-
PC3. discuss about ability to identify problem in the machinery at initial phases and show how the guidance of experts, exposure to identify dysfunctions in machines	5	5	-	-
PC4. discuss about ability to identify technicians to repair the dysfunctional part of the machinery	5	-	-	-
PC5. discuss about ability to resolve the issue at the earliest in the most efficient manner and show how to get the machinery repaired and in proper shape in due time	5	5	-	-
PC6. show how to re-address the issues related to machinery	5	5	-	-
NOS Total	30	20	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	SGJ/N4036
NOS Name	Describe operation and maintenance of plastic recycling unit
Sector	Green Jobs
Sub-Sector	Waste Management
Occupation	Technician
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

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SGJ/N4052: Maintain Personal Health & Safety in Plastic recycling facility

Description

This unit is about maintaining basic health and workplace safety in Plastic recycling facility

Scope

The scope covers the following :

- Maintain standard health and workplace safety
- Organize safety awareness sessions and participate in safety drills
- Use and maintain protective safety gears

Elements and Performance Criteria

Maintain Personal Health & Safety in Plastic recycling facility

To be competent, the user/individual on the job must be able to:

- PC1.** identify the requirements for safe work area.
- PC2.** explain how to Administer first aid and demonstrate how to Administer first aid
- PC3.** identify the personal protective equipment used for the specific purpose and illustrate the personal protective equipment used for the specific purpose
- PC4.** identify the heavy electrical and mechanical equipment's associated with manufacturing and show how to Identify the heavy electrical and mechanical equipment's associated with plastic recycling facility
- PC5.** identify work safety procedures and instructions to operate plastic recycling facility and demonstrate how to Identify and perform work safety procedures and instructions to operate plastic recycling machines
- PC6.** explain occupational health & safety standards and regulations for Plastic recycling process and demonstrate good housekeeping practices and infection control guidelines.
- PC7.** demonstrate how to Dispose- off any waste materials in accordance with safe working practices and procedures.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** company occupational safety and health policy
- KU2.** company's medical policy
- KU3.** personal protective equipments (PPEs) required for safe operation
- KU4.** occupational health and safety (OHS) standards for workplace and machine safety
- KU5.** risk identification and mitigation procedures
- KU6.** • workplace safety procedures including emergency evacuation, first aid procedures among
• others.
- KU7.** understand work safety procedures and instructions to operate plastic recycling machines

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Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** how to be able to read safety instructions and warning signage
- GS2.** fill up documentation applicable to ones role
- GS3.** read instruction and safety manuals.
- GS4.** express statements or information clearly so that others can hear and understand
- GS5.** participate in and understand the main points of simple discussions
- GS6.** effectively communicate the danger.
- GS7.** make decisions pertaining to safety procedures at workplace
- GS8.** identify need of first aid and render it accordingly
- GS9.** report potential sources of danger and wear appropriate safety gear to avoid accidents.
- GS10.** planning of work and using tools in an organized manner to avoid accidents/incidents.
- GS11.** schedule daily activities and drawing up priorities related to workplace safety
- GS12.** use of safety equipment such as fire extinguisher during fire accidents
- GS13.** use personal protective equipments (ppes) such as protective gear, goggles, caps, shoes,etc
- GS14.** follow code of safety conduct
- GS15.** manage relationships with co-workers and managers of the who may be stressed, frustrated, confused or angry
- GS16.** recognize problems and search for solutions
- GS17.** choose best methods to complete assigned tasks
- GS18.** identify problems immediately and take up solutions quickly to resolve delays.
- GS19.** assess situation & identify appropriate control measures.
- GS20.**
 - critically evaluate information obtained from customers, supervisor and co-workers to
 - perform day to day activities.
- GS21.** initiate and take-up own working and learning.

