

## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR LOGISTICS SECTOR

### Contents

1. Introduction and Contacts..... P1
2. Qualifications Pack..... P2
3. Glossary of Key Terms ..... P3
4. OS Units..... P5
5. Nomenclature for QP & OS..... P47
6. Assessment Criteria for each NOS.... P49



### What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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### Introduction

## Qualifications Pack: Cold Chain Manager

**SECTOR: LOGISTICS**

**SUB-SECTOR:** Cold Chain

**OCCUPATION:** Operations

**REFERENCE ID:** LSC/Q8702

**ALIGNED TO:** NCO-2015/ NIL

The Cold Chain Manager is responsible for overseeing end to end cold chain operations including refrigerated storage, transportation and data entry operations

**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.

## Job Details

<b>Qualifications Pack Code</b>	<b>LSC/Q8702</b>		
<b>Job Role</b>	<b>Cold Chain Manager</b>		
<b>Credits(NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Sector</b>	<b>Logistics</b>	<b>Drafted on</b>	<b>26/08/16</b>
<b>Sub-sector</b>	<b>Cold Chain</b>	<b>Last reviewed on</b>	<b>11/01/17</b>
<b>Occupation</b>	<b>Operations – Cold Storage</b>	<b>Next review date</b>	<b>11/01/20</b>
<b>NSQC Clearance on</b>	<b>NA</b>		

<b>Job Role</b>	<b>Cold Chain Manager</b>
<b>Role Description</b>	Overseeing end to end cold chain operations including refrigerated storage, transportation and data entry operations
<b>NSQF</b>	7
<b>Minimum Educational Qualifications</b>	Graduate
<b>Maximum Educational Qualifications</b>	Post Graduate
<b>Training</b> (Suggested but not mandatory)	Not Applicable
<b>Minimum Job Entry Age</b>	18 years
<b>Experience</b>	Minimum preferable 15 years experience in cold room operations
<b>Applicable National Occupational Standards (NOS)</b>	<p><b>Compulsory:</b></p> <ol style="list-style-type: none"> <li><a href="#">LSC/N8708</a> Administer manpower planning and labor management across cold chain operations</li> <li><a href="#">LSC/N8709</a> <u>Ensure smooth and effective execution of cold chain operation</u></li> <li><a href="#">LSC/N8710</a> Monitor and improvise perishable product handling activities</li> <li><a href="#">LSC/N8711</a> <u>Oversee route planning and reefer/non-reefer vehicle coordination</u></li> <li><a href="#">LSC/N8712</a> <u>Supervise Data entry/MIS reports management</u></li> <li><a href="#">LSC/N9901</a> <u>Maintain food and personnel safety, health and hygiene in cold storage plant</u></li> <li><a href="#">LSC/N9902</a> <u>Communicate effectively with colleagues and clients</u></li> </ol> <p><b>Optional:</b></p> <ol style="list-style-type: none"> <li>NA</li> </ol>
<b>Performance Criteria</b>	As described in the relevant OS units

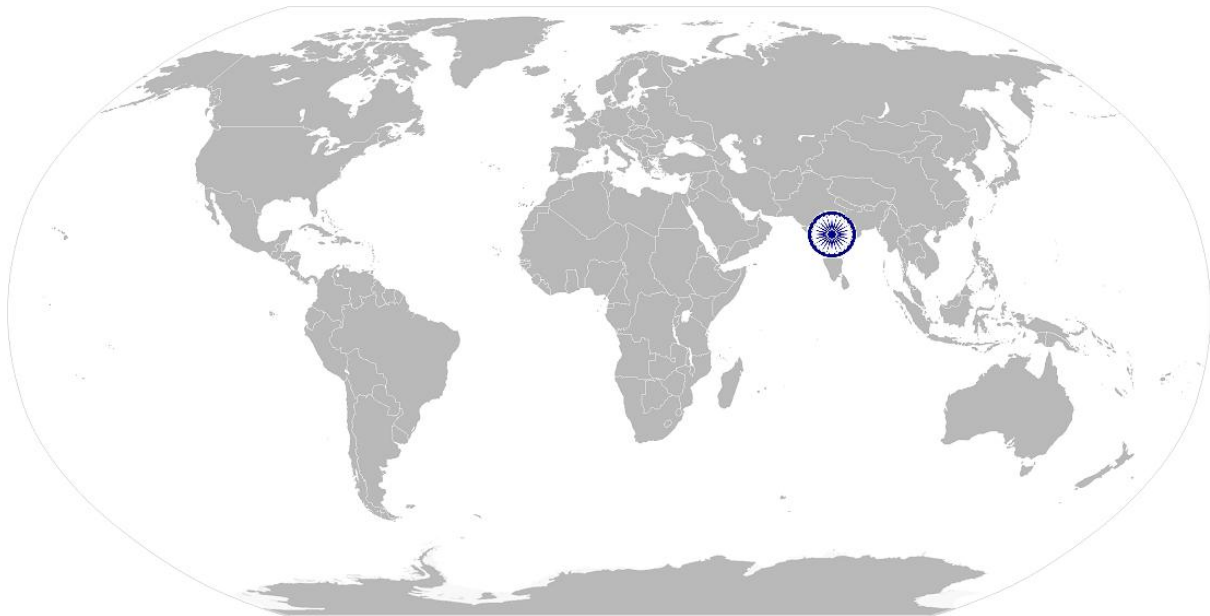
Keywords /Terms	Description
Core Skills/Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the NOS, these include communication related skills that are applicable to most job roles.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of NOS.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in the Indian context
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Organisational Context	Organisational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
Qualifications Pack(QP)	Qualifications Pack comprises the set of NOS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Scope	Scope is the 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 the quality of performance required.
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-Sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Sub-functions	Sub-functions are sub-activities essential to fulfil the achieving the objectives of the function.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.

<b>Acronyms</b>	Keywords /Terms	Description
	NSQF	National Skills Qualifications Framework
	QP	Qualifications Pack
	OS	Occupational Standards
	OH&S	Occupational Health and Safety
	PPE	Personal Protective Equipment
	HR	Human Resources

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

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# National Occupational Standard



## Overview

This 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.

