



# Cold Chain Lead

QP Code: LSC/Q8702

Version: 2.0

NSQF Level: 7

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## LSC/Q8702: Cold Chain Lead

### Brief Job Description

The individual at work is responsible for managing temperature sensitive logistics planning, strategic human resource management, supervise product handling and effective performance in cold storage plant.

### Personal Attributes

The job requires the individual to have: attention to details, flexibility to move from one location to another, ability to work in low temperature conditions, good eye sight, arm-hand steadiness and ability to withstand changing temperature conditions from one facility to another

### Applicable National Occupational Standards (NOS)

#### Compulsory NOS:

1. [LSC/N8708: Administer manpower planning and labor management across cold chain operations](#)
2. [LSC/N8709: Ensure smooth and effective execution of cold chain operation](#)
3. [LSC/N8710: Monitor and improvise perishable product handling activities](#)
4. [LSC/N8711: Oversee Route Planning and reefer/non-reefer vehicle coordination](#)
5. [LSC/N8712: Supervise Data entry/MIS reports management](#)
6. [LSC/N9901: Maintain food and personnel safety, health and hygiene in cold storage plant](#)
7. [LSC/N9902: Communicate effectively with colleagues and clients](#)
8. [DGT/VSQ/N0103: Employability Skills \(90 Hours\)](#)

### Qualification Pack (QP) Parameters

<b>Sector</b>	Logistics
<b>Sub-Sector</b>	Cold Chain Logistics Solutions
<b>Occupation</b>	Cold Chain Operations, Packing & Packaging/Dispatch/Distribution, Maintenance, Engineering, Projects
<b>Country</b>	India

<b>NSQF Level</b>	7
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/NIL
<b>Minimum Educational Qualification &amp; Experience</b>	<p>Ph.D. (Pursuing PhD) OR Post Graduate (Pursuing 2nd year of 2 year PG- Eng) OR Graduate (Completed 3 year UG degree ) with 3 Years of experience relevant experience OR Graduate (Completed 4 year UG degree with Honours/ Honours with research) with 2 Years of experience relevant experience OR Certificate-NSQF (level 6 -Cold Chain Engineering Specialist) with 3 Years of experience relevant experience</p>
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	25 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Approval Date</b>	
<b>Version</b>	2.0

## LSC/N8708: Administer manpower planning and labor management across cold chain operations

### Description

This OS unit is about labor requirement planning, review of worker training in the cold chain facility and assisting head HR with operational level worker details in taking appropriate recruitment, attrition and labor welfare decisions

### Scope

This unit/task covers the following:

- Identify and review training requirements for cold chain operations
- Assist head HR in recruitment and attrition decisions
- Make decisions on health and fitness of employees for carrying out cold chain operations  
Range:  
Manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallet trucks, belt, chain or roller conveyors, either gravity or self-propelled

### Elements and Performance Criteria

#### *Identifying and reviewing training requirements for cold chain operations*

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

- PC1.** identify HACCP (Hazard Analysis and Critical Control Points), HAZMAT (Hazardous Material) and other training certifications required to be taken by workers
- PC2.** ensure timely revision of training requirements based on technological developments and new equipments introduced in the facility
- PC3.** attend conferences and seminars conducted by national cold chain associations for updates in cold chain segment
- PC4.** update maintenance and quality assurance department about technological developments incorporated in company's cold chain; operations
- PC5.** ensure updated training requirements are appropriately communicated to workers

#### *Assisting head HR in recruitment and attrition decisions*

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

- PC6.** keep track of workers employed across departments
- PC7.** identify location from where workers should be hired, based on urgency of requirement
- PC8.** identify skill sets required in workers for product specific operations, for eg: ability to handle stress during urgent delivery requirement etc.
- PC9.** provide prior information on expected labor force requirement to head hr
- PC10.** supervise transfer of employees from one department to the other based on requirement
- PC11.** initiate discussion with workers to analyze the cause of worker attrition
- PC12.** assist head hr in designing corrective mechanism to reduce attrition

#### *Making decisions on health and fitness of employees for carrying out cold chain operations*

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

- PC13.** take charge of illness or injury incurred to workers during cold chain operations and update the same to head hr
- PC14.** ensure timely fitness reports are prepared for every employee
- PC15.** take non conformance decision in case employee fitness levels do not match the requirements
- PC16.** analyze the cause of illness or injury of employees
- PC17.** update the instructions on fitness requirements and safety measures in the cold storage facility

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- KU1.** companys reporting structure
- KU2.** individuals role in cold chain process flow
- KU3.** occupational health and safety standards
- KU4.** existing quality control standards followed by various industry players
- KU5.** quality control standards that are applicable to the company and the products on which they are appli
- KU6.** companys policies, standard operating procedures and governance structure
- KU7.** risk and impact of not following defined procedures/work instructions
- KU8.** companys personnel management and incentives rules
- KU9.** clients and suppliers of the company
- KU10.** HACCP (Hazard analysis and critical control points), HAZMAT (Hazardous material) and other training certifications required to be taken by workers
- KU11.** appropriate PPE (Personal Protective Equipment) including gloves, jacket, shoes, goggles to be worn by operators
- KU12.** types of goods in which the company deals
- KU13.** characteristics of the products being handled. for eg: odor, texture, size, weight, stickiness, effect of exposure to water etc.
- KU14.** existing labor laws and labor welfare schemes
- KU15.** product specific quality control and assurance standards
- KU16.** operational understanding of the safety precautions to be taken for product handling
- KU17.** geographical distribution of labor force possessing the required skill sets . for e.g.: workers may be hired from Chittoor belt which has many cold storage facilities. thus, the local labor force will already possess the required skill sets and need not be trained after recruitment
- KU18.** appropriate Material Handling Equipment (MHE) to be used according to the size and quantity of goods
- KU19.** types of workplace hazards that one can encounter in product handling
- KU20.** steps and remedial measures to be taken in case of injury or hazard caused due to improper product handling
- KU21.** recruitment procedure for labor force used by the company

## **Generic Skills (GS)**

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

- GS1.** read instructions on workplace hazards and handling requirements for goods
- GS2.** read recruitment procedure and labor policies
- GS3.** maintain records of workers who got injured, were replaced or substituted in place of another worker etc.
- GS4.** update safety instructions based on technological changes
- GS5.** initiate discussion with workers to understand their grievance
- GS6.** communicate decisions to workers relating to non-conformance of safety standards or corrective actions to be taken in case of injury
- GS7.** communicate types of workplace hazards, safety precautions and remedial measures to be taken
- GS8.** communicate with HR regarding worker performance, recruitment procedure, reason for attrition etc.
- GS9.** take non conformance decision on health and safety
- GS10.** identify whether worker training requirement should be updated
- GS11.** prioritize and execute tasks such as transferring labor from one department to the other, providing prior information about labor force requirement to head hr etc. in an efficient manner
- GS12.** plan and organize distribution of workers along different stages of cold chain
- GS13.** identify customer requirements with respect to quality expectations
- GS14.** identify goods that are in high demand in market and those for which demand is expected to increase in future
- GS15.** execute remedial measures in case of injury or hazard in handling technique
- GS16.** make decision for short term recruitment in case of urgent requirement
- GS17.** understand labor requirement based on schedule of activities across the cold chain
- GS18.** analyze technological developments taking place in industry and identify if training and safety instructions need to be updated
- GS19.** identify appropriate location from where workers should be chosen
- GS20.** execute appropriate remedial measures in case of injury or hazard in handling technique

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Identifying and reviewing training requirements for cold chain operations</i>	<b>10</b>	<b>22</b>	-	-
<b>PC1.</b> identify HACCP (Hazard Analysis and Critical Control Points), HAZMAT (Hazardous Material) and other training certifications required to be taken by workers	2	5	-	-
<b>PC2.</b> ensure timely revision of training requirements based on technological developments and new equipments introduced in the facility	2	5	-	-
<b>PC3.</b> attend conferences and seminars conducted by national cold chain associations for updates in cold chain segment	2	4	-	-
<b>PC4.</b> update maintenance and quality assurance department about technological developments incorporated in companys cold chain; operations	2	4	-	-
<b>PC5.</b> ensure updated training requirements are appropriately communicated to workers	2	4	-	-
<i>Assisting head HR in recruitment and attrition decisions</i>	<b>14</b>	<b>28</b>	-	-
<b>PC6.</b> keep track of workers employed across departments	2	4	-	-
<b>PC7.</b> identify location from where workers should be hired, based on urgency of requirement	2	4	-	-
<b>PC8.</b> identify skill sets required in workers for product specific operations, for eg: ability to handle stress during urgent delivery requirement etc.	2	4	-	-
<b>PC9.</b> provide prior information on expected labor force requirement to head hr	2	4	-	-
<b>PC10.</b> supervise transfer of employees from one department to the other based on requirement	2	4	-	-
<b>PC11.</b> initiate discussion with workers to analyze the cause of worker attrition	2	4	-	-



Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> assist head hr in designing corrective mechanism to reduce attrition	2	4	-	-
<i>Making decisions on health and fitness of employees for carrying out cold chain operations</i>	<b>6</b>	<b>20</b>	-	-
<b>PC13.</b> take charge of illness or injury incurred to workers during cold chain operations and update the same to head hr	2	4	-	-
<b>PC14.</b> ensure timely fitness reports are prepared for every employee	1	4	-	-
<b>PC15.</b> take non conformance decision in case employee fitness levels do not match the requirements	1	4	-	-
<b>PC16.</b> analyze the cause of illness or injury of employees	1	4	-	-
<b>PC17.</b> update the instructions on fitness requirements and safety measures in the cold storage facility	1	4	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	LSC/N8708
<b>NOS Name</b>	Administer manpower planning and labor management across cold chain operations
<b>Sector</b>	Logistics
<b>Sub-Sector</b>	Cold Chain Logistics Solutions
<b>Occupation</b>	Cold Chain Operations, Packing & Packaging/Dispatch/Distribution, Maintenance, Engineering, Projects
<b>NSQF Level</b>	7
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	02/05/2019
<b>Next Review Date</b>	02/05/2022
<b>NSQF Clearance Date</b>	22/08/2019