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain Personal Health & Safety in Plastic recycling facility</i>	25	25	-	-
PC1. identify the requirements for safe work area.	3	-	-	-
PC2. explain how to Administer first aid and demonstrate how to Administer first aid	2	4	-	-
PC3. identify the personal protective equipment used for the specific purpose and illustrate the personal protective equipment used for the specific purpose	5	4	-	-
PC4. identify the heavy electrical and mechanical equipment's associated with manufacturing and show how to Identify the heavy electrical and mechanical equipment's associated with plastic recycling facility	5	4	-	-
PC5. identify work safety procedures and instructions to operate plastic recycling facility and demonstrate how to Identify and perform work safety procedures and instructions to operate plastic recycling machines	5	4	-	-
PC6. explain occupational health & safety standards and regulations for Plastic recycling process and demonstrate good housekeeping practices and infection control guidelines.	5	4	-	-
PC7. demonstrate how to Dispose- off any waste materials in accordance with safe working practices and procedures.	-	5	-	-
NOS Total	25	25	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	SGJ/N4052
NOS Name	Maintain Personal Health & Safety in Plastic recycling facility
Sector	Green Jobs
Sub-Sector	Waste Management
Occupation	Technician
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

Qualification Pack

DGT/VSQ/N0101: Employability Skills (30 Hours)

Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

Elements and Performance Criteria

Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

PC1. understand the significance of employability skills in meeting the job requirements

Constitutional values - Citizenship

To be competent, the user/individual on the job must be able to:

PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

Basic English Skills

To be competent, the user/individual on the job must be able to:

PC4. speak with others using some basic English phrases or sentences

Communication Skills

To be competent, the user/individual on the job must be able to:

PC5. follow good manners while communicating with others

PC6. work with others in a team

Qualification Pack

Diversity & Inclusion

To be competent, the user/individual on the job must be able to:

PC7. communicate and behave appropriately with all genders and PwD

PC8. report any issues related to sexual harassment

Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

PC9. use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

PC11. approach the concerned authorities for any exploitation as per legal rights and laws

Essential Digital Skills

To be competent, the user/individual on the job must be able to:

PC12. operate digital devices and use its features and applications securely and safely

PC13. use internet and social media platforms securely and safely

Entrepreneurship

To be competent, the user/individual on the job must be able to:

PC14. identify and assess opportunities for potential business

PC15. identify sources for arranging money and associated financial and legal challenges

Customer Service

To be competent, the user/individual on the job must be able to:

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

KU4. Twenty first (21st) century skills and their importance

KU5. how to use basic spoken English language

KU6. Do and dont of effective communication

KU7. inclusivity and its importance

KU8. different types of disabilities and appropriate communication and behaviour towards PwD

KU9. different types of financial products and services

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- KU10.** how to compute income and expenses
- KU11.** importance of maintaining safety and security in financial transactions
- KU12.** different legal rights and laws
- KU13.** how to operate digital devices and applications safely and securely
- KU14.** ways to identify business opportunities
- KU15.** types of customers and their needs
- KU16.** how to apply for a job and prepare for an interview
- KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** communicate effectively using appropriate language
- GS2.** behave politely and appropriately with all
- GS3.** perform basic calculations
- GS4.** solve problems effectively
- GS5.** be careful and attentive at work
- GS6.** use time effectively
- GS7.** maintain hygiene and sanitisation to avoid infection

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values - Citizenship</i>	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	1	3	-	-
PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
<i>Essential Digital Skills</i>	4	6	-	-
PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13. use internet and social media platforms securely and safely	-	-	-	-
<i>Entrepreneurship</i>	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
<i>Customer Service</i>	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
2. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.

Minimum Aggregate Passing % at QP Level : 70

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

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Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
SGJ/N4033.Introduce Plastic recycling	30	20	0	0	50	15
SGJ/N4034.Describe tools and Equipment/machineries used for Plastic recycling	30	20	0	0	50	15
SGJ/N4035.Describe process line and products of plastic recycling	66	34	0	0	100	25
SGJ/N4036.Describe operation and maintenance of plastic recycling unit	30	20	0	0	50	15
SGJ/N4052.Maintain Personal Health & Safety in Plastic recycling facility	25	25	0	0	50	15
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	15
Total	201	149	-	-	350	100

Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training

Qualification Pack

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. 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 functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
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 (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) 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)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
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.

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Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation 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/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment 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.
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.