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

National Occupational Standard

<b>Unit Code</b>	<b>LSC/N8708</b>
<b>Unit Title (Task)</b>	<b>Administer manpower planning and labor management across cold chain operations</b>
<b>Description</b>	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.
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>Identify and review training requirements for cold chain operations</li> <li>Assist head HR in recruitment and attrition decisions</li> <li>Make decisions on health and fitness of employees for carrying out cold chain operations</li> </ul> <p><b>Range:</b> Manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallet trucks, belt, chain or roller conveyors, either gravity or self-propelled</p>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Identifying and reviewing training requirements for cold chain operations</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. identify HACCP (Hazard Analysis and Critical Control Points), HAZMAT (Hazardous Material) and other training certifications required to be taken by workers</p> <p>PC2. ensure timely revision of training requirements based on technological developments and new equipments introduced in the facility</p> <p>PC3. attend conferences and seminars conducted by national cold chain associations for updates in cold chain segment</p> <p>PC4. update maintenance and quality assurance department about technological developments incorporated in company's cold chain; operations</p> <p>PC5. ensure updated training requirements are appropriately communicated to workers</p>
<b>Assisting head HR in recruitment and attrition decisions</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC6. keep track of workers employed across departments</p> <p>PC7. identify location from where workers should be hired, based on urgency of requirement</p> <p>PC8. identify skill sets required in workers for product specific operations, for eg: ability to handle stress during urgent delivery requirement etc.</p> <p>PC9. provide prior information on expected labor force requirement to head hr</p> <p>PC10. supervise transfer of employees from one department to the other based on requirement</p> <p>PC11. initiate discussion with workers to analyze the cause of worker attrition</p> <p>PC12. assist head hr in designing corrective mechanism to reduce attrition</p>

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

<p><b>Making decisions on health and fitness of employees for carrying out cold chain operations</b></p>	<p>To be competent, the user/ individual must be able to:</p> <p>PC13. take charge of illness or injury incurred to workers during cold chain operations and update the same to head hr</p> <p>PC14. ensure timely fitness reports are prepared for every employee</p> <p>PC15. take non conformance decision in case employee fitness levels do not match the requirements</p> <p>PC16. analyze the cause of illness or injury of employees</p> <p>PC17. update the instructions on fitness requirements and safety measures in the cold storage facility</p>
<p><b>Knowledge and Understanding (K)</b></p>	
<p><b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's reporting structure</p> <p>KA2. individual's role in cold chain process flow</p> <p>KA3. occupational health and safety standards</p> <p>KA4. existing quality control standards followed by various industry players</p> <p>KA5. quality control standards that are applicable to the company and the products on which they are applicable</p> <p>KA6. company's policies, standard operating procedures and governance structure</p> <p>KA7. action taken in case of breach of defined procedures/work instructions</p> <p>KA8. company's personnel management and incentive rules</p> <p>KA9. clients and suppliers of the company</p>
<p><b>B. Technical Knowledge</b></p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. HACCP (Hazard analysis and critical control points), HAZMAT (Hazardous material) and other training certifications required to be taken by workers</p> <p>KB2. appropriate PPE (Personal Protective Equipment) including gloves, jacket, shoes, goggles to be worn by operators</p> <p>KB3. types of goods in which the company deals</p> <p>KB4. characteristics of the products being handled. for eg: odor, texture, size, weight, stickiness, effect of exposure to water etc.</p> <p>KB5. existing labor laws and labor welfare schemes</p> <p>KB6. product specific quality control and assurance standards</p> <p>KB7. operational understanding of the safety precautions to be taken for product handling</p> <p>KB8. 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</p> <p>KB9. appropriate Material Handling Equipment (MHE) to be used according to the size and quantity of goods</p> <p>KB10. types of workplace hazards that one can encounter in product handling</p> <p>KB11. steps and remedial measures to be taken in case of injury or hazard caused due to improper product handling</p> <p>KB12. recruitment procedure for labor force used by the company</p>
<p><b>Skills (S)</b></p>	

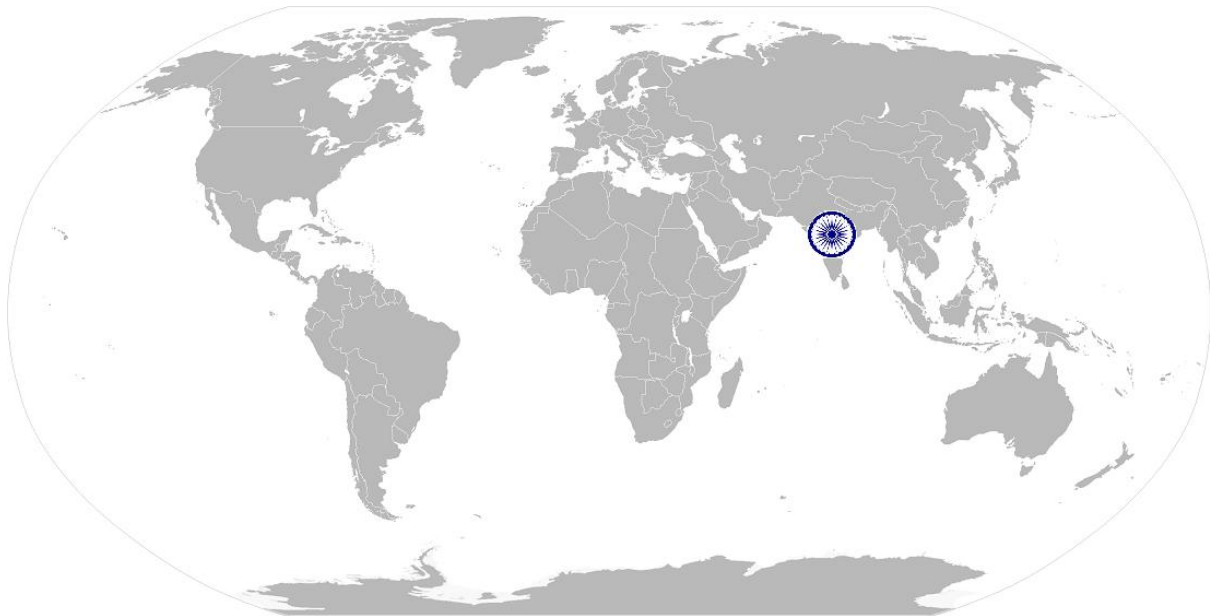
**LSC/N8708 Administer manpower planning and labor management across cold chain operations**