## LSC/N8709: Ensure smooth and effective execution of cold chain operation

### Description

This OS unit is about taking corrective and preventive action across the cold chain from the time goods enter the cold storage facility till they reach consumption centres and ensure smooth and timely flow of cold chain operations

### Scope

This unit/task covers the following:

- Take preventive and corrective action and non conformance decision in case of interruption in cold storage facility
  - Assist in budget development and exercise budgetary control over warehouse operations
  - Liaison with maintenance head in case of interruptions in cold storage operations
- Range: Manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallettrucks, belt, chain or roller conveyors, either gravity or self-propelled

### Elements and Performance Criteria

#### *Identifying and reviewing training requirements for cold chain operations*

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

- PC1.** initiate action to prevent occurrence of any microbiological non-conformities at any stage of cold chain operations
- PC2.** analyze and find root cause in case of delays at different stages of the cold chain operations. for e.g.: a delay in grading of goods may be due to excessive drying of goods in the previous stage of grading line operations or due to extra time taken in unloading because of improper space management
- PC3.** stop operations whenever there is likelihood of occurrence that could affect product safety and personnel safety or any other emergence
- PC4.** ensure effective implementation of cleaning schedule for all equipments and machines is followed
- PC5.** understand requirements of cold storage equipments from perishable product handling specialist

#### *Assisting head HR in recruitment and attrition decisions*

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

- PC6.** identify expenditure required on refrigeration equipments and associated tools
- PC7.** estimate maintenance and upgradation expenditure expected to be incurred on machines and equipments
- PC8.** identify worker expenses incurred for day-to-day activities such as food, travel etc.
- PC9.** ensure correct details of number of workers is provided to budget control team
- PC10.** estimate maximum expenditure that might be required to be incurred in situations of crisis, for e.g.: accident, leakage, injury etc.
- PC11.** ensure timely compliance of calibration schedule for equipments is followed

**PC12.** update maintenance head and follow up in case equipments and instruments are not functioning properly

*Making decisions on health and fitness of employees for carrying out cold chain operations*

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

**PC13.** follow up with maintenance head in case of uninterrupted supply of electricity and water

**PC14.** ensure equipments are replaced in appropriate time period based on their working efficiency and inputs from workers, for eg: timely replacement of refrigeration valves

**PC15.** supervise upgradation of evaporators, compressors etc.

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

**KU1.** companys reporting structure

**KU2.** individuals role in cold chain process flow

**KU3.** occupational health and safety standards

**KU4.** existing quality control standards followed by various industry players

**KU5.** quality control standards that are applicable to the company and the products on which they are applicable

**KU6.** companys policies, standard operating procedures and governance structure

**KU7.** risk and impact of not following defined procedures/work instructions

**KU8.** companys personnel management and incentives rules

**KU9.** clients and suppliers of the company

**KU10.** ideal time required for each cold chain activity

**KU11.** process flow of cold chain operation

**KU12.** types of goods in which the company deals

**KU13.** characteristics of the products being handled, for eg: texture, odour, stickiness etc.

**KU14.** cleaning schedule of refrigeration equipments

**KU15.** measurement units and scales used in cold storage equipments

**KU16.** calibration schedule and correct measurements according to which calibration is done

**KU17.** maximum permissible cost norms for equipments, if any

**KU18.** product market of cold chain equipments (demand, supply, price etc.) and costing of machines and support tools

**KU19.** appropriate Material Handling Equipment (MHE) to be used according to the size and quantity of goods for efficient loading

**KU20.** types of workplace hazards that one can encounter in product handling

**KU21.** steps and remedial measures to be taken in case of injury or hazard caused due to improper product handling and corresponding expenditure expected to be incurred

## **Generic Skills (GS)**

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

**GS1.** read budget statements

- GS2.** read scales and units of cold storage equipments like compressors, evaporators etc.
- GS3.** maintain records of expenditure incurred
- GS4.** write details of equipments and tools requirement as communicated by product handling specialist
- GS5.** maintain records of time periods in which equipments are replaced and calibrated
- GS6.** understand requirements of cold storage equipments from perishable product handling specialist
- GS7.** coordinate with other supervisors and peers in english or accepted workplace language
- GS8.** estimate budget to be allocated for day-to-day worker expenses
- GS9.** identify correct number of workers required across every activity of cold storage
- GS10.** prioritize and execute tasks in an efficient manner
- GS11.** coordinate time with maintenance head for exchange of details
- GS12.** identify customer requirements with respect to quality expectations
- GS13.** identify goods that are in high demand in market and those for which demand is expected to increase in future
- GS14.** execute remedial measures in case of injury or hazard in handling technique
- GS15.** take appropriate action in case of microbiological non conformities at any stage of cold chain
- GS16.** analyze and find root cause of delay and disruption of activities
- GS17.** estimate maintenance and upgradation expenditure on equipments
- GS18.** identify if there is likelihood of occurrence that could affect product safety and personnel safety or any other emergence

**Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Identifying and reviewing training requirements for cold chain operations</i>	<b>10</b>	<b>25</b>	-	-
<b>PC1.</b> initiate action to prevent occurrence of any microbiological non-conformities at any stage of cold chain operations	2	5	-	-
<b>PC2.</b> analyze and find root cause in case of delays at different stages of the cold chain operations. for e.g.: a delay in grading of goods may be due to excessive drying of goods in the previous stage of grading line operations or due to extra time taken in unloading because of improper space management	2	5	-	-
<b>PC3.</b> stop operations whenever there is likelihood of occurrence that could affect product safety and personnel safety or any other emergence	2	5	-	-
<b>PC4.</b> ensure effective implementation of cleaning schedule for all equipments and machines is followed	2	5	-	-
<b>PC5.</b> understand requirements of cold storage equipments from perishable product handling specialist	2	5	-	-
<i>Assisting head HR in recruitment and attrition decisions</i>	<b>14</b>	<b>33</b>	-	-
<b>PC6.</b> identify expenditure required on refrigeration equipments and associated tools	2	5	-	-
<b>PC7.</b> estimate maintenance and upgradation expenditure expected to be incurred on machines and equipments	2	5	-	-
<b>PC8.</b> identify worker expenses incurred for day-to-day activities such as food, travel etc.	2	5	-	-
<b>PC9.</b> ensure correct details of number of workers is provided to budget control team	2	5	-	-
<b>PC10.</b> estimate maximum expenditure that might be required to be incurred in situations of crisis, for e.g.: accident, leakage, injury etc.	2	5	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> ensure timely compliance of calibration schedule for equipments is followed	2	4	-	-
<b>PC12.</b> update maintenance head and follow up in case equipments and instruments are not functioning properly	2	4	-	-
<i>Making decisions on health and fitness of employees for carrying out cold chain operations</i>	<b>6</b>	<b>12</b>	-	-
<b>PC13.</b> follow up with maintenance head in case of uninterrupted supply of electricity and water	2	4	-	-
<b>PC14.</b> ensure equipments are replaced in appropriate time period based on their working efficiency and inputs from workers, for eg: timely replacement of refrigeration valves	2	4	-	-
<b>PC15.</b> supervise upgradation of evaporators, compressors etc.	2	4	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	LSC/N8709
<b>NOS Name</b>	Ensure smooth and effective execution of cold chain operation
<b>Sector</b>	Logistics
<b>Sub-Sector</b>	Cold Chain Logistics Solutions
<b>Occupation</b>	Cold Chain Operations, Packing & Packaging/Dispatch/Distribution, Maintenance, Engineering, Projects
<b>NSQF Level</b>	7
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	02/05/2019
<b>Next Review Date</b>	02/05/2022
<b>NSQF Clearance Date</b>	22/08/2019



## LSC/N8710: Monitor and improvise perishable product handling activities

### Description

This OS unit is about keeping the product handling activities of cold chain in line with legal, technological changes and environmental laws in industry, supervising energy consumption and quality control and acting as a link between cold storage and pack house facilities located across multiple locations

### Scope

This unit/task covers the following:

- Update internal systems and machines based on changes taking place in legal, technological and environmental norms
- Administer product handling in cold storage operations
- Manage back end integrated pack houses and establish link with cold storage facility at multiple locations
- Supervise cold chain quality controlRange: Manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallettrucks, belt, chain or roller conveyors, either gravity or self-propelled

### Elements and Performance Criteria

#### *Updating internal systems and machines based on changes taking place in legal, technological and environmental norms*

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

- PC1.** utilize alternate technologies and energy sources in the cold chain with the aim to have a positive impact on the environment, for eg: solar powered refrigeration equipments
- PC2.** ensure standardisation of handling units of perishable products across all stages of cold chain
- PC3.** explore multi modal transport options that can be used in the perishables logistics chain, especially as speed and good handling is critical to maintaining quality control
- PC4.** supervise modernisation or up gradation of refrigeration systems in existing cold storages so as to result in substantial and measurable reduction in carbon footprint of the facility and reduction in recurring cost of the power consumed
- PC5.** attend seminars and conferences organized by cold chain associations to get information about latest updates in the sector

#### *Administering product handling in cold storage operations*

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

- PC6.** identify the appropriate product flow capacity volume of commodities that must be handled per unit of time
- PC7.** determine the appropriate cooling method and system based on volume of commodity handled per unit of time
- PC8.** conduct regular check up of the ripening chamber and ensure proper documentation is done at every stage
- PC9.** supervise pre-cooling temperature and storage conditions
- PC10.** identify scope for resource integration or cross-functional utilization of equipments across the cold chain

**PC11.** participate in decision making for no. of fans, water pump capacity, refrigeration of condensing unit etc.

*Managing back end integrated pack houses and establishing link with cold storage facility at multiple locations*

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

**PC12.** supervise grading, sorting, washing and drying activities on the goods received in pack house

**PC13.** identify multiple market routing or value realization options of the graded units, for eg: sending fresh produce directly to market for refrigeration, sending to pre-cooling units located at cold storage facility etc.

