

Qualification Pack



Effluent Treatment Plant Operator- Life Sciences (Pharma, Bio-Pharma & Research)

QP Code: LFS/Q0220

Version: 2.0

NSQF Level: 4

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LFS/Q0220: Effluent Treatment Plant Operator- Life Sciences (Pharma, Bio-Pharma & Research)

Brief Job Description

Effluent Treatment Plant operator or ETP operator is responsible for operating, monitoring and maintaining effluent treatment plant while carrying out waste disposal activities. This person provides support to In-charge and EHS team to ensure that activities related to effluent treatment are carried out in adherence to correct procedures, regulations, health and safety guidelines. The job holder is responsible to monitor the quantity and quality of effluent streams. The individual is also responsible for the site inspection for environmental monitoring and maintaining the records for quantity, quality and operating parameters for ETP operations.

Personal Attributes

The individual should have good time management and analytical skills. The job holder must possess good communication and problem solving skills. The individual should be detail and result oriented.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [LFS/N0262: Carry out GMP-critical \(Good Manufacturing Practices\) activities and their documentation](#)
2. [SGJ/N6601: Operate the Wastewater Treatment Plant](#)
3. [SGJ/N6602: Monitor and Maintain the Wastewater Treatment Plant](#)
4. [SGJ/N6605: Work Safety at Wastewater treatment plant](#)
5. [LFS/N0263: Coordinate and communicate with EHS Supervisor, teams and auditors](#)
6. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Life Sciences
Sub-Sector	Pharmaceutical, Bio Pharmaceutical
Occupation	Manufacturing



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Country	India
NSQF Level	4
Credits	12
Aligned to NCO/ISCO/ISIC Code	NCO 2015/3132.0400
Minimum Educational Qualification & Experience	12th Class (Science Subject Preferred) with NA of experience OR I.T.I with NA of experience
Minimum Level of Education for Training in School	10th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	22/09/2025
NSQC Approval Date	22/09/2020
Version	2.0
Reference code on NQR	QC-04-LS-00258-2023-V1.1-LSSSDC
NQR Version	1.0



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LFS/N0262: Carry out GMP-critical (Good Manufacturing Practices) activities and their documentation

Description

This job function is about the ETP operator performing GMP critical activities and their documentation to maintain compliance with GMP and environmental regulations during ETP Operations in the Life Sciences Sector

Scope

The scope covers the following :

- GMP-critical activities prior to effluent treatment
- GMP-critical activities during ETP operations
- GMP-critical activities post effluent treatment
- reporting & documentation
- environment sustainability

Elements and Performance Criteria

GMP-critical activities prior to effluent treatment

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

- PC1.** take the shift handover as per the SOP
- PC2.** inspect ETP equipment for safety checks and leakage regularly
- PC3.** ensure the display of specific labels for a designated area for hazardous chemicals
- PC4.** ensure availability of Material Safety Data Sheets (MSDS) in ETP area for all the chemicals in use

GMP-critical activities during ETP operations

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

- PC5.** operate spill control equipment in ETP area
- PC6.** perform the filtration of treated water as per SOP and transfer treated water for reuse as per SOP
- PC7.** ensure the collection of effluent water samples before and after treatment as per GMP and Good Laboratory Practices (GLP) guidelines for sampling
- PC8.** ensure testing, analysis, and reporting of collected samples
- PC9.** check the pH of the sample and record as per SOP
- PC10.** ensure to take the parallel samples during the collection of vigilance samples by authorities
- PC11.** ensure to send parallel samples to an in-house (established in the organization) environmental lab and vigilance samples taken by authorities to a regulatory environmental lab for analysis

GMP-critical activities post effluent treatment

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

- PC12.** maintain the leachate (landfill) treatment facility (if available) for hazardous chemicals



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PC13. perform waste disposal as per environmental and GMP regulations under the guidance of the supervisor

Reporting & documentation

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

PC14. document all the control steps that are undertaken or recommended by the supervisor to be followed as per GMP, GLP guidelines and Attributable, Legible, Contemporaneous, Original and Accurate (ALCOA) principle

PC15. prepare an ETP performance report

PC16. submit periodic reports to the supervisor as per SOP

PC17. provide EC (Environmental Clearance), CTE (Consent to Establishment) & CTO (Consent To Operations) compliance reports to EHS team