<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to: SA1. read instructions on workplace hazards and handling requirements for goods SA2. read recruitment procedure and labor policies
	<b>Writing Skills</b>
	The user/individual on the job needs to know and understand how to: SA3. maintain records of workers who got injured, were replaced or substituted in place of another worker etc. SA4. update safety instructions based on technological changes
	<b>Oral Communication (Listening and Speaking skills)</b>
<b>B. Professional Skills</b>	The user/individual on the job needs to know and understand how to: SA5. initiate discussion with workers to understand their grievance SA6. communicate decisions to workers relating to non-conformance of safety standards or corrective actions to be taken in case of injury SA7. communicate types of workplace hazards, safety precautions and remedial measures to be taken SA8. communicate with HR regarding worker performance, recruitment procedure, reason for attrition etc.
	<b>Decision Making</b>
	The user/individual on the job needs to know and understand how to: SB1. take non conformance decision on health and safety SB2. identify whether worker training requirement should be updated
	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand how: SB3. 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 SB4. plan and organize distribution of workers along different stages of cold chain
	<b>Customer Centricity</b>
	The user/individual on the job needs to know and understand how to: SB5. identify customer requirements with respect to quality expectations SB6. identify goods that are in high demand in market and those for which demand is expected to increase in future
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB7. execute remedial measures in case of injury or hazard in handling technique SB8. make decision for short term recruitment in case of urgent requirement
	<b>Analytical Thinking</b>
The user/individual on the job needs to know and understand how to: SB9. understand labor requirement based on schedule of activities across the cold chain SB10. analyze technological developments taking place in industry and identify if training and safety instructions need to be updated	



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

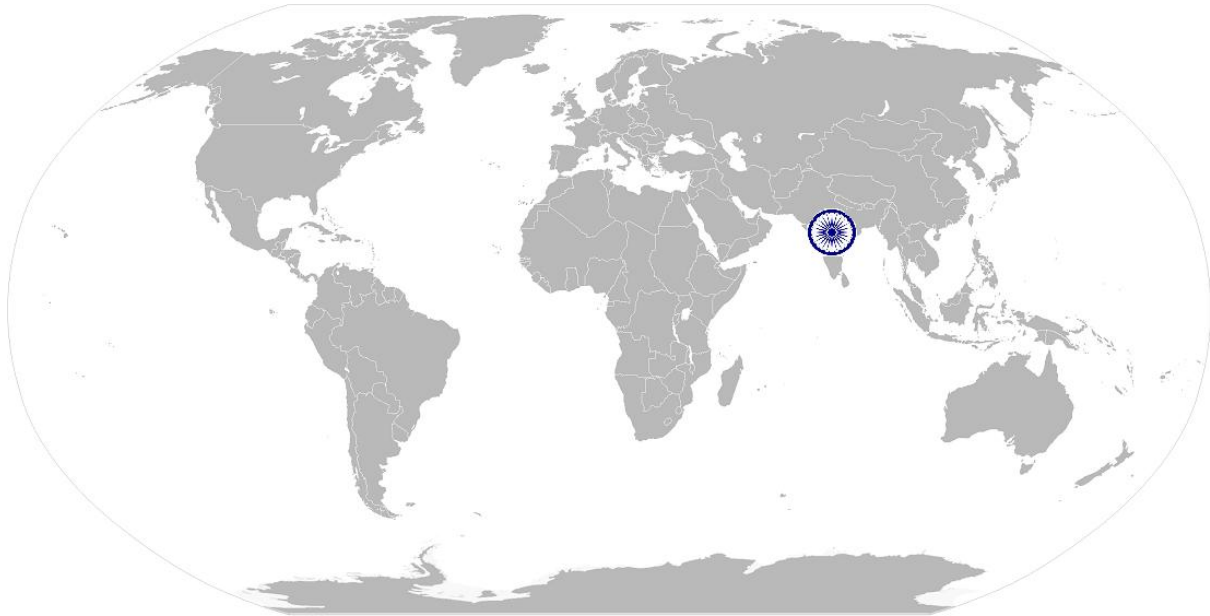
	<b>Critical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB11. identify appropriate location from where workers should be chosen SB12. execute appropriate remedial measures in case of injury or hazard in handling technique