**PC14.** supervise packaging for safe transport if the routing requires long travel to reach the pre-cooling unit or refrigerated consumption centres

**PC15.** identify rural areas to be supported in the form of back end village level pack houses

**PC16.** ensure goods are properly transported from back end pack house to the appropriate cold chain facility

**PC17.** ensure uniform practices are followed at all cold storage facilities

*Supervising cold chain quality control*

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

**PC18.** maintain high levels of hygiene at all stages of the products life

**PC19.** together with the haccp (hazard analysis critical control point) team (including microbiologists and process engineers) construct a flow diagram for all product/process operations - list all hazards associated with each process step and the measures to eliminate or reduce hazards

**PC20.** determine the step at which ccp (critical control point) can be applied in order to eliminate the hazard

**PC21.** establish the target levels/tolerances for controlling the ccps

**PC22.** establish/implement monitoring systems for controlling ccps

**PC23.** identify corrective actions when a deviation occurs at a ccp

**PC24.** establish a documentation system for procedures and records

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

**KU1.** companys reporting structure

**KU2.** individuals role in cold chain process flow

**KU3.** occupational health and safety standards

**KU4.** existing quality control standards followed by various industry players

**KU5.** quality control standards that are applicable to the company and the products on which they are applicable

**KU6.** companys policies, standard operating procedures and governance structure

**KU7.** risk and impact of not following defined procedures/work instructions

**KU8.** companys personnel management and incentives rules

**KU9.** clients and suppliers of the company

- KU10.** type and characteristics of the products being handled odour, texture, size, weight, stickiness etc.
- KU11.** appropriate material handling equipment (MHE) to be used according to the size and quantity of goods for efficient loading
- KU12.** changes in spoiled goods with respect to colour, dehydration and protein content
- KU13.** appropriate grading criteria for goods
- KU14.** extent of chlorination required for washing of fruits
- KU15.** technique for measurement of hydration levels
- KU16.** identification of goods based on grading categories
- KU17.** appropriate oxygen and carbon dioxide levels to be maintained in the grading line facility
- KU18.** appropriate water temperature used for washing
- KU19.** waste water recycling, reuse and disposal procedure
- KU20.** appropriate time required for each stage of pack house activity
- KU21.** changes in spoiled goods with respect to colour, dehydration and protein content
- KU22.** time for which washed goods should be dried, in order to avoid shrinking and water loss
- KU23.** different types of trolleys used within the cold storage facility. for eg: trolleys can be of following types two-wheeled trolleys - manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallettrucks, belt, chain or roller conveyors, either gravity or self-propelled.
- KU24.** equipments used for vehicle handling, namely platform elevators, cranes, gantries, hand-stacking equipment, fork lift trucks, various types of mechanised stacking equipment etc
- KU25.** understand what handling requirements are appropriate for what types of goods. for eg: some marine products are richer in aroma and thus should be handled properly to ensure that aroma doesnt spread to other products through hands or other tools used while handling

## Generic Skills (GS)

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

- GS1.** read product codes, quantity and specifications provided
- GS2.** read instructions for safety precautions and material handling
- GS3.** maintain records of goods passing through each stage of grading line
- GS4.** mention details of rejected goods, along with reason for rejection
- GS5.** communicate clear instructions to workers about handling techniques
- GS6.** give instructions about the identification of goods for different categories
- GS7.** decide criteria for grading of goods, for eg: market value, weight etc.
- GS8.** dispose waste water from washing of goods
- GS9.** schedule time for activities in each stage of grading line
- GS10.** re-schedule and re-allocate workers across activities in case of requirement
- GS11.** enforce hygienic conditions as per product handling requirements
- GS12.** segregate goods as per customer requirements
- GS13.** handle delays in one stage of grading line operations so that it doesnt affect the other stage
- GS14.** handle the situation if units of one grade get mixed with units of other grade

- GS15.** plan the appropriate number of workers to be deployed in grading line operations
- GS16.** make changes in grading line temperature conditions based on climatic changes
- GS17.** decided extent of chlorination required in water used for washing
- GS18.** treat the waste water after washing, whether water should be disposed or recycled or reused
- GS19.** decide appropriate time for which goods should be dried to avoid excessive water loss

**Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Updating internal systems and machines based on changes taking place in legal, technological and environmental norms</i>	<b>10</b>	<b>15</b>	-	-
<b>PC1.</b> utilize alternate technologies and energy sources in the cold chain with the aim to have a positive impact on the environment, for eg: solar powered refrigeration equipments	2	3	-	-
<b>PC2.</b> ensure standardisation of handling units of perishable products across all stages of cold chain	2	3	-	-
<b>PC3.</b> explore multi modal transport options that can be used in the perishables logistics chain, especially as speed and good handling is critical to maintaining quality control	2	3	-	-
<b>PC4.</b> supervise modernisation or up gradation of refrigeration systems in existing cold storages so as to result in substantial and measurable reduction in carbon footprint of the facility and reduction in recurring cost of the power consumed	2	3	-	-
<b>PC5.</b> attend seminars and conferences organized by cold chain associations to get information about latest updates in the sector	2	3	-	-
<i>Administering product handling in cold storage operations</i>	<b>7</b>	<b>18</b>	-	-
<b>PC6.</b> identify the appropriate product flow capacity volume of commodities that must be handled per unit of time	2	3	-	-
<b>PC7.</b> determine the appropriate cooling method and system based on volume of commodity handled per unit of time	1	3	-	-
<b>PC8.</b> conduct regular check up of the ripening chamber and ensure proper documentation is done at every stage	1	3	-	-
<b>PC9.</b> supervise pre-cooling temperature and storage conditions	1	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> identify scope for resource integration or cross-functional utilization of equipments across the cold chain	1	3	-	-
<b>PC11.</b> participate in decision making for no. of fans, water pump capacity, refrigeration of condensing unit etc.	1	3	-	-
<i>Managing back end integrated pack houses and establishing link with cold storage facility at multiple locations</i>	<b>6</b>	<b>18</b>	-	-
<b>PC12.</b> supervise grading, sorting, washing and drying activities on the goods received in pack house	1	3	-	-
<b>PC13.</b> identify multiple market routing or value realization options of the graded units, for eg: sending fresh produce directly to market for refrigeration, sending to pre-cooling units located at cold storage facility etc.	1	3	-	-
<b>PC14.</b> supervise packaging for safe transport if the routing requires long travel to reach the pre-cooling unit or refrigerated consumption centres	1	3	-	-
<b>PC15.</b> identify rural areas to be supported in the form of back end village level pack houses	1	3	-	-
<b>PC16.</b> ensure goods are properly transported from back end pack house to the appropriate cold chain facility	1	3	-	-
<b>PC17.</b> ensure uniform practices are followed at all cold storage facilities	1	3	-	-
<i>Supervising cold chain quality control</i>	<b>7</b>	<b>19</b>	-	-
<b>PC18.</b> maintain high levels of hygiene at all stages of the products life	1	3	-	-
<b>PC19.</b> together with the haccp (hazard analysis critical control point) team (including microbiologists and process engineers) construct a flow diagram for all product/process operations - list all hazards associated with each process step and the measures to eliminate or reduce hazards	1	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC20.</b> determine the step at which ccp (critical control point) can be applied in order to eliminate the hazard	1	3	-	-
<b>PC21.</b> establish the target levels/tolerances for controlling the ccps	1	3	-	-
<b>PC22.</b> establish/implement monitoring systems for controlling ccps	1	3	-	-
<b>PC23.</b> identify corrective actions when a deviation occurs at a ccp	1	2	-	-
<b>PC24.</b> establish a documentation system for procedures and records	1	2	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	LSC/N8710
<b>NOS Name</b>	Monitor and improvise perishable product handling activities
<b>Sector</b>	Logistics
<b>Sub-Sector</b>	Cold Chain Logistics Solutions
<b>Occupation</b>	Cold Chain Operations, Packing & Packaging/Dispatch/Distribution, Maintenance, Engineering, Projects
<b>NSQF Level</b>	7
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	02/05/2019
<b>Next Review Date</b>	02/05/2022
<b>NSQF Clearance Date</b>	22/08/2019



## LSC/N8711: Oversee Route Planning and reefer/non-reefer vehicle coordination

### Description

This unit is about overseeing refrigerated transportation and supervising route planning and coordination

### Scope

This unit/task covers the following:

- Attend to client enquiries and orders
- Understand the client requirements
- Check the order requirements
- Assign duty to the reefer/non reefer vehicle operator
- Plan the routes
- Handle customer complaints and staff problems
- Monitor and follow up the travelRange: Manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallettrucks, belt, chain or roller conveyors, either gravity or self-propelled

### Elements and Performance Criteria

#### *Attending to client enquiries and orders*

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

- PC1.** answer phone calls and emails of the clients regularly and promptly
- PC2.** follow proper behavioural etiquettes with the clients whether face to face or on phone or e-mail
- PC3.** be updated on availability of the products with the order received
- PC4.** ensure the availability of vehicle and the vehicle operator for the delivery
- PC5.** be aware of the other delivery schedules for the day
- PC6.** review and revise transportation and delivery schedule based on priority
- PC7.** take confirmations from the client and schedule the delivery
- PC8.** update the order details and the time of booking to the MIS person for record