PC18. submit the reports to internal stakeholders (QA team, Plant Manager and EHS Manager) and statutory authority as per environmental and GMP regulations

Environment sustainability

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

PC19. ensure energy conservation by switching off the machine and equipment post operations

PC20. identify ways to optimize the usage of electricity/energy in various tasks/activities/processes

PC21. ensure energy conservation by optimizing the ETP plant machine/ equipment performance

PC22. identify recyclable and non-recyclable, and hazardous waste generated

PC23. segregate waste into different categories to achieve minimum pollution of land and water

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the organizational SOPs

KU2. the role of different materials, chemicals, and equipment

KU3. the guidelines related to ETP operations and environmental sustainability in Good Laboratory Practices (GLP), Good Manufacturing Practices(GMP), Good Clinical Practices (GCP) and local environmental regulations

KU4. the ETP operations manual

KU5. the process of handling biological and chemical hazards

KU6. the guidelines laid for compliance with ISO 14001 environmental management system

KU7. the procedures to document GMP critical ETP operations

KU8. the operating manuals for ATFD operations, ZLD operations, multiple-effect evaporator, and RO plant

KU9. the process of recording the physical parameters like SVI, TSS, TDS, and odor and their importance

KU10. the process to log online data

KU11. the water effluent and OHS criteria to handle effluent

KU12. the selection of safety gears and PPE to be used while performing ETP operations and their operating procedures



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Generic Skills (GS)

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

- GS1.** use written communication skills to draft reports or electronic mails to communicate the details of work done to appropriate people
- GS2.** use verbal communication skills in communicating the details of work done to appropriate people and during interaction with regulatory inspectors and other teammates
- GS3.** use planning and organizing skills in every activity planned and performed in ETP operations and to achieve resource optimization
- GS4.** use problem-solving skills in dealing with any deviation from SOPs and day-today problems
- GS5.** use critical skills in analyzing any situation which needs an immediate escalation or emergency alarm
- GS6.** use critical skills in analyzing impact of pollution and hazards to the environment and living beings in every activity
- GS7.** apply customer-centricity while interacting with different stakeholders

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>GMP-critical activities prior to effluent treatment</i>	10	15	-	-
PC1. take the shift handover as per the SOP	-	-	-	-
PC2. inspect ETP equipment for safety checks and leakage regularly	-	-	-	-
PC3. ensure the display of specific labels for a designated area for hazardous chemicals	-	-	-	-
PC4. ensure availability of Material Safety Data Sheets (MSDS) in ETP area for all the chemicals in use	-	-	-	-
<i>GMP-critical activities during ETP operations</i>	10	15	-	-
PC5. operate spill control equipment in ETP area	-	-	-	-
PC6. perform the filtration of treated water as per SOP and transfer treated water for reuse as per SOP	-	-	-	-
PC7. ensure the collection of effluent water samples before and after treatment as per GMP and Good Laboratory Practices (GLP) guidelines for sampling	-	-	-	-
PC8. ensure testing, analysis, and reporting of collected samples	-	-	-	-
PC9. check the pH of the sample and record as per SOP	-	-	-	-
PC10. ensure to take the parallel samples during the collection of vigilance samples by authorities	-	-	-	-
PC11. ensure to send parallel samples to an in-house (established in the organization) environmental lab and vigilance samples taken by authorities to a regulatory environmental lab for analysis	-	-	-	-
<i>GMP-critical activities post effluent treatment</i>	10	15	-	-
PC12. maintain the leachate (landfill) treatment facility (if available) for hazardous chemicals	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. perform waste disposal as per environmental and GMP regulations under the guidance of the supervisor	-	-	-	-
<i>Reporting & documentation</i>	8	12	-	-
PC14. document all the control steps that are undertaken or recommended by the supervisor to be followed as per GMP, GLP guidelines and Attributable, Legible, Contemporaneous, Original and Accurate (ALCOA) principle	-	-	-	-
PC15. prepare an ETP performance report	-	-	-	-
PC16. submit periodic reports to the supervisor as per SOP	-	-	-	-
PC17. provide EC (Environmental Clearance), CTE (Consent to Establishment) & CTO (Consent To Operations) compliance reports to EHS team	-	-	-	-
PC18. submit the reports to internal stakeholders (QA team, Plant Manager and EHS Manager) and statutory authority as per environmental and GMP regulations	-	-	-	-
<i>Environment sustainability</i>	2	3	-	-
PC19. ensure energy conservation by switching off the machine and equipment post operations	-	-	-	-
PC20. identify ways to optimize the usage of electricity/energy in various tasks/activities/processes	-	-	-	-
PC21. ensure energy conservation by optimizing the ETP plant machine/ equipment performance	-	-	-	-
PC22. identify recyclable and non-recyclable, and hazardous waste generated	-	-	-	-
PC23. segregate waste into different categories to achieve minimum pollution of land and water	-	-	-	-
NOS Total	40	60	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	LFS/N0262
NOS Name	Carry out GMP-critical (Good Manufacturing Practices) activities and their documentation
Sector	Life Sciences
Sub-Sector	Pharmaceutical, Bio Pharmaceutical
Occupation	Manufacturing
NSQF Level	4
Credits	2.00
Version	2.0
Last Reviewed Date	NA
Next Review Date	22/09/2023
NSQC Clearance Date	22/09/2020