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

**NOS Version Control**

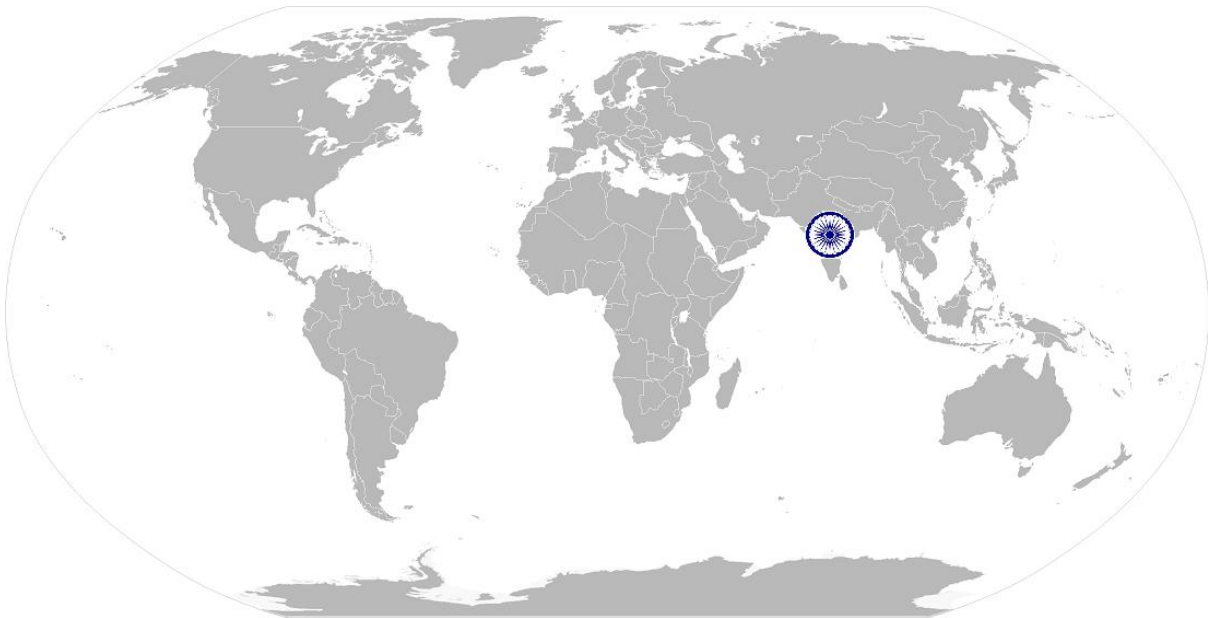
<b>NOS Code</b>	<b>LSC/N8708</b>		
<b>Credits(NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry</b>	<b>Logistics</b>	<b>Drafted on</b>	<b>26/08/16</b>
<b>Industry Sub-sector</b>	<b>Cold Chain</b>	<b>Last reviewed on</b>	<b>11/01/17</b>
<b>Occupation</b>	<b>Operations – Cold Storage</b>	<b>Next review date</b>	<b>11/01/20</b>



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

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# National Occupational Standard



## Overview

This 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

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

National Occupational Standard

<b>Unit Code</b>	<b>LSC/N8709</b>
<b>Unit Title (Task)</b>	<b>Oversee Ensure smooth and effective execution of cold chain operation</b>
<b>Description</b>	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
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Take preventive and corrective action and non conformance decision in case of interruption in cold storage facility</li> <li>• Assist in budget development and exercise budgetary control over warehouse operations</li> <li>• Liaison with maintenance head in case of interruptions in cold storage operations</li> </ul> <p><b>Range:</b> Manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallet trucks, belt, chain or roller conveyors, either gravity or self-propelled</p>

**Performance Criteria(PC) w.r.t. the Scope**

<b>Element</b>	<b>Performance Criteria</b>
<b>Taking preventive and corrective action and non conformance decision in case of interruption in cold storage facility</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. initiate action to prevent occurrence of any microbiological non-conformities at any stage of cold chain operations</p> <p>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</p> <p>PC3. stop operations whenever there is likelihood of occurrence that could affect product safety and personnel safety or any other emergence</p> <p>PC4. ensure effective implementation of cleaning schedule for all equipments and machines is followed</p>
<b>Assisting in budget development and exercising budgetary control over warehouse operations</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC5. understand requirements of cold storage equipments from perishable product handling specialist</p> <p>PC6. identify expenditure required on refrigeration equipments and associated tools</p> <p>PC7. estimate maintenance and upgradation expenditure expected to be incurred on machines and equipments</p> <p>PC8. identify worker expenses incurred for day-to-day activities such as food, travel etc.</p> <p>PC9. ensure correct details of number of workers is provided to budget control team</p> <p>PC10. estimate maximum expenditure that might be required to be incurred in situations of crisis, for e.g.: accident, leakage, injury etc.</p>
<b>Liaisoning with maintenance head in</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC11. ensure timely compliance of calibration schedule for equipments is followed</p>

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

<p><b>case of interruptions in cold storage operations</b></p>	<p>PC12. update maintenance head and follow up in case equipments and instruments are not functioning properly</p> <p>PC13. follow up with maintenance head in case of uninterrupted supply of electricity and water</p> <p>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</p> <p>PC15. supervise upgradation of evaporators, compressors etc.</p>
<p><b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's reporting structure</p> <p>KA2. individual's role in cold chain process flow</p> <p>KA3. occupational health and safety standards</p> <p>KA4. existing quality control standards followed by various industry players</p> <p>KA5. quality control standards that are applicable to the company and the products on which they are applicable</p> <p>KA6. company's policies, standard operating procedures and governance structure</p> <p>KA7. action taken in case of breach of defined procedures/work instructions</p> <p>KA8. company's personnel management and incentives rules</p> <p>KA9. clients and suppliers of the company</p>
<p><b>B. Technical Knowledge</b></p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. ideal time required for each cold chain activity</p> <p>KB2. process flow of cold chain operation</p> <p>KB3. types of goods in which the company deals</p> <p>KB4. characteristics of the products being handled, for eg: texture, odour, stickiness etc.</p> <p>KB5. cleaning schedule of refrigeration equipments</p> <p>KB6. measurement units and scales used in cold storage equipments</p> <p>KB7. calibration schedule and correct measurements according to which calibration is done</p> <p>KB8. maximum permissible cost norms for equipments, if any</p> <p>KB9. product market of cold chain equipments (demand, supply, price etc.) and costing of machines and support tools</p> <p>KB10. appropriate Material Handling Equipment (MHE) to be used according to the size and quantity of goods for efficient loading</p> <p>KB11. types of workplace hazards that one can encounter in product handling</p> <p>KB12. 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</p>
<p><b>Skills (S)</b></p>	
<p><b>A. Core Skills/ Generic Skills</b></p>	<p><b>Reading Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA1. read budget statements</p> <p>SA2. read scales and units of cold storage equipments like compressors, evaporators etc.</p> <p><b>Writing Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p>