#### *Understanding the client requirements*

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

- PC9.** understand from the clients on the type of products, the delivery date, quantity, delivery address, etc.
- PC10.** confirm the delivery details with the clients
- PC11.** update the clients on non availability of any products or reefer/non reefer vehicle as per their order and requirement
- PC12.** send confirmation message or email to the clients along with the delivery summary and invoice
- PC13.** maintain good rapport and relationships with the client

#### *Checking the order requirements*

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

- PC14.** ensure the order details and the products match
- PC15.** check the reefer vehicle maintenance and cleanliness on daily basis
- PC16.** ensure reefer vehicle is in proper working condition and meets the required safety standards
- PC17.** check the temperature and pre cool of the reefer unit as set by the reefer vehicle operator
- PC18.** verify the reefer/non reefer vehicle papers are in order
- PC19.** ensure the safety precautions to be taken with respect to the product quality in terms of temperature maintenance and other storage conditions based on the type of product

*Assigning duty to the reefer/non reefer vehicle operator*

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

- PC20.** assign the reefer/ non reefer vehicle operator to be sent for the delivery
- PC21.** brief the operator about the client and delivery details
- PC22.** coordinate the transportation routes and time schedule based on customer requirement
- PC23.** advice the reefer/non reefer vehicle operators on their duty and responsibility to be carried out during the trip
- PC24.** ensure the reefer/non reefer vehicle operators carry the necessary materials such as maps, GPS, client details, etc.
- PC25.** monitor the various actions of the reefer/ non reefer vehicle operator such as maintenance of the vehicle, defrosting the reefer unit etc.
- PC26.** ensure the reefer/non reefer vehicles leave for delivery at the designated time

*Planning the routes*

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

- PC27.** plan the driving routes to ensure on time delivery
- PC28.** provide the reefer/non reefer vehicle operator with GPS services for routes
- PC29.** supervise the maps and driving directions of the reefer/non reefer vehicle operator to ensure efficient route service is provided
- PC30.** incorporate changes to the schedule if required
- PC31.** ensure safety and maintenance at the reefer vehicle
- PC32.** verify the trip sheets submitted by the reefer/non reefer vehicle operator for mileage and fuel usage

*Handling customer complaints and staff problems*

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

- PC33.** listen to the customer complaints and problems
- PC34.** ensure to take proper steps to rectify those problems with immediate action
- PC35.** monitor the issues of reefer/non reefer vehicle operator such as licensing, safety, accidents, etc.
- PC36.** investigate on various staff problems and provide with proper solution

*Monitoring and following up the travel*

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

- PC37.** ensure the quality of products on delivery
- PC38.** communicate with the reefer/non reefer vehicle operators during trip in case of any emergency
- PC39.** monitor the safe delivery of products at the appropriate temperature, pressure, humidity and other required parameters maintained

- PC40.** verify the documentations provided by the reefer/non reefer vehicle operator
- PC41.** coordinate with the client for payment details
- PC42.** report and document the details of the travel
- PC43.** monitor the control and discipline of the reefer/non reefer vehicle operator with the work
- PC44.** track the vehicles before and during the journey
- PC45.** achieve client satisfaction ensuring high level service with timely and quality delivery as per requirement

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- KU1.** companys reporting structure
- KU2.** individuals role in cold chain process flow
- KU3.** occupational health and safety standards
- KU4.** existing quality control standards followed by various industry players
- KU5.** quality control standards that are applicable to the company and the products on which they are applicable
- KU6.** companys policies, standard operating procedures and governance structure
- KU7.** risk and impact of not following defined procedures/work instructions
- KU8.** companys personnel management and incentives rules
- KU9.** clients and suppliers of the company
- KU10.** inspection checks to be conducted at the pre-dispatch stage
- KU11.** how to operate metal detector and other inspection equipments
- KU12.** product names and codes used for labelling
- KU13.** vehicle maintenance and repair procedures
- KU14.** precautions to be taken to avoid damages to the product while in transit
- KU15.** site details and traffic management plan
- KU16.** temperature requirements for the various products and at the reefer transport, for example,marine products: -18 to -21 degrees fruits and vegetables: -1 to 15 degrees; 95% to 98% rh; 65% to 75% rh for onion and garlic; 40% to 50% rh for beans, dry fruits and vegetables dairy: -20 to +4 degreesdry fruits: 4 to 10 degrees pharma - chemicals and vaccines: 4 to 10 degree
- KU17.** check and usage of brakes, stepni, lights, petrol, accelerator, steering control, gear, etc.
- KU18.** spacing and air flow specifications for loading into the reefer unit for respective products
- KU19.** appropriate packaging material to be used based on product characteristics, for eg: the materialsused for the package must be new,clean and of such a qualityasto avoid causinganyexternalorinternaldamageto the produce
- KU20.** procedure for weighing, sealing and labelling
- KU21.** appropriate temperature for refrigerated transportation
- KU22.** characteristics of goods being handled, for eg: tolerance to exposure to water, stickiness, odour etc.
- KU23.** appropriate medium for client communications

## **Generic Skills (GS)**

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

- GS1.** read manufacturer specifications related to the vehicle
- GS2.** read standard operating procedures for service and maintenance
- GS3.** write document details of maintenance and service activities
- GS4.** record details of faults and repair operations
- GS5.** write mail or message to be communicated to the client
- GS6.** maintain documentation of the product quality and conditions in transit
- GS7.** maintain documentation of trip details
- GS8.** understand from the clients on the type of products, the delivery date, quantity, delivery address, etc.
- GS9.** confirm the delivery details with the clients
- GS10.** coordinate with the concerned authority to report on any malfunctions or repair
- GS11.** take decision on correct materials and tools to be used for vehicle maintenance
- GS12.** evaluate the complaint raised by the customer and identify the right person in the organization to address it
- GS13.** take a non conformance decision on the quality of goods before delivery
- GS14.** plan the vehicle maintenance and service at regular intervals
- GS15.** plan the driving routes to ensure on time delivery
- GS16.** supervise the maps and driving directions of the reefer/non reefer vehicle operator to ensure efficient route service is provided
- GS17.** customer demand and quality requirements
- GS18.** update the clients on non availability of any products or reefer/non reefer vehicle as per their order and requirement
- GS19.** achieve client satisfaction ensuring high level service with timely and quality delivery as per requirement
- GS20.** maintain quality and hygienic vehicle conditions to the extent expected by customers
- GS21.** solve customer complaints and reply promptly
- GS22.** resolve issues if vehicle routing and transit is delayed
- GS23.** resolve the faults and malfunctions of the vehicle
- GS24.** perform the emergency repairs such as changing tyres in case of puncture, checking on light bulbs, etc
- GS25.** analyze the route and incorporate changes to the schedule if needed
- GS26.** investigate on various staff problems and provide with proper solution
- GS27.** assess whether the vehicle meets the required condition after the maintenance and service
- GS28.** analyze process disruptions and delays
- GS29.** monitor the temperature with appropriate device

**Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Attending to client enquiries and orders</i>	-	<b>16</b>	-	-
<b>PC1.</b> answer phone calls and emails of the clients regularly and promptly	-	2	-	-
<b>PC2.</b> follow proper behavioural etiquettes with the clients whether face to face or on phone or e-mail	-	2	-	-
<b>PC3.</b> be updated on availability of the products with the order received	-	2	-	-
<b>PC4.</b> ensure the availability of vehicle and the vehicle operator for the delivery	-	2	-	-
<b>PC5.</b> be aware of the other delivery schedules for the day	-	2	-	-
<b>PC6.</b> review and revise transportation and delivery schedule based on priority	-	2	-	-
<b>PC7.</b> take confirmations from the client and schedule the delivery	-	2	-	-
<b>PC8.</b> update the order details and the time of booking to the MIS person for record	-	2	-	-
<i>Understanding the client requirements</i>	<b>1</b>	<b>10</b>	-	-
<b>PC9.</b> understand from the clients on the type of products, the delivery date, quantity, delivery address, etc.	1	2	-	-
<b>PC10.</b> confirm the delivery details with the clients	-	2	-	-
<b>PC11.</b> update the clients on non availability of any products or reefer/non reefer vehicle as per their order and requirement	-	2	-	-
<b>PC12.</b> send confirmation message or email to the clients along with the delivery summary and invoice	-	2	-	-
<b>PC13.</b> maintain good rapport and relationships with the client	-	2	-	-
<i>Checking the order requirements</i>	<b>5</b>	<b>12</b>	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC14.</b> ensure the order details and the products match	1	2	-	-
<b>PC15.</b> check the reefer vehicle maintenance and cleanliness on daily basis	-	2	-	-
<b>PC16.</b> ensure reefer vehicle is in proper working condition and meets the required safety standards	1	2	-	-
<b>PC17.</b> check the temperature and pre cool of the reefer unit as set by the reefer vehicle operator	1	2	-	-
<b>PC18.</b> verify the reefer/non reefer vehicle papers are in order	1	2	-	-
<b>PC19.</b> ensure the safety precautions to be taken with respect to the product quality in terms of temperature maintenance and other storage conditions based on the type of product	1	2	-	-
<i>Assigning duty to the reefer/non reefer vehicle operator</i>	<b>6</b>	<b>13</b>	-	-
<b>PC20.</b> assign the reefer/ non reefer vehicle operator to be sent for the delivery	-	2	-	-
<b>PC21.</b> brief the operator about the client and delivery details	1	2	-	-
<b>PC22.</b> coordinate the transportation routes and time schedule based on customer requirement	1	2	-	-
<b>PC23.</b> advice the reefer/non reefer vehicle operators on their duty and responsibility to be carried out during the trip	1	2	-	-
<b>PC24.</b> ensure the reefer/non reefer vehicle operators carry the necessary materials such as maps, GPS, client details, etc.	1	2	-	-
<b>PC25.</b> monitor the various actions of the reefer/ non reefer vehicle operator such as maintenance of the vehicle, defrosting the reefer unit etc.	1	2	-	-
<b>PC26.</b> ensure the reefer/non reefer vehicles leave for delivery at the designated time	1	1	-	-
<i>Planning the routes</i>	<b>6</b>	<b>6</b>	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC27.</b> plan the driving routes to ensure on time delivery	1	1	-	-
<b>PC28.</b> provide the reefer/non reefer vehicle operator with GPS services for routes	1	1	-	-
<b>PC29.</b> supervise the maps and driving directions of the reefer/non reefer vehicle operator to ensure efficient route service is provided	1	1	-	-
<b>PC30.</b> incorporate changes to the schedule if required	1	1	-	-
<b>PC31.</b> ensure safety and maintenance at the reefer vehicle	1	1	-	-
<b>PC32.</b> verify the trip sheets submitted by the reefer/non reefer vehicle operator for mileage and fuel usage	1	1	-	-
<i>Handling customer complaints and staff problems</i>	<b>3</b>	<b>4</b>	-	-
<b>PC33.</b> listen to the customer complaints and problems	-	1	-	-
<b>PC34.</b> ensure to take proper steps to rectify those problems with immediate action	1	1	-	-
<b>PC35.</b> monitor the issues of reefer/non reefer vehicle operator such as licensing, safety, accidents, etc.	1	1	-	-
<b>PC36.</b> investigate on various staff problems and provide with proper solution	1	1	-	-
<i>Monitoring and following up the travel</i>	<b>9</b>	<b>9</b>	-	-
<b>PC37.</b> ensure the quality of products on delivery	1	1	-	-
<b>PC38.</b> communicate with the reefer/non reefer vehicle operators during trip in case of any emergency	1	1	-	-
<b>PC39.</b> monitor the safe delivery of products at the appropriate temperature, pressure, humidity and other required parameters maintained	1	1	-	-
<b>PC40.</b> verify the documentations provided by the reefer/non reefer vehicle operator	1	1	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC41.</b> coordinate with the client for payment details	1	1	-	-
<b>PC42.</b> report and document the details of the travel	1	1	-	-
<b>PC43.</b> monitor the control and discipline of the reefer/non reefer vehicle operator with the work	1	1	-	-
<b>PC44.</b> track the vehicles before and during the journey	1	1	-	-
<b>PC45.</b> achieve client satisfaction ensuring high level service with timely and quality delivery as per requirement	1	1	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	LSC/N8711
<b>NOS Name</b>	Oversee Route Planning and reefer/non-reefer vehicle coordination
<b>Sector</b>	Logistics
<b>Sub-Sector</b>	Cold Chain Logistics Solutions
<b>Occupation</b>	Cold Chain Operations, Packing & Packaging/Dispatch/Distribution, Maintenance, Engineering, Projects
<b>NSQF Level</b>	7
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	02/05/2019
<b>Next Review Date</b>	02/05/2022
<b>NSQF Clearance Date</b>	22/08/2019