Qualification Pack

SGJ/N6601: Operate the Wastewater Treatment Plant

Description

This unit is about operation and maintenance of Wastewater treatment Plant.

Scope

The scope covers the following :

- Wastewater Treatment Plant operation

Elements and Performance Criteria

Wastewater Treatment Plant Operation

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

- PC1.** explain what is wastewater and general concepts of effluent disposal, recycling and re-use of treated wastewater
- PC2.** explain broadly the multiple stages of treatment, along with flow diagram, schematic and layout of wastewater treatment plant
- PC3.** start the wastewater treatment plant by switching on the pumps, mixers, controllers and other equipments
- PC4.** perform the operation and cleaning of different screens
- PC5.** operate different valves in a wastewater treatment plant
- PC6.** charge the slurry tank
- PC7.** operate oil skimmer and fill drums as required
- PC8.** perform the addition of chemicals and microbes to treat water as required
- PC9.** facilitate the calibration of process control equipment as needed
- PC10.** ensure that the sludge is handled properly
- PC11.** complete the documentation as required
- PC12.** identify ways to optimize usage of electricity/energy in various tasks/activities/processes
- PC13.** identify skills to work as a wastewater technician including using inclusive language (verbal, non-verbal and written) that is gender, disability and culturally sensitive to work effectively with others

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organisational reporting structure
- KU2.** companys different department and concerned authority
- KU3.** authorization from specified supervisor
- KU4.** organisational policies and process



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- KU5.** overall operations and different processes of wastewater treatment plant including but not limited to screening, sedimentation, neutralization, absorption, adsorption, oxidation/reduction, ion exchange process, chlorination, aeration tank, sludge digesters, handling and drying
- KU6.** working principle of different machineries in wastewater treatment plant
- KU7.** classification of different types of filters, and how they are cleaned or replaced
- KU8.** safety compliances while handling chemicals and organic matter
- KU9.** importance and need of treating wastewater
- KU10.** common practices of conserving electricity
- KU11.** gender, disability and cultural biases, stereotypes and impact on others

Generic Skills (GS)

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

- GS1.** maintain records of the readings of different instrument
- GS2.** read English and/or vernacular language
- GS3.** read and understand manuals, health and safety instructions, memos, other company documents
- GS4.** read from different sources- books screens in machines and signage
- GS5.** read color codes, as per standard electrical, mechanical and civil nomenclature
- GS6.** express statements or information clearly so that others can hear and understand
- GS7.** participate in and understand the main points of simple discussions
- GS8.** respond appropriately to any queries
- GS9.** communicate with supervisor
- GS10.** follow organization rule-based decision making process
- GS11.** take decision with systematic course of actions and/or response
- GS12.** plan and organize of work to meet deadlines
- GS13.** work constructively and collaboratively with others
- GS14.** recognize problems and search for solutions
- GS15.** choose best methods to complete assigned tasks
- GS16.** approach relevant authority when required
- GS17.** apply domain knowledge, observations and data to select course of action to perform tasks related to wastewater treatment
- GS18.** evaluate information obtained from customers, supervisor and co-workers to perform day to day activities
- GS19.** ask questions for better understanding