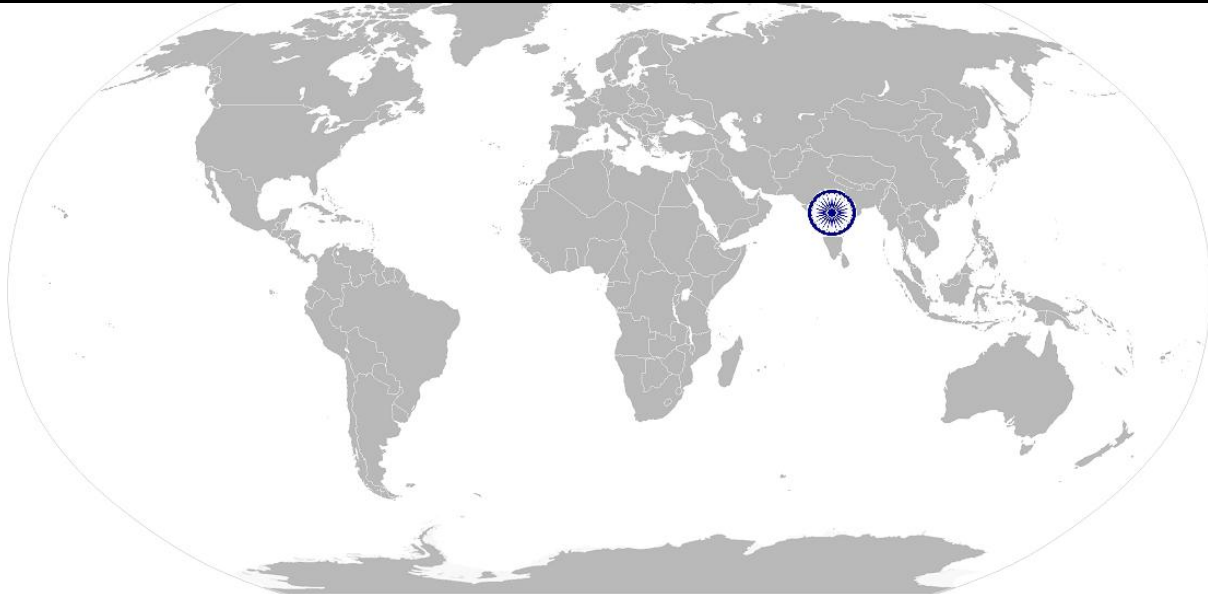
**LSC/N8709 Ensure smooth and effective execution of cold chain operation**

	<p>SA3. maintain records of expenditure incurred          SA4. write details of equipments and tools requirement as communicated by product handling specialist          SA5. maintain records of time periods in which equipments are replaced and calibrated</p>
	<p><b>Oral Communication (Listening and Speaking skills)</b></p>
	<p>The user/individual on the job needs to know and understand how to:          SA6. understand requirements of cold storage equipments from perishable product handling specialist          SA7. coordinate with other supervisors and peers in english or accepted workplace language</p>
<p><b>B. Professional Skills</b></p>	<p><b>Decision Making</b></p>
	<p>The user/individual on the job needs to know and understand how to:          SB1. estimate budget to be allocated for day-to-day worker expenses          SB2. identify correct number of workers required across every activity of cold storage</p>
	<p><b>Plan and Organize</b></p>
	<p>The user/individual on the job needs to know and understand how to:          SB3. prioritize and execute tasks in an efficient manner          SB4. coordinate time with maintenance head for exchange of details</p>
	<p><b>Customer Centricity</b></p>
	<p>The user/individual on the job needs to know and understand how to:          SB5. identify customer requirements with respect to quality expectations          SB6. identify goods that are in high demand in market and those for which demand is expected to increase in future</p>
	<p><b>Problem Solving</b></p>
	<p>The user/individual on the job needs to know and understand how to:          SB7. execute remedial measures in case of injury or hazard in handling technique          SB8. take appropriate action in case of microbiological non conformities at any stage of cold chain</p>
	<p><b>Analytical Thinking</b></p>
	<p>The user/individual on the job needs to know and understand how to:          SB9. analyze and find root cause of delay and disruption of activities</p>
	<p><b>Critical Thinking</b></p>
	<p>The user/individual on the job needs to know and understand how to:          SB10. estimate maintenance and upgradation expenditure on equipments          SB11. identify if there is likelihood of occurrence that could affect product safety and personnel safety or any other emergence</p>

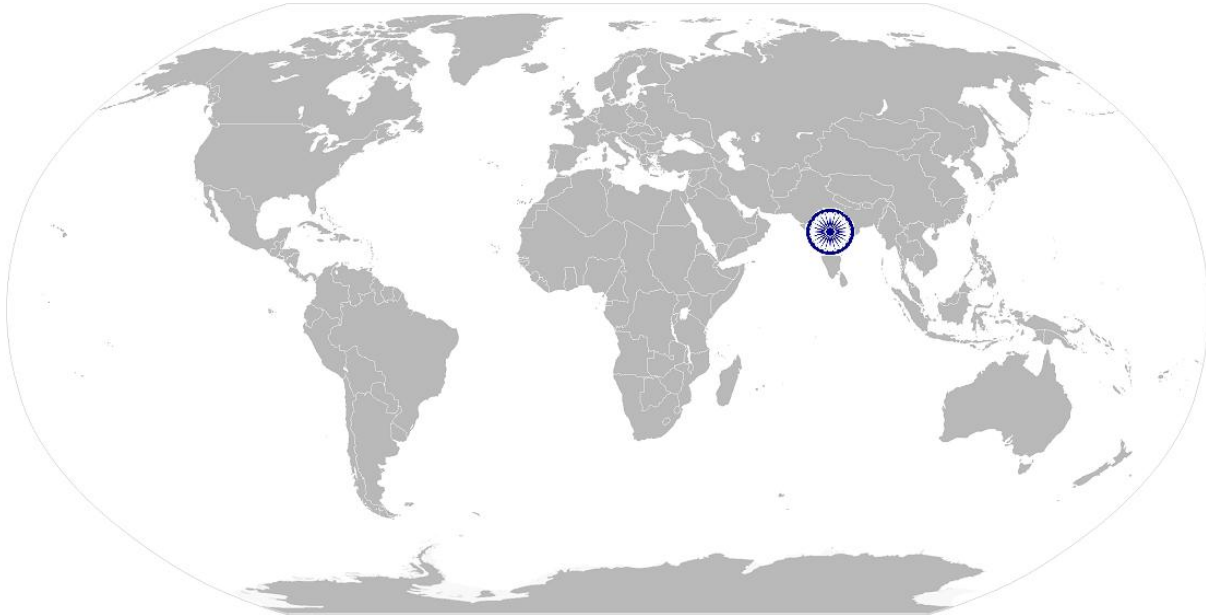
**LSC/N8709 Ensure smooth and effective execution of cold chain operation**

**NOS Version Control**

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<b>Credits(NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
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# National Occupational Standard



## Overview

This 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.