## LSC/N8712: Supervise Data entry/MIS reports management

### Description

This OS unit is about supervision and management of staff related problems and overseeing data entry operations

### Scope

This unit/task covers the following:

- Supervise the work requirement
- Monitor MIS and data entry operations
- Attend staff related problems and issuesRange: Manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallettrucks, belt, chain or roller conveyors, either gravity or self-propelled

### Elements and Performance Criteria

#### *Supervising the work requirement*

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

- PC1.** coordinate with the different departments such as storage, transportation, etc.
- PC2.** brief the data entry executive on the various documentations to be done
- PC3.** check the obtained information and documents to be updated
- PC4.** study the documents in detail and understand the requirements

#### *Monitoring MIS and data entry operations*

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

- PC5.** check the best software tool identified to update the data
- PC6.** identify the latest technology updates that would support the data entry requirements
- PC7.** examine the required software to perform the MIS and data entry operation
- PC8.** monitor the working of the software and the procedure to update
- PC9.** coordinate with the respective departments in case if any additional inputs or documents are required
- PC10.** review the entered information and compare with the original source document
- PC11.** verify the output for errors and brief the data entry operators
- PC12.** ensure the update happens on a regular basis
- PC13.** ensure to maintain the documentation and quality standards to be used in the data entry operation
- PC14.** conduct consistent check on the software and database stored
- PC15.** ensure to maintain the files updated in software as well as the source documents securely

#### *Attending staff related problems and issues*

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

- PC16.** listen to the complaints or problems of the staff
- PC17.** monitor the issues such as software problem, malfunctions, inadequate or unclear information or any other technical problems

**PC18.** ensure access to relevant files, documents and information to the data entry operator as required

**PC19.** ensure to take proper steps to resolve the issues

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

**KU1.** companys reporting structure

**KU2.** individuals role in cold chain process flow

**KU3.** occupational health and safety standards

**KU4.** existing quality control standards followed by various industry players

**KU5.** quality control standards that are applicable to the company and the products on which they are applicable

**KU6.** companys policies, standard operating procedures and governance structure

**KU7.** risk and impact of not following defined procedures/work instructions

**KU8.** companys personnel management and incentives rules

**KU9.** clients and suppliers of the company

**KU10.** how to operate MIS

**KU11.** computer and its terminologies

**KU12.** softwares available to maintain MIS

**KU13.** how to work on different software needed for report writing including MS office suit or open source office

**KU14.** basic data analysis techniques used to make inferences

**KU15.** latest technology updates that would support the data entry requirements

**KU16.** quality control and assurance standards

**KU17.** characteristics of goods being handled, for eg: tolerance to exposure to water, stickiness, odour etc.

**KU18.** appropriate medium for client communications

**KU19.** product names and codes used for labelling

## **Generic Skills (GS)**

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

**GS1.** read and understand manuals, SOPs, instructions, memos, reports, job cards etc

**GS2.** review the entered information and compare with the original source document

**GS3.** fill all data processing forms accurately

**GS4.** maintain the files in software as well as the source documents securely

**GS5.** coordinate with the different departments such as storage, transportation, etc.

**GS6.** verify the output for errors and brief the data entry operators

**GS7.** identify the right person from organization to address the problem

**GS8.** identify appropriate software to be used to maintain MIS

- GS9.** plan random check on the software and database stored
- GS10.** coordinate with the respective departments in case any additional inputs or documents are required
- GS11.** identify customer demand and quality requirements
- GS12.** achieve client satisfaction ensuring high level service with timely and quality delivery as per requirement
- GS13.** monitor the issues such as software problem, malfunctions, inadequate or unclear information or any other technical problems
- GS14.** ensure to take proper steps to resolve the issues
- GS15.** apply basic logic to identify data errors
- GS16.** analyze the database and identify which software will be appropriate to store the database
- GS17.** evaluate if the data is stored correctly in the MIS
- GS18.** analyze process disruptions and delays
- GS19.** investigate on various staff problems and provide proper solution
- GS20.** understand if any new information is required to be captured from customers

**Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Supervising the work requirement</i>	<b>8</b>	<b>16</b>	-	-
<b>PC1.</b> coordinate with the different departments such as storage, transportation, etc.	2	4	-	-
<b>PC2.</b> brief the data entry executive on the various documentations to be done	2	4	-	-
<b>PC3.</b> check the obtained information and documents to be updated	2	4	-	-
<b>PC4.</b> study the documents in detail and understand the requirements	2	4	-	-
<i>Monitoring MIS and data entry operations</i>	<b>18</b>	<b>42</b>	-	-
<b>PC5.</b> check the best software tool identified to update the data	2	4	-	-
<b>PC6.</b> identify the latest technology updates that would support the data entry requirements	2	4	-	-
<b>PC7.</b> examine the required software to perform the MIS and data entry operation	2	4	-	-
<b>PC8.</b> monitor the working of the software and the procedure to update	2	4	-	-
<b>PC9.</b> coordinate with the respective departments in case if any additional inputs or documents are required	2	4	-	-
<b>PC10.</b> review the entered information and compare with the original source document	2	4	-	-
<b>PC11.</b> verify the output for errors and brief the data entry operators	2	4	-	-
<b>PC12.</b> ensure the update happens on a regular basis	1	4	-	-
<b>PC13.</b> ensure to maintain the documentation and quality standards to be used in the data entry operation	1	4	-	-
<b>PC14.</b> conduct consistent check on the software and database stored	1	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC15.</b> ensure to maintain the files updated in software as well as the source documents securely	1	3	-	-
<i>Attending staff related problems and issues</i>	<b>4</b>	<b>12</b>	-	-
<b>PC16.</b> listen to the complaints or problems of the staff	1	3	-	-
<b>PC17.</b> monitor the issues such as software problem, malfunctions, inadequate or unclear information or any other technical problems	1	3	-	-
<b>PC18.</b> ensure access to relevant files, documents and information to the data entry operator as required	1	3	-	-
<b>PC19.</b> ensure to take proper steps to resolve the issues	1	3	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	LSC/N8712
<b>NOS Name</b>	Supervise Data entry/MIS reports management
<b>Sector</b>	Logistics
<b>Sub-Sector</b>	Cold Chain Logistics Solutions
<b>Occupation</b>	Cold Chain Operations, Packing & Packaging/Dispatch/Distribution, Maintenance, Engineering, Projects
<b>NSQF Level</b>	7
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	02/05/2019
<b>Next Review Date</b>	02/05/2022
<b>NSQF Clearance Date</b>	22/08/2019

## LSC/N9901: Maintain food and personnel safety, health and hygiene in cold storage plant

### Description

This OS unit is about complying with safety, health and hygiene at the workplace to have a hazard-free environment and avoid downtime

### Scope

This unit/task covers the following:

- Take precautionary measures to avoid work hazards
- Follow standard health, safety and hygiene procedures