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Wastewater Treatment Plant Operation</i>	13	22	-	-
PC1. explain what is wastewater and general concepts of effluent disposal, recycling and re-use of treated wastewater	1	1	-	-
PC2. explain broadly the multiple stages of treatment, along with flow diagram, schematic and layout of wastewater treatment plant	1	1	-	-
PC3. start the wastewater treatment plant by switching on the pumps, mixers, controllers and other equipments	1	2	-	-
PC4. perform the operation and cleaning of different screens	1	2	-	-
PC5. operate different valves in a wastewater treatment plant	1	1	-	-
PC6. charge the slurry tank	1	3	-	-
PC7. operate oil skimmer and fill drums as required	1	2	-	-
PC8. perform the addition of chemicals and microbes to treat water as required	1	2	-	-
PC9. facilitate the calibration of process control equipment as needed	1	2	-	-
PC10. ensure that the sludge is handled properly	1	2	-	-
PC11. complete the documentation as required	1	2	-	-
PC12. identify ways to optimize usage of electricity/energy in various tasks/activities/processes	1	1	-	-
PC13. identify skills to work as a wastewater technician including using inclusive language (verbal, non-verbal and written) that is gender, disability and culturally sensitive to work effectively with others	1	1	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	13	22	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	SGJ/N6601
NOS Name	Operate the Wastewater Treatment Plant
Sector	Green Jobs
Sub-Sector	Waste Management
Occupation	Operation and Maintenance
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	27/05/2021
Next Review Date	22/09/2023
NSQC Clearance Date	22/09/2020



Qualification Pack

SGJ/N6602: Monitor and Maintain the Wastewater Treatment Plant

Description

This unit is about monitoring and maintaining the Wastewater Treatment Plant.

Scope

The scope covers the following :

- Monitor the working of Wastewater Treatment Plant
- Maintain the Wastewater Treatment Plant

Elements and Performance Criteria

Monitor the working of Wastewater Treatment Plant

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

- PC1.** check all equipments and fill out daily activities log sheet
- PC2.** ensure proper working of wastewater collection system
- PC3.** monitor the working of wastewater pumping station and record any anomalies
- PC4.** take chemical inventory and record the chemical and water usage daily
- PC5.** monitor and record all meter and gauge readings
- PC6.** visually inspect the discharge at delivery point periodically for anomalies
- PC7.** prepare and maintain the operation records

Maintain the Wastewater Treatment Plant

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

- PC8.** explain structure of a Maintenance Program (General Guidelines, treatment plant Components of Maintenance)
- PC9.** implement a Maintenance Plan as per established typical Maintenance Procedures
- PC10.** perform maintenance on valves, filters, pumps, tanks and aerators
- PC11.** discuss to perform general plant maintenance and diagnose faults/ trouble in the equipment's operation and take immediate actions
- PC12.** perform general maintenance and rectify the problem on time with minimal interruption or hindrance in plant's operation
- PC13.** ensure the cleanliness work area and equipment
- PC14.** assist in developing the estimates for repair, maintenance and construction activities in the wastewater treatment plant
- PC15.** maintain service records of electro mechanical equipment and the plant complete the documentation as required

Resource conservation

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

- PC16.** identify ways to optimize usage of material including water in various tasks/activities/processes
- PC17.** identify ways to optimize usage of electricity/energy



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Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organisational policy on quality and standards, design norms, safety hazards, integrity, codes, compliance and guidelines
- KU2.** the purpose and scope of the work to be carried out and its importance
- KU3.** maintenance of a wastewater treatment plant
- KU4.** organisational reporting structure
- KU5.** different department and concerned authority within organisation
- KU6.** working principle of different major components in wastewater treatment plant
- KU7.** classification of different types of filters, valves, pumps, screens, tanks and how they are cleaned or replaced when required
- KU8.** working principle of different major components in wastewater treatment plant
- KU9.** overall maintenance of wastewater treatment plant
- KU10.** maintenance schedule of different parts of a wastewater treatment plant
- KU11.** working principle of different major components in wastewater treatment plant

Generic Skills (GS)

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

- GS1.** fill up documentation applicable to ones role
- GS2.** take decision with systematic course of actions and/or response
- GS3.** read English and/or vernacular language
- GS4.**
 - read and understand manuals, health and safety instructions, memos, other company documents.
- GS5.** read from different sources- books screens in machines and signage.
- GS6.** understand the various color codes, as per standard electrical, mechanical and civil nomenclature
- GS7.** express statements or information clearly so that others can hear and understand
- GS8.** participate in and understand the main points of simple discussions
- GS9.** respond appropriately to any queries
- GS10.** communicate with supervisor
- GS11.** apply domain knowledge, observations and data to select course of action to perform tasks related to Wastewater Treatment