**LSC/N8710 Monitor and improvise perishable product handling activities**

National Occupational Standard

<b>Unit Code</b>	<b>LSC/N8710</b>
<b>Unit Title (Task)</b>	<b>Monitor and improvise perishable product handling activities</b>
<b>Description</b>	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.
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Update internal systems and machines based on changes taking place in legal, technological and environmental norms</li> <li>• Administer product handling in cold storage operations</li> <li>• Manage back end integrated pack houses and establish link with cold storage facility at multiple locations</li> <li>• Supervise cold chain quality control</li> </ul> <p><b>Range:</b> Manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallet trucks, belt, chain or roller conveyors, either gravity or self-propelled</p>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Updating internal systems and machines based on changes taking place in legal, technological and environmental norms</b>	<p>To be competent, the user/ individual must be able to:</p> <p>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</p> <p>PC2. ensure standardisation of handling units of perishable products across all stages of cold chain</p> <p>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</p> <p>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</p> <p>PC5. attend seminars and conferences organized by cold chain associations to get information about latest updates in the sector</p>
<b>Administering product handling in cold storage operations</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC6. identify the appropriate product flow capacity – volume of commodities that must be handled per unit of time</p> <p>PC7. determine the appropriate cooling method and system based on volume of commodity handled per unit of time</p> <p>PC8. conduct regular check up of the ripening chamber and ensure proper documentation is done at every stage</p> <p>PC9. supervise pre-cooling temperature and storage conditions</p> <p>PC10. identify scope for resource integration or cross-functional utilization of</p>

**LSC/N8710 Monitor and improvise perishable product handling activities**

	<p>equipments across the cold chain</p> <p>PC11. participate in decision making for no. of fans, water pump capacity, refrigeration of condensing unit etc.</p>
<b>Managing back end integrated pack houses and establishing link with cold storage facility at multiple locations</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC12. supervise grading, sorting, washing and drying activities on the goods received in pack house</p> <p>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.</p> <p>PC14. supervise packaging for safe transport if the routing requires long travel to reach the pre-cooling unit or refrigerated consumption centres</p> <p>PC15. identify rural areas to be supported in the form of back end village level pack houses</p> <p>PC16. ensure goods are properly transported from back end pack house to the appropriate cold chain facility</p> <p>PC17. ensure uniform practices are followed at all cold storage facilities</p>
<b>Supervising cold chain quality control</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC18. maintain high levels of hygiene at all stages of the product's life</p> <p>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</p> <p>PC20. determine the step at which ccp (critical control point) can be applied in order to eliminate the hazard</p> <p>PC21. establish the target levels/tolerances for controlling the ccps</p> <p>PC22. establish/implement monitoring systems for controlling ccps</p> <p>PC23. identify corrective actions when a deviation occurs at a ccp</p> <p>PC24. establish a documentation system for procedures and records</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's reporting structure</p> <p>KA2. individual's role in cold chain process flow</p> <p>KA3. occupational health and safety standards</p> <p>KA4. existing quality control standards followed by various industry players</p> <p>KA5. quality control standards that are applicable to the company and the products on which they are applicable</p> <p>KA6. company's policies, standard operating procedures and governance structure</p> <p>KA7. action taken in case of breach of defined procedures/work instructions</p> <p>KA8. company's personnel management and incentives rules</p> <p>KA9. clients and suppliers of the company</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. type and characteristics of the products being handled – odour, texture, size, weight, stickiness etc.</p> <p>KB2. appropriate material handling equipment (MHE) to be used according to the</p>

**LSC/N8710**
**Monitor and improvise perishable product handling activities**

	<p>size and quantity of goods for efficient loading</p> <p>KB3. changes in spoiled goods with respect to colour, dehydration and protein content</p> <p>KB4. appropriate grading criteria for goods</p> <p>KB5. extent of chlorination required for washing of fruits</p> <p>KB6. technique for measurement of hydration levels</p> <p>KB7. identification of goods based on grading categories</p> <p>KB8. appropriate oxygen and carbon dioxide levels to be maintained in the grading line facility</p> <p>KB9. appropriate water temperature used for washing</p> <p>KB10. waste water recycling, reuse and disposal procedure</p> <p>KB11. appropriate time required for each stage of pack house activity</p> <p>KB12. changes in spoiled goods with respect to colour, dehydration and protein content</p> <p>KB13. time for which washed goods should be dried, in order to avoid shrinking and water loss</p> <p>KB14. 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 pallet trucks, belt, chain or roller conveyors, either gravity or self-propelled.</p> <p>KB15. equipments used for vehicle handling, namely platform elevators, cranes, gantries, hand-stacking equipment, fork lift trucks, various types of mechanised stacking equipment etc.</p> <p>KB16. 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 doesn't spread to other products through hands or other tools used while handling.</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b>
	The user/ individual on the job needs to know and understand how to: <ul style="list-style-type: none"> <li>SA1. read product codes, quantity and specifications provided</li> <li>SA2. read instructions for safety precautions and material handling</li> </ul>
	<b>Writing Skills</b>
	The user/ individual on the job needs to know and understand how to: <ul style="list-style-type: none"> <li>SA3. maintain records of goods passing through each stage of grading line</li> <li>SA4. mention details of rejected goods, along with reason for rejection</li> </ul>
	<b>Oral Communication (Listening and Speaking skills)</b>
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/ individual on the job needs to know and understand how to: <ul style="list-style-type: none"> <li>SB1. decide criteria for grading of goods, for eg: market value, weight etc.</li> <li>SB2. dispose waste water from washing of goods</li> </ul>