### Elements and Performance Criteria

#### *Taking precautionary measures to avoid work hazards*

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

- PC1.** assess the various health, safety and environmental hazards in the cold storage
- PC2.** take necessary steps to eliminate or minimize the hazards
- PC3.** analyze the causes of accidents at the workplace
- PC4.** take preventive measures to avoid risk of cold burns and other injury due to contact with hot surfaces, gas, fire, hot fluids/ liquids, etc.
- PC5.** ensure the employees have access to first aid kit when needed
- PC6.** ensure to use personal protective equipment and safety gear such as gloves, jacket, footwear etc. for loading and unloading material in cold rooms to protect themselves from hypothermia, frostbite etc
- PC7.** ensure to display safety signs at places where necessary for people to be cautious
- PC8.** use rubber mats in the places where floors are constantly wet
- PC9.** ensure electrical precautions such as insulated clothing, adequate equipment insulation, dry work area, switch off the power supply when not required, etc
- PC10.** display emergency exit plan at prominent places and have emergency assembly area earmarked as a grid for easy counting of on duty associates and workers.
- PC11.** unplug the control panel, compressor, condensor etc before performing maintenance
- PC12.** report to the superior on any problems and hazards identified
- PC13.** install fire alarms (electrical/manual) in cold store/deep freeze and keep other safety devices like hammer/mallet in the storage area

#### *Following standard health, safety and hygiene procedures*

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

- PC14.** maintain appropriate ventilation in the cold rooms to avoid unacceptable accumulation of heat, condensation or odours
- PC15.** check and review the cold storage areas frequently
- PC16.** stack items in an organized way and use safe lifting techniques to reduce risk of injuries from handling procedures at the storage areas



- PC17.** ensure no sign of pest infestation and install rodent traps, fly glues and insectocutors wherever needed
- PC18.** follow hygiene & sanitation standards of Government bodies like FSSAI, APEDA and /or EIA or importing countries like FAO, EU standards after PC 20
- PC19.** use effective loading and unloading systems
- PC20.** proper stock rotation (First in First out) to be practised
- PC21.** segregate damaged/non-conforming products from other products to designate area for appropriate disposition
- PC22.** fumigate containers depending upon product and contamination or as per customers requirement
- PC23.** avoid smoking, spitting, eating etc near food storage area
- PC24.** ensure reefers are covered, clean, free from pest infestation & other contaminants
- PC25.** dispose cold storage plant waste in the designated areas safely as per companys policies and rules
- PC26.** ensure to be safe while handling machines(generator, compressor, condensor etc), gas (ammonia) and chemicals(ethylene, refrigerants etc)
- PC27.** keep the floors free from oil, water and grease to avoid slippery surface
- PC28.** cut nails regularly and avoid applying nail paint. Avoid wearing bangles, rings, and chains in cold storage
- PC29.** wash hands with soap solution and dry under a dryer as they enter for duty or after using wash room
- PC30.** periodic examination of protective devices, pressure vessels and pipelines, and parts of pipework by a competent person to prevent defect that may give rise to danger
- PC31.** ensure workers suffering from abscess, boils etc should be relieved from food handling
- PC32.** develop personal hygiene habits like brushing teeth, taking shower everybody, wearing clean and tidy clothes after ironing etc

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- KU1.** companys HR policies on personnel management
- KU2.** companys reporting structure
- KU3.** occupational health and safety standards
- KU4.** cold storageplant inspection checklist
- KU5.** companys sanitary standard operating procedures
- KU6.** procedures to follow during emergency maintenance issues
- KU7.** technical standards for design and construction of cold storages: Bureau of Indian standards(BIS), International standard(ISO) etc
- KU8.** the purpose and usage of protective gears such as gloves , jackets etc. while working
- KU9.** use of first aid at workplace
- KU10.** cold storage order 1980
- KU11.** food safety and standards act 2006
- KU12.** reporting procedure or heirarchy for signs of damage and potential hazards

- KU13.** methods to minimize accidental risks
- KU14.** safe storage and handling of chemicals like refrigerants, ammonia, ethylene etc
- KU15.** loading and unloading systems
- KU16.** standard operating procedure for safety drills and equipment maintenance
- KU17.** operation of machines: compressor, condenser, evaporator etc
- KU18.** emergency procedures to be followed in case of an mishap such as fire, accidents, etc. and communication of safety instructions to subordinate staff
- KU19.** emergency responses in case of malfunctioning of refrigeration equipment as a whole or its components like evaporator, condenser or compressor
- KU20.** solid, liquid and gaseous waste disposal, treatment norms and equipment
- KU21.** necessary action to be taken for the hazards identified
- KU22.** knowledge of Quality systems like BRC, FSSAI, ISO, FSSC, HACCP etc
- KU23.** safe storage and handling of chemicals like refrigerants, ammonia, ethylene etc
- KU24.** loading and unloading systems
- KU25.** standard operating procedure for safety drills and equipment maintenance
- KU26.** operation of machines: compressor, condenser, evaporator etc
- KU27.** emergency procedures to be followed in case of an mishap such as fire, accidents, etc. and communication of safety instructions to subordinate staff
- KU28.** emergency responses in case of malfunctioning of refrigeration equipment as a whole or its components like evaporator, condenser or compressor
- KU29.** solid, liquid and gaseous waste disposal, treatment norms and equipment
- KU30.** necessary action to be taken for the hazards identified
- KU31.** knowledge of Quality systems like BRC, FSSAI, ISO, FSSC, HACCP etc
- KU32.** Maintain food and personnel safety, health and hygiene in cold storage plant

## **Generic Skills (GS)**

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

- GS1.** read and interpret the relevant organisation policies, procedures and diagrams that identify health, safety and safe environmental practices.
- GS2.** read job sheets, company policy documents and information displayed at the workplace for health, safety and environment.
- GS3.** read notes/comments from the senior
- GS4.** fill up documentation related to health, safety and environmental standards, if required
- GS5.** verbally report health, safety and environmental hazards and poor organisation practice.
- GS6.** communicate to the supervisor about the work health, safety and environmental issues
- GS7.** receive instructions from supervisor on minimizing the risks
- GS8.** communicate with co-workers about the precautions to be taken for hazards free work
- GS9.** take preventive measures for the identified hazards
- GS10.** select appropriate hand tools and personal protection equipment
- GS11.** identify first aid needs in case of an injury
- GS12.** formalize and display evacuation plan at strategic locations

- GS13.** ensure targeted product delivery by practicing stipulated standards of occupational health safety and environmental measures
- GS14.** take care of personal and equipment protection
- GS15.** identify the hazards and suggest possible solutions
- GS16.** use safety equipment such as fire extinguisher during fire accidents
- GS17.** store tools in a safe way
- GS18.** analyse the seriousness of the hazards
- GS19.** evolve smooth workflow by avoiding hazards at workplace
- GS20.** evaluate and apply the possible solutions for the hazards, as necessary
- GS21.** take care of personal and equipment protection
- GS22.** identify the hazards and suggest possible solutions
- GS23.** use safety equipment such as fire extinguisher during fire accidents
- GS24.** store tools in a safe way
- GS25.** analyse the seriousness of the hazards
- GS26.** evolve smooth workflow by avoiding hazards at workplace
- GS27.** evaluate and apply the possible solutions for the hazards, as necessary

**Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Taking precautionary measures to avoid work hazards</i>	<b>11</b>	<b>30</b>	-	-
<b>PC1.</b> assess the various health, safety and environmental hazards in the cold storage	1	3	-	-
<b>PC2.</b> take necessary steps to eliminate or minimize the hazards	1	3	-	-
<b>PC3.</b> analyze the causes of accidents at the workplace	1	3	-	-
<b>PC4.</b> take preventive measures to avoid risk of cold burns and other injury due to contact with hot surfaces, gas, fire, hot fluids/ liquids, etc.	1	2	-	-
<b>PC5.</b> ensure the employees have access to first aid kit when needed	1	2	-	-
<b>PC6.</b> ensure to use personal protective equipment and safety gear such as gloves, jacket, footwear etc. for loading and unloading material in cold rooms to protect themselves from hypothermia, frostbite etc	1	2	-	-
<b>PC7.</b> ensure to display safety signs at places where necessary for people to be cautious	1	2	-	-
<b>PC8.</b> use rubber mats in the places where floors are constantly wet	-	2	-	-
<b>PC9.</b> ensure electrical precautions such as insulated clothing, adequate equipment insulation, dry work area, switch off the power supply when not required, etc	1	2	-	-
<b>PC10.</b> display emergency exit plan at prominent places and have emergency assembly area earmarked as a grid for easy counting of on duty associates and workers.	1	2	-	-
<b>PC11.</b> unplug the control panel, compressor, condensor etc before performing maintenance	-	2	-	-
<b>PC12.</b> report to the superior on any problems and hazards identified	1	2	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> install fire alarms (electrical/manual) in cold store/deep freeze and keep other safety devices like hammer/mallet in the storage area	1	3	-	-
<i>Following standard health, safety and hygiene procedures</i>	<b>19</b>	<b>40</b>	-	-
<b>PC14.</b> maintain appropriate ventilation in the cold rooms to avoid unacceptable accumulation of heat, condensation or odours	1	2	-	-
<b>PC15.</b> check and review the cold storage areas frequently	1	2	-	-
<b>PC16.</b> stack items in an organized way and use safe lifting techniques to reduce risk of injuries from handling procedures at the storage areas	1	2	-	-
<b>PC17.</b> ensure no sign of pest infestation and install rodent traps, fly glues and insectocutors wherever needed	1	2	-	-
<b>PC18.</b> follow hygiene & sanitation standards of Government bodies like FSSAI, APEDA and /or EIA or importing countries like FAO, EU standards after PC 20	1	2	-	-
<b>PC19.</b> use effective loading and unloading systems	1	2	-	-
<b>PC20.</b> proper stock rotation (First in First out) to be practised	1	2	-	-
<b>PC21.</b> segregate damaged/non-conforming products from other products to designate area for appropriate disposition	1	2	-	-
<b>PC22.</b> fumigate containers depending upon product and contamination or as per customers requirement	1	2	-	-
<b>PC23.</b> avoid smoking, spitting, eating etc near food storage area	1	2	-	-
<b>PC24.</b> ensure reefers are covered, clean, free from pest infestation & other contaminants	1	2	-	-
<b>PC25.</b> dispose cold storage plant waste in the designated areas safely as per companys policies and rules	1	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC26.</b> ensure to be safe while handling machines(generator, compressor, condensor etc), gas (ammonia) and chemicals(ethylene, refrigerants etc)	1	2	-	-
<b>PC27.</b> keep the floors free from oil, water and grease to avoid slippery surface	1	2	-	-
<b>PC28.</b> cut nails regularly and avoid applying nail paint. Avoid wearing bangles, rings, and chains in cold storage	1	2	-	-
<b>PC29.</b> wash hands with soap solution and dry under a dryer as they enter for duty or after using wash room	1	2	-	-
<b>PC30.</b> periodic examination of protective devices, pressure vessels and pipelines, and parts of pipework by a competent person to prevent defect that may give rise to danger	1	2	-	-
<b>PC31.</b> ensure workers suffering from abscess, boils etc should be relieved from food handling	1	3	-	-
<b>PC32.</b> develop personal hygiene habits like brushing teeth, taking shower everybody, wearing clean and tidy clothes after ironing etc	1	2	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	LSC/N9901
<b>NOS Name</b>	Maintain food and personnel safety, health and hygiene in cold storage plant
<b>Sector</b>	Logistics
<b>Sub-Sector</b>	Cold Chain Logistics Solutions
<b>Occupation</b>	Cold Chain Operations
<b>NSQF Level</b>	5
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	04/05/2019
<b>Next Review Date</b>	04/05/2022
<b>NSQF Clearance Date</b>	22/08/2019