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Monitor the working of Wastewater Treatment Plant</i>	16	25	-	-
PC1. check all equipments and fill out daily activities log sheet	3	5	-	-
PC2. ensure proper working of wastewater collection system	2	4	-	-
PC3. monitor the working of wastewater pumping station and record any anomalies	2	4	-	-
PC4. take chemical inventory and record the chemical and water usage daily	3	4	-	-
PC5. monitor and record all meter and gauge readings	2	4	-	-
PC6. visually inspect the discharge at delivery point periodically for anomalies	2	2	-	-
PC7. prepare and maintain the operation records	2	2	-	-
<i>Maintain the Wastewater Treatment Plant</i>	8	12	-	-
PC8. explain structure of a Maintenance Program (General Guidelines, treatment plant Components of Maintenance)	1	1	-	-
PC9. implement a Maintenance Plan as per established typical Maintenance Procedures	1	1	-	-
PC10. perform maintenance on valves, filters, pumps, tanks and aerators	1	2	-	-
PC11. discuss to perform general plant maintenance and diagnose faults/ trouble in the equipment's operation and take immediate actions	1	-	-	-
PC12. perform general maintenance and rectify the problem on time with minimal interruption or hindrance in plant's operation	1	2	-	-
PC13. ensure the cleanliness work area and equipment	1	2	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. assist in developing the estimates for repair, maintenance and construction activities in the wastewater treatment plant	1	2	-	-
PC15. maintain service records of electro mechanical equipment and the plant complete the documentation as required	1	2	-	-
<i>Resource conservation</i>	2	2	-	-
PC16. identify ways to optimize usage of material including water in various tasks/activities/processes	1	1	-	-
PC17. identify ways to optimize usage of electricity/energy	1	1	-	-
NOS Total	26	39	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	SGJ/N6602
NOS Name	Monitor and Maintain the Wastewater Treatment Plant
Sector	Green Jobs
Sub-Sector	Waste Management
Occupation	Operation and Maintenance
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	27/05/2021
Next Review Date	22/09/2023
NSQC Clearance Date	22/09/2020



Qualification Pack

SGJ/N6605: Work Safety at Wastewater treatment plant

Description

This unit is about maintaining work safety at Wastewater Treatment Plant.

Scope

The scope covers the following :

- Work Safety at Wastewater treatment plant

Elements and Performance Criteria

Work safety at Wastewater treatment plant

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

- PC1..** identify the hazards associated with different tasks in a wastewater treatment plant
- PC2..** inform the concerned person of the accident and hazard occurred
- PC3..** select the right personal protective equipment for different tasks in a waste treatment plant
- PC4..** perform the changing of chlorine cylinders safely
- PC5..** ensure safe storage of corrosive substances
- PC6..** ensure health & safety by following company policies & processes and industry standards for work safety

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** company's policy on quality and standards, design norms, safety hazards, integrity, codes, compliance and guidelines
- KU2.** purpose and scope of the work to be carried out and its importance
- KU3.** operations of a wastewater treatment plant
- KU4.** company's reporting structure
- KU5.** company's different department and concerned authority
- KU6.** safety compliances while handling chemicals and organic matter
- KU7.** hazards associated with the operation of the waste treatment plant
- KU8.** dos and don'ts in operation of waste treatment plant
- KU9.** importance and know-how of personal protective equipment
- KU10.** procedure for safe handling of corrosive substances, chemicals, chlorine and chlorine equipment
- KU11.** safe storage of corrosive substances
- KU12.** how to detect chlorine leakage and control

Generic Skills (GS)



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

- GS1.** fill up documentation applicable to ones role
- GS2.** read english and/or vernacular language
- GS3.** read and understand manuals, health and safety instructions, memos, other company documents
- GS4.** read from different sources- books screens in machines and signage
- GS5.** read various color codes, as per standard electrical, mechanical and civil nomenclature
- GS6.** express statements or information clearly so that others can hear and understand
- GS7.** participate in and understand the main points of simple discussions
- GS8.** respond appropriately to any queries
- GS9.** communicate with supervisor
- GS10.** follow organization rule-based decision making process
- GS11.** take decision with systematic course of actions and/or response
- GS12.** plan and organize work to meet deadlines
- GS13.** work constructively and collaboratively with others.
- GS14.** recognize problems and search for solutions.
- GS15.** choose best methods to complete assigned tasks.
- GS16.** apply domain knowledge, observations and data to select course of action to perform tasks related to wastewater treatment
- GS17.** evaluate information obtained from customers, supervisor and co-workers to perform day to day activities
- GS18.** ask questions for better understanding