**LSC/N8710**
**Monitor and improvise perishable product handling activities**

	<b>Plan and Organize</b>
	The user/ individual on the job needs to know and understand how to: SB3. schedule time for activities in each stage of grading line SB4. re-schedule and re-allocate workers across activities in case of requirement
	<b>Customer Centricity</b>
	The user/ individual on the job needs to know and understand how to: SB5. enforce hygienic conditions as per product handling requirements SB6. segregate goods as per customer requirements
	<b>Problem Solving</b>
	The user/ individual on the job needs to know and understand how to: SB7. handle delays in one stage of grading line operations so that it doesn't affect the other stage SB8. handle the situation if units of one grade get mixed with units of other grade
	<b>Analytical Thinking</b>
	The user/ individual on the job needs to know and understand how to: SB9. plan the appropriate number of workers to be deployed in grading line operations SB10. make changes in grading line temperature conditions based on climatic changes
	<b>Critical Thinking</b>
	The user/ individual on the job needs to know and understand how to: SB11. decided extent of chlorination required in water used for washing SB12. treat the waste water after washing, whether water should be disposed or recycled or reused SB13. decide appropriate time for which goods should be dried to avoid excessive water loss

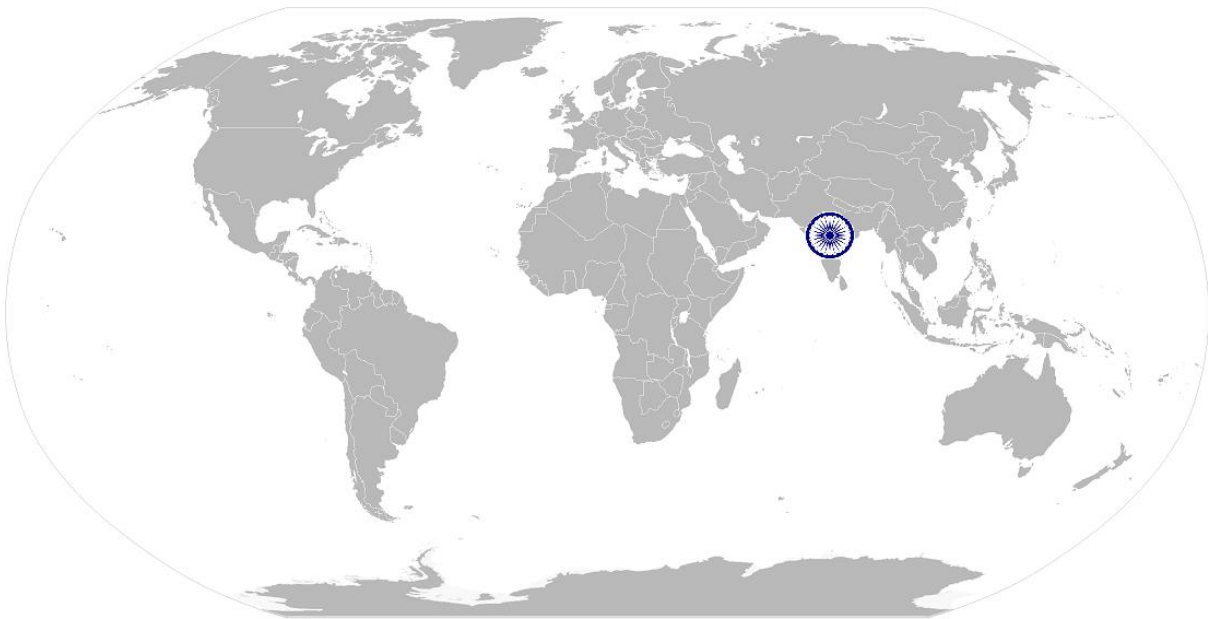
**LSC/N8710      Monitor and improvise perishable product handling activities**
**NOS Version Control**

<b>NOS Code</b>	<b>LSC/N8710</b>		
<b>Credits(NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry</b>	<b>Logistics</b>	<b>Drafted on</b>	<b>26/08/16</b>
<b>Industry Sub-sector</b>	<b>Cold Chain</b>	<b>Last reviewed on</b>	<b>11/01/17</b>
<b>Occupation</b>	<b>Operations – Cold Storage</b>	<b>Next review date</b>	<b>11/01/20</b>

LSC/N8711

Oversee Route Planning and reefer/non-reefer vehicle coordination

# National Occupational Standard



## Overview

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

**LSC/N8711**

**Oversee Route Planning and reefer/non-reefer vehicle coordination**

National Occupational Standard

<b>Unit Code</b>	<b>LSC/N8711</b>
<b>Unit Title (Task)</b>	<b>Oversee Route Planning and reefer/non-reefer vehicle coordination</b>
<b>Description</b>	This unit is about overseeing refrigerated transportation and supervising route planning and coordination
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Attend to client enquiries and orders</li> <li>• Understand the client requirements</li> <li>• Check the order requirements</li> <li>• Assign duty to the reefer/non reefer vehicle operator</li> <li>• Plan the routes</li> <li>• Handle customer complaints and staff problems</li> <li>• Monitor and follow up the travel</li> </ul> <p><b>Range:</b> Manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallet trucks, belt, chain or roller conveyors, either gravity or self-propelled</p>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Attending to client enquiries and orders</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. answer phone calls and emails of the clients regularly and promptly</p> <p>PC2. follow proper behavioural etiquettes with the clients whether face to face or on phone or e-mail</p> <p>PC3. be updated on availability of the products with the order received</p> <p>PC4. ensure the availability of vehicle and the vehicle operator for the delivery</p> <p>PC5. be aware of the other delivery schedules for the day</p> <p>PC6. review and revise transportation and delivery schedule based on priority</p> <p>PC7. take confirmations from the client and schedule the delivery</p> <p>PC8. update the order details and the time of booking to the MIS person for record</p>
<b>Understanding the client requirements</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC9. understand from the clients on the type of products, the delivery date, quantity, delivery address, etc.</p> <p>PC10. confirm the delivery details with the clients</p> <p>PC11. update the clients on non availability of any products or reefer/non reefer vehicle as per their order and requirement</p> <p>PC12. send confirmation message or email to the clients along with the delivery summary and invoice</p> <p>PC13. maintain good rapport and relationships with the client</p>
<b>Checking the order requirements</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC14. ensure the order details and the products match</p> <p>PC15. check the reefer vehicle maintenance and cleanliness on daily basis</p> <p>PC16. ensure reefer vehicle is in proper working condition and meets the required</p>