## LSC/N9902: Communicate effectively with colleagues and clients

### Description

This OS unit is about coordinating and communicating effectively with seniors, colleagues and clients to achieve a smooth workflow

### Scope

This unit/task covers the following:

- Interact with seniors
- Communicate with colleagues
- Communicate effectively with clients

### Elements and Performance Criteria

#### *Interacting with seniors*

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

- PC1.** understand the work output requirements, targets, performance indicators and incentives
- PC2.** deliver quality work on time and report any anticipated reasons for delays
- PC3.** escalate unresolved problems or complaints to the relevant superior
- PC4.** communicate project progress proactively to the superior
- PC5.** receive feedback on work standards
- PC6.** document the completed work schedule and handover to the superior

#### *Communicating with colleagues*

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

- PC7.** exhibit trust, support and respect to all the colleagues in the workplace
- PC8.** aim to achieve hassle free cold chain operation
- PC9.** help and assist colleagues with information and knowledge
- PC10.** seek assistance from the colleagues when required
- PC11.** identify the potential and existing conflicts with the colleagues and resolve
- PC12.** pass on essential information to other colleagues on timely basis
- PC13.** maintain the etiquette, use polite language, demonstrate responsible and disciplined behaviors to the colleagues
- PC14.** interact with colleagues from different departments: ripening chamber, cold storage, transport, packhouse etc to effectively carry out the work among the team and understand the nature of their work
- PC15.** put team over individual goals and multi task or share work where necessary supporting the colleagues
- PC16.** highlight any errors of colleagues, help to rectify and ensure quality output
- PC17.** work with cooperation, coordination, communication and collaboration, with shared goals and supporting each others performance

#### *Communicating effectively with clients*

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



- PC18.** ask relevant questions to the client and identify their needs
- PC19.** possess strong knowledge on market and cold chain operation
- PC20.** brief the client clearly on potential costs and challenges involved in the cold chain industry
- PC21.** communicate with the client in a polite, professional and friendly manner
- PC22.** build effective but impersonal relationship with the client
- PC23.** ensure the appropriate language and tone are used with clients
- PC24.** listen actively and have a two way communication
- PC25.** be sensitive to the gender, cultural and social differences such as modes of greeting, formality, etc.
- PC26.** understand the client expectations correctly and provide the appropriate products and services
- PC27.** understand the client dissatisfaction and address or escalate their complaints effectively
- PC28.** maintain a positive, sensible and cooperative manner all time
- PC29.** ensure to maintain a proper body language, dress code, gestures and etiquettes towards the client
- PC30.** avoid interrupting the client while they talk
- PC31.** ensure to avoid negative questions and statements to the client
- PC32.** inform the client on any issues or problems before hand and also on the developments involving them
- PC33.** ensure to respond back to the client immediately for their voice messages, e-mails, apps, etc.
- PC34.** develop good rapport with the client and promote other products and services
- PC35.** seek feedback from the client on their understanding to what was discussed
- PC36.** explain the terms and conditions clearly

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- KU1.** companys HR policies on personnel management
- KU2.** companys reporting structure
- KU3.** occupational health and safety standards
- KU4.** cold storageplant inspection checklist
- KU5.** companys sanitary standard operating procedures
- KU6.** procedures to follow during emergency maintenance issues
- KU7.** technical standards for design and construction of cold storages: Bureau of Indian standards(BIS), International standard(ISO) etc
- KU8.** methods for effective communication with various categories of people and the different departments in the organization
- KU9.** significance of team coordination and productivity targets of the organisation
- KU10.** how to record the job activity as required on various types of documents
- KU11.** how to use computer or smartphone to communicate effectively and productively
- KU12.** significance of helping colleagues with specific issues and problems

- KU13.** importance of meeting quality and time standards as a team
- KU14.** how to practice effective listening and talking
- KU15.** effective use of voice tone and pitch for communication
- KU16.** how to demonstrate ethics and convey discipline to the clients
- KU17.** how to build effective working relationship with mutual trust and respect within the team
- KU18.** importance of dealing with grievances effectively and in time
- KU19.** safe storage and handling of chemicals like refrigerants, ammonia, ethylene etc
- KU20.** loading and unloading systems
- KU21.** standard operating procedure for safety drills and equipment maintenance
- KU22.** operation of machines: compressor, condenser, evaporator etc
- KU23.** emergency procedures to be followed in case of an mishap such as fire, accidents, etc. and communication of safety instructions to subordinate staff
- KU24.** emergency responses in case of malfunctioning of refrigeration equipment as a whole or its components like evaporator, condenser or compressor
- KU25.** solid, liquid and gaseous waste disposal, treatment norms and equipment
- KU26.** necessary action to be taken for the hazards identified
- KU27.** knowledge of Quality systems like BRC, FSSAI, ISO, FSSC, HACCP etc
- KU28.** Maintain food and personnel safety, health and hygiene in cold storage plant

## **Generic Skills (GS)**

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

- GS1.** read and interpret the relevant organisation policies, procedures and diagrams that identify health, safety and safe environmental practices.
- GS2.** read notes/comments from the senior
- GS3.** fill up documentation pertaining to job requirement
- GS4.** interact with team members to work efficiently
- GS5.** communicate effectively with senior to achieve smooth workflow
- GS6.** communicate effectively with the clients to build a good rapport with them
- GS7.** use language that the client or colleague understands
- GS8.** use the communication systems of the company, e.g., telephone, fax, public announcement systems
- GS9.** E-mail and use Internet for communicating
- GS10.** use of audio-visual aids to communicate complex issues
- GS11.** spot and communicate potential areas of disruptions to work process and report the same
- GS12.** report to supervisor and deal with a colleague individually, depending on the type of concern
- GS13.** plan communication strategy in order to avoid conflicts and work disruption
- GS14.** practice patient listening, careful talking and paraphrasing in order to avoid misunderstanding
- GS15.** coordinate with different departments and multi-task as necessary
- GS16.** contribute to quality of team work and achieve smooth workflow
- GS17.** share work load as required

- GS18.** delegate work in consultation with senior or as necessary instead of allowing work to pile up
- GS19.** resolve recurring inter-personal conflicts by clear and two-way dialogue
- GS20.** improve work processes by interacting with others and adopting best practices
- GS21.** take care of personal and equipment protection
- GS22.** identify the hazards and suggest possible solutions
- GS23.** use safety equipment such as fire extinguisher during fire accidents
- GS24.** store tools in a safe way
- GS25.** analyse the seriousness of the hazards
- GS26.** evolve smooth workflow by avoiding hazards at workplace
- GS27.** evaluate and apply the possible solutions for the hazards, as necessary

**Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interacting with seniors</i>	<b>6</b>	<b>12</b>	-	-
<b>PC1.</b> understand the work output requirements, targets, performance indicators and incentives	1	2	-	-
<b>PC2.</b> deliver quality work on time and report any anticipated reasons for delays	1	2	-	-
<b>PC3.</b> escalate unresolved problems or complaints to the relevant superior	1	2	-	-
<b>PC4.</b> communicate project progress proactively to the superior	1	2	-	-
<b>PC5.</b> receive feedback on work standards	1	2	-	-
<b>PC6.</b> document the completed work schedule and handover to the superior	1	2	-	-
<i>Communicating with colleagues</i>	<b>11</b>	<b>22</b>	-	-
<b>PC7.</b> exhibit trust, support and respect to all the colleagues in the workplace	1	2	-	-
<b>PC8.</b> aim to achieve hassle free cold chain operation	1	2	-	-
<b>PC9.</b> help and assist colleagues with information and knowledge	1	2	-	-
<b>PC10.</b> seek assistance from the colleagues when required	1	2	-	-
<b>PC11.</b> identify the potential and existing conflicts with the colleagues and resolve	1	2	-	-
<b>PC12.</b> pass on essential information to other colleagues on timely basis	1	2	-	-
<b>PC13.</b> maintain the etiquette, use polite language, demonstrate responsible and disciplined behaviors to the colleagues	1	2	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC14.</b> interact with colleagues from different departments: ripening chamber, cold storage, transport, packhouse etc to effectively carry out the work among the team and understand the nature of their work	1	2	-	-
<b>PC15.</b> put team over individual goals and multi task or share work where necessary supporting the colleagues	1	2	-	-
<b>PC16.</b> highlight any errors of colleagues, help to rectify and ensure quality output	1	2	-	-
<b>PC17.</b> work with cooperation, coordination, communication and collaboration, with shared goals and supporting each others performance	1	2	-	-
<i>Communicating effectively with clients</i>	<b>13</b>	<b>36</b>	-	-
<b>PC18.</b> ask relevant questions to the client and identify their needs	1	2	-	-
<b>PC19.</b> possess strong knowledge on market and cold chain operation	1	2	-	-
<b>PC20.</b> brief the client clearly on potential costs and challenges involved in the cold chain industry	1	2	-	-
<b>PC21.</b> communicate with the client in a polite, professional and friendly manner	1	2	-	-
<b>PC22.</b> build effective but impersonal relationship with the client	1	2	-	-
<b>PC23.</b> ensure the appropriate language and tone are used with clients	1	2	-	-
<b>PC24.</b> listen actively and have a two way communication	1	2	-	-
<b>PC25.</b> be sensitive to the gender, cultural and social differences such as modes of greeting, formality, etc.	1	2	-	-
<b>PC26.</b> understand the client expectations correctly and provide the appropriate products and services	1	2	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC27.</b> understand the client dissatisfaction and address or escalate their complaints effectively	1	2	-	-
<b>PC28.</b> maintain a positive, sensible and cooperative manner all time	1	2	-	-
<b>PC29.</b> ensure to maintain a proper body language, dress code, gestures and etiquettes towards the client	1	2	-	-
<b>PC30.</b> avoid interrupting the client while they talk	-	2	-	-
<b>PC31.</b> ensure to avoid negative questions and statements to the client	-	2	-	-
<b>PC32.</b> inform the client on any issues or problems before hand and also on the developments involving them	-	2	-	-
<b>PC33.</b> ensure to respond back to the client immediately for their voice messages, e-mails, apps, etc.	-	2	-	-
<b>PC34.</b> develop good rapport with the client and promote other products and services	-	2	-	-
<b>PC35.</b> seek feedback from the client on their understanding to what was discussed	-	1	-	-
<b>PC36.</b> explain the terms and conditions clearly	1	1	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	LSC/N9902
<b>NOS Name</b>	Communicate effectively with colleagues and clients
<b>Sector</b>	Logistics
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	5
<b>Credits</b>	NA
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	04/05/2019
<b>Next Review Date</b>	04/05/2022
<b>NSQC Clearance Date</b>	22/08/2019

## DGT/VSQ/N0103: Employability Skills (90 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.** understand the significance of employability skills in meeting the current job market requirement and future of work
- PC2.** identify and explore learning and employability relevant portals
- PC3.** research about the different industries, job market trends, latest skills required and the available opportunities

#### *Constitutional values - Citizenship*

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

- PC4.** 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.
- PC5.** follow environmentally sustainable practices

#### *Becoming a Professional in the 21st Century*

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

- PC6.** recognize the significance of 21st Century Skills for employment
- PC7.** 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



**PC8.** adopt a continuous learning mindset for personal and professional development

*Basic English Skills*

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

**PC9.** use basic English for everyday conversation in different contexts, in person and over the telephone

**PC10.** read and understand routine information, notes, instructions, mails, letters etc. written in English

**PC11.** 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:

**PC12.** identify career goals based on the skills, interests, knowledge, and personal attributes

**PC13.** prepare a career development plan with short- and long-term goals

*Communication Skills*

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

**PC14.** follow verbal and non-verbal communication etiquette while communicating in professional and public settings

**PC15.** use active listening techniques for effective communication

**PC16.** communicate in writing using appropriate style and format based on formal or informal requirements

**PC17.** work collaboratively with others in a team

*Diversity & Inclusion*

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

**PC18.** communicate and behave appropriately with all genders and PwD

**PC19.** 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:

**PC20.** identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.

**PC21.** carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook

**PC22.** identify common components of salary and compute income, expenses, taxes, investments etc

**PC23.** 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:

**PC24.** operate digital devices and use their features and applications securely and safely

**PC25.** carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.

**PC26.** display responsible online behaviour while using various social media platforms

**PC27.** create a personal email account, send and process received messages as per requirement

**PC28.** carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications

**PC29.** utilize virtual collaboration tools to work effectively

### *Entrepreneurship*

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

- PC30.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC31.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC32.** 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:

- PC33.** identify different types of customers and ways to communicate with them
- PC34.** identify and respond to customer requests and needs in a professional manner
- PC35.** use appropriate tools to collect customer feedback
- PC36.** follow appropriate hygiene and grooming standards

### *Getting ready for apprenticeship & Jobs*

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

- PC37.** create a professional Curriculum vitae (Résumé)
- PC38.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- PC39.** apply to identified job openings using offline /online methods as per requirement
- PC40.** answer questions politely, with clarity and confidence, during recruitment and selection
- PC41.** 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.** components of salary and 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

- KU16.** use applications such as word processors, spreadsheets etc.
- KU17.** how to identify business opportunities
- KU18.** types and needs of customers
- KU19.** how to apply for a job and prepare for an interview
- KU20.** 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 in English and other languages
- GS2.** communicate effectively using appropriate language in formal and informal settings
- GS3.** behave politely and appropriately with all to maintain effective work relationship
- GS4.** how to work in a virtual mode, using various technological platforms
- 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

**Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the current job market requirement and future of work	-	-	-	-
<b>PC2.</b> identify and explore learning and employability relevant portals	-	-	-	-
<b>PC3.</b> research about the different industries, job market trends, latest skills required and the available opportunities	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC4.</b> 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.	-	-	-	-
<b>PC5.</b> follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>1</b>	<b>3</b>	-	-
<b>PC6.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC7.</b> 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	-	-	-	-
<b>PC8.</b> adopt a continuous learning mindset for personal and professional development	-	-	-	-
<i>Basic English Skills</i>	<b>3</b>	<b>4</b>	-	-
<b>PC9.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC11.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development &amp; Goal Setting</i>	<b>1</b>	<b>2</b>	-	-
<b>PC12.</b> identify career goals based on the skills, interests, knowledge, and personal attributes	-	-	-	-
<b>PC13.</b> prepare a career development plan with short- and long-term goals	-	-	-	-
<i>Communication Skills</i>	<b>2</b>	<b>2</b>	-	-
<b>PC14.</b> follow verbal and non-verbal communication etiquette while communicating in professional and public settings	-	-	-	-
<b>PC15.</b> use active listening techniques for effective communication	-	-	-	-
<b>PC16.</b> communicate in writing using appropriate style and format based on formal or informal requirements	-	-	-	-
<b>PC17.</b> work collaboratively with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>1</b>	-	-
<b>PC18.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC19.</b> escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>2</b>	<b>3</b>	-	-
<b>PC20.</b> identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.	-	-	-	-
<b>PC21.</b> carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC22.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
<b>PC23.</b> identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	<b>3</b>	<b>5</b>	-	-
<b>PC24.</b> operate digital devices and use their features and applications securely and safely	-	-	-	-
<b>PC25.</b> carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.	-	-	-	-
<b>PC26.</b> display responsible online behaviour while using various social media platforms	-	-	-	-
<b>PC27.</b> create a personal email account, send and process received messages as per requirement	-	-	-	-
<b>PC28.</b> carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications	-	-	-	-
<b>PC29.</b> utilize virtual collaboration tools to work effectively	-	-	-	-
<i>Entrepreneurship</i>	<b>2</b>	<b>3</b>	-	-
<b>PC30.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC31.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC32.</b> identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	<b>1</b>	<b>2</b>	-	-
<b>PC33.</b> identify different types of customers and ways to communicate with them	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC34.</b> identify and respond to customer requests and needs in a professional manner	-	-	-	-
<b>PC35.</b> use appropriate tools to collect customer feedback	-	-	-	-
<b>PC36.</b> follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship &amp; Jobs</i>	<b>2</b>	<b>3</b>	-	-
<b>PC37.</b> create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC38.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC39.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC40.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC41.</b> identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>30</b>	-	-

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0103
<b>NOS Name</b>	Employability Skills (90 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	5
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	30/09/2025
<b>NSQC Clearance Date</b>	29/09/2022

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
6. In case of unsuccessful completion, the trainee may seek reassessment 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.)

## Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
LSC/N8708.Administer manpower planning and labor management across cold chain operations	30	70	-	-	100	15
LSC/N8709.Ensure smooth and effective execution of cold chain operation	30	70	-	-	100	15
LSC/N8710.Monitor and improvise perishable product handling activities	30	70	-	-	100	15
LSC/N8711.Oversee Route Planning and reefer/non-reefer vehicle coordination	30	70	-	-	100	10
LSC/N8712.Supervise Data entry/MIS reports management	30	70	-	-	100	15
LSC/N9901.Maintain food and personnel safety, health and hygiene in cold storage plant	30	70	-	-	100	15
LSC/N9902.Communicate effectively with colleagues and clients	30	70	-	-	100	15
DGT/VSQ/N0103.Employability Skills (90 Hours)	20	30	-	-	50	-
<b>Total</b>	<b>210</b>	<b>490</b>	<b>-</b>	<b>-</b>	<b>700</b>	<b>NaN</b>

## Acronyms

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

## Glossary

<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	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.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	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.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	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.
<b>Scope</b>	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.
<b>Knowledge and Understanding (KU)</b>	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.

<b>Organisational Context</b>	<p>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.</p>
<b>Technical Knowledge</b>	<p>Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</p>
<b>Core Skills/ Generic Skills (GS)</b>	<p>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.</p>
<b>Electives</b>	<p>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.</p>
<b>Options</b>	<p>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.</p>