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Work safety at Wastewater treatment plant</i>	20	30	-	-
PC1.. identify the hazards associated with different tasks in a wastewater treatment plant	5	7	-	-
PC2.. inform the concerned person of the accident and hazard occurred	2	3	-	-
PC3.. select the right personal protective equipment for different tasks in a waste treatment plant	5	7	-	-
PC4.. perform the changing of chlorine cylinders safely	3	5	-	-
PC5.. ensure safe storage of corrosive substances	3	5	-	-
PC6.. ensure health & safety by following company policies & processes and industry standards for work safety	2	3	-	-
NOS Total	20	30	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	SGJ/N6605
NOS Name	Work Safety at Wastewater treatment plant
Sector	Green Jobs
Sub-Sector	Waste Management
Occupation	Health and Safety
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	27/05/2021
Next Review Date	22/09/2023
NSQC Clearance Date	22/09/2020



Qualification Pack

LFS/N0263: Coordinate and communicate with EHS Supervisor, teams and auditors

Description

This job function is about the ETP operator coordinating with EHS supervisor and colleagues within and outside the department and responding to auditors.

Scope

The scope covers the following :

- Coordination with the supervisor
- Coordination within the team and cross-functional teams
- Respond to audit queries
- Sensitivity towards all genders and people with disability

Elements and Performance Criteria

Coordination with the supervisor

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

- PC1.** follow work instructions received from the reporting supervisor
- PC2.** communicate process-flow improvements, production defects received from the previous process, repairs and maintenance of equipment to reporting supervisor
- PC3.** submit periodic reports to the supervisor as per SOP

Coordination within the team and cross-functional teams

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

- PC4.** support team members and colleagues of other departments in work
- PC5.** take handover from previous shift operator and give handover to next shift operator as per SOP
- PC6.** find solutions to workflow related difficulties with mutual agreement
- PC7.** coordinate with QA for ETP plant validation at a routine interval as per SOP
- PC8.** conduct regular Toolbox Talk with helpers to improve safety observation and system
- PC9.** provide inputs to the concerned stakeholders in periodic fence line review to detect non-compliance
- PC10.** evaluate the impact of trending regulatory and statutory guideline updates, and communicate the same to internal stakeholders and EHS Incharge

Respond to audit queries

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

- PC11.** interact with the auditor in their preferred language as per their comfort
- PC12.** provide clear answers to the auditor's queries
- PC13.** produce the documented records of performed activities and operations to auditors
- PC14.** maintain data integrity while responding to auditors and regulatory inspectors

Sensitivity towards all genders and people with disability



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

- PC15.** respect all the genders, religions, and caste
- PC16.** empathize with the people with disability
- PC17.** offer support or help to a person with disability only when asked
- PC18.** ensure to adhere with the guidelines laid in Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act
- PC19.** report any violation of prevention of sexual harassment (POSH) rules immediately to the POSH committee

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the company's policies on the preferred language of communication, reporting and escalation policy
- KU2.** the reporting structure of the organization
- KU3.** type of audits in the life sciences sector for the effluent treatment plant
- KU4.** the required regulatory and statutory compliance rule related documentation
- KU5.** the guidelines for data integrity, ethics, and compliance in the life sciences industry
- KU6.** the guidelines laid on Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act
- KU7.** the methods of workplace communication
- KU8.** the methods of team coordination
- KU9.** the types of possible disabilities among people with disability (PwD)
- KU10.** the challenges faced by PwD
- KU11.** the importance of displaying empathy towards PwD
- KU12.** the right way to use the laws, acts, and provisions defined for PwD by the statutory bodies
- KU13.** the importance of awareness for gender sensitization and prevention of sexual harassment (POSH) act
- KU14.** the importance of respect all the religions, caste, and cultures

Generic Skills (GS)

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

- GS1.** use reading and comprehension skills to gauge the relevant information manuals, SOPs, health and safety instructions, memos, reports, job cards, and notes/comments
- GS2.** use written communication skills to record and communicate details of work done to appropriate stakeholders by using written/typed report or computer-based record/electronic mail
- GS3.** use written communication skills to maintain proper and concise records as per given format and compliant with ALCOA principle
- GS4.** use verbal communication skills to communicate confidential and sensitive information discretely to the authorized person while interacting with teammates



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- GS5.** use team-building skills during the interaction with teammates while managing the difficult/stressful or emotional situations at work
- GS6.** apply problem-solving skills to find solutions for workflow-related difficulties
- GS7.** apply critical skills to analyze and identify when to report an issue/concern to the supervisor and to deal with a colleague individually, depending on the type of concern
- GS8.** apply customer-centricity while responding to auditors and QA personnel

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Coordination with the supervisor</i>	10	20	-	-
PC1. follow work instructions received from the reporting supervisor	-	-	-	-
PC2. communicate process-flow improvements, production defects received from the previous process, repairs and maintenance of equipment to reporting supervisor	-	-	-	-
PC3. submit periodic reports to the supervisor as per SOP	-	-	-	-
<i>Coordination within the team and cross-functional teams</i>	15	20	-	-
PC4. support team members and colleagues of other departments in work	-	-	-	-
PC5. take handover from previous shift operator and give handover to next shift operator as per SOP	-	-	-	-
PC6. find solutions to workflow related difficulties with mutual agreement	-	-	-	-
PC7. coordinate with QA for ETP plant validation at a routine interval as per SOP	-	-	-	-
PC8. conduct regular Toolbox Talk with helpers to improve safety observation and system	-	-	-	-
PC9. provide inputs to the concerned stakeholders in periodic fence line review to detect non-compliance	-	-	-	-
PC10. evaluate the impact of trending regulatory and statutory guideline updates, and communicate the same to internal stakeholders and EHS Incharge	-	-	-	-
<i>Respond to audit queries</i>	10	15	-	-
PC11. interact with the auditor in their preferred language as per their comfort	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. provide clear answers to the auditor's queries	-	-	-	-
PC13. produce the documented records of performed activities and operations to auditors	-	-	-	-
PC14. maintain data integrity while responding to auditors and regulatory inspectors	-	-	-	-
<i>Sensitivity towards all genders and people with disability</i>	5	5	-	-
PC15. respect all the genders, religions, and caste	-	-	-	-
PC16. empathize with the people with disability	-	-	-	-
PC17. offer support or help to a person with disability only when asked	-	-	-	-
PC18. ensure to adhere with the guidelines laid in Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act	-	-	-	-
PC19. report any violation of prevention of sexual harassment (POSH) rules immediately to the POSH committee	-	-	-	-
NOS Total	40	60	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	LFS/N0263
NOS Name	Coordinate and communicate with EHS Supervisor, teams and auditors
Sector	Life Sciences
Sub-Sector	Pharmaceutical, Bio Pharmaceutical, Contract Research
Occupation	Manufacturing
NSQF Level	4
Credits	1.00
Version	2.0
Last Reviewed Date	NA
Next Review Date	22/09/2023
NSQC Clearance Date	22/09/2020



Qualification Pack

DGT/VSQ/N0102: Employability Skills (60 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
- Career Development & Goal Setting
- 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.** identify employability skills required for jobs in various industries
- PC2.** identify and explore learning and employability portals

Constitutional values – Citizenship

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

- PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC4.** follow environmentally sustainable practices

Becoming a Professional in the 21st Century

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

- PC5.** recognize the significance of 21st Century Skills for employment
- PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

Basic English Skills

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



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- PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC9.** write short messages, notes, letters, e-mails etc. in English

Career Development & Goal Setting

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

- PC10.** understand the difference between job and career
- PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

Communication Skills

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

- PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13.** work collaboratively with others in a team

Diversity & Inclusion

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

- PC14.** communicate and behave appropriately with all genders and PwD
- PC15.** escalate any issues related to sexual harassment at workplace according to POSH Act

Financial and Legal Literacy

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

- PC16.** select financial institutions, products and services as per requirement
- PC17.** carry out offline and online financial transactions, safely and securely
- PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation

Essential Digital Skills

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

- PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21.** use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22.** use basic features of word processor, spreadsheets, and presentations

Entrepreneurship

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

- PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

Customer Service

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

- PC26.** identify different types of customers
- PC27.** identify and respond to customer requests and needs in a professional manner.



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PC28. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC29. create a professional Curriculum vitae (Résumé)

PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively

PC31. apply to identified job openings using offline /online methods as per requirement

PC32. answer questions politely, with clarity and confidence, during recruitment and selection

PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills and different learning and employability related portals

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 English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up

KU6. importance of career development and setting long- and short-term goals

KU7. about effective communication

KU8. POSH Act

KU9. Gender sensitivity and inclusivity

KU10. different types of financial institutes, products, and services

KU11. how to compute income and expenditure

KU12. importance of maintaining safety and security in offline and online financial transactions

KU13. different legal rights and laws

KU14. different types of digital devices and the procedure to operate them safely and securely

KU15. how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.

KU16. how to identify business opportunities

KU17. types and needs of customers

KU18. how to apply for a job and prepare for an interview

KU19. apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

GS1. read and write different types of documents/instructions/correspondence

GS2. communicate effectively using appropriate language in formal and informal settings



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- GS3.** behave politely and appropriately with all
- GS4.** how to work in a virtual mode
- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values – Citizenship</i>	1	1	-	-
PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development & Goal Setting</i>	1	2	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	2	-	-
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	2	3	-	-
PC16. select financial institutions, products and services as per requirement	-	-	-	-
PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Entrepreneurship</i>	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-



Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by Life Sciences Sector Skill Development Council (LSSSDC)
2. Each Element will be assigned marks proportional to its importance in NOS. LSSSDC will also lay down the proportion of marks for Theory, Practical, Project, and Viva for each Element.
3. The assessment for the theory part will be based on the knowledge bank of questions created by the LSSSDC.
4. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
5. LSSSDC as assessment and awarding body will create unique evaluations for each assessment component i.e. theory, practical, project and viva for every student at each examination/training center based on this criterion.
6. Wherever any assessment component is not applicable/ feasible, the balance assessment components will be used to assess the candidate and accordingly the total marks will be calculated only for the applied



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assessment component.

7. To pass the Qualification Pack, every trainee should score a minimum of 50%-70% of marks in each NOS (depending on NSQF Level) to successfully clear the assessment. In the case of a Govt funded program, the program guidelines will be overarching on the pass percentage rules.

8. In case of unsuccessful completion, the trainee may seek re-assessment on the Qualification Pack.

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.)

Minimum Passing % at NOS Level: 70

(Please note: A Trainee must score the minimum percentage for each NOS separately as well as on the QP as a whole.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
LFS/N0262.Carry out GMP-critical (Good Manufacturing Practices) activities and their documentation	40	60	0	0	100	25
SGJ/N6601.Operate the Wastewater Treatment Plant	13	22	-	-	35	20
SGJ/N6602.Monitor and Maintain the Wastewater Treatment Plant	26	39	-	-	65	20
SGJ/N6605.Work Safety at Wastewater treatment plant	20	30	-	-	50	10
LFS/N0263.Coordinate and communicate with EHS Supervisor, teams and auditors	40	60	0	0	100	15
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	10



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National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
Total	159	241	-	-	400	100



Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
SOP	Standard Operating Procedure
ETP	Effluent Treatment Plant
QA	Quality Assurance
EHS	Environment Health & Safety
COD	Chemical Oxygen Demand
BOD	Biochemical Oxygen Demand
TDS	Total Dissolved Solids
ETP	Effluent Treatment Plant
SOP	Standard Operating Procedure
GLP	Good Laboratory Practices
AFTD	Agitated Thin Film Evaporator
ZLD	Zero-Liquid Discharge
SVI	Sludge Volume Index
TSS	Total suspended solids
TDS	Total Dissolved Solids
OHS	Occupational Health and Safety
ALCOA	Attributable, Legible, Contemporaneous, Original and Accurate
EC	Environmental Clearance
CTE	Consent To Establishment
CTO	Consent To Operations
MSDS	Material Safety Data Sheets



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SOP	Standard Operating Procedure
ETP	Effluent Treatment Plant
POSH	Prevention of Sexual Harassment
PwD	People with Disability

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.
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.

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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.
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 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 Standard	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualification 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.

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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 has to deal with in carrying out the function which has 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/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.