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

	<p>safety standards</p> <p>PC17. check the temperature and pre cool of the reefer unit as set by the reefer vehicle operator</p> <p>PC18. verify the reefer/non reefer vehicle papers are in order</p> <p>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</p>
<b>Assigning duty to the reefer/non reefer vehicle operator</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC20. assign the reefer/ non reefer vehicle operator to be sent for the delivery</p> <p>PC21. brief the operator about the client and delivery details</p> <p>PC22. coordinate the transportation routes and time schedule based on customer requirement</p> <p>PC23. advice the reefer/non reefer vehicle operators on their duty and responsibility to be carried out during the trip</p> <p>PC24. ensure the reefer/non reefer vehicle operators carry the necessary materials such as maps, GPS, client details, etc.</p> <p>PC25. monitor the various actions of the reefer/ non reefer vehicle operator such as maintenance of the vehicle, defrosting the reefer unit etc.</p> <p>PC26. ensure the reefer/non reefer vehicles leave for delivery at the designated time</p>
<b>Planning the routes</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC27. plan the driving routes to ensure on time delivery</p> <p>PC28. provide the reefer/non reefer vehicle operator with GPS services for routes</p> <p>PC29. supervise the maps and driving directions of the reefer/non reefer vehicle operator to ensure efficient route service is provided</p> <p>PC30. incorporate changes to the schedule if required</p> <p>PC31. ensure safety and maintenance at the reefer vehicle</p> <p>PC32. verify the trip sheets submitted by the reefer/non reefer vehicle operator for mileage and fuel usage</p>
<b>Handling customer complaints and staff problems</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC33. listen to the customer complaints and problems</p> <p>PC34. ensure to take proper steps to rectify those problems with immediate action</p> <p>PC35. monitor the issues of reefer/non reefer vehicle operator such as licensing, safety, accidents, etc.</p> <p>PC36. investigate on various staff problems and provide with proper solution</p>
<b>Monitoring and following up the travel</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC37. ensure the quality of products on delivery</p> <p>PC38. communicate with the reefer/non reefer vehicle operators during trip in case of any emergency</p> <p>PC39. monitor the safe delivery of products at the appropriate temperature, pressure, humidity and other required parameters maintained</p> <p>PC40. verify the documentations provided by the reefer/non reefer vehicle operator</p> <p>PC41. coordinate with the client for payment details</p> <p>PC42. report and document the details of the travel</p> <p>PC43. monitor the control and discipline of the reefer/non reefer vehicle operator with the work</p>



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

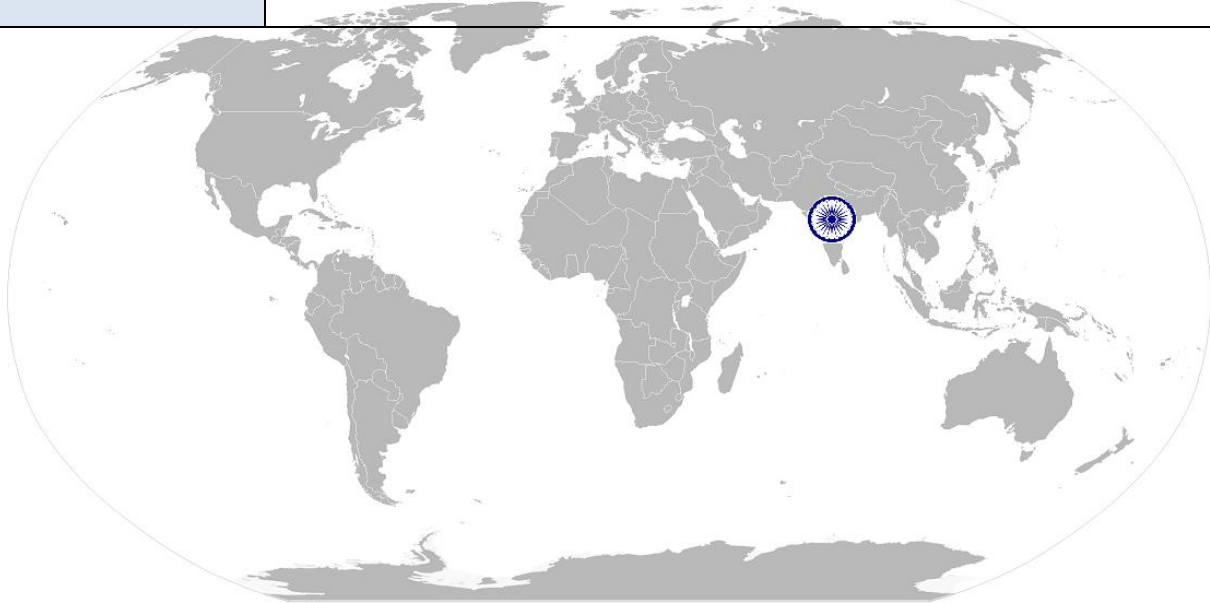
	PC44. track the vehicles before and during the journey PC45. achieve client satisfaction ensuring high level service with timely and quality delivery as per requirement
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. company's reporting structure KA2. individual's role in cold chain process flow KA3. occupational health and safety standards KA4. existing quality control standards followed by various industry players KA5. quality control standards that are applicable to the company and the products on which they are applicable KA6. company's policies, standard operating procedures and governance structure KA7. action taken in case of breach of defined procedures/work instructions KA8. company's personnel management and incentives rules KA9. clients and suppliers of the company
<b>B. Technical Knowledge</b>	The user/individual on the job needs to know and understand: KA10. inspection checks to be conducted at the pre-dispatch stage KA11. how to operate metal detector and other inspection equipments KA12. product names and codes used for labelling KA13. vehicle maintenance and repair procedures KA14. precautions to be taken to avoid damages to the product while in transit KA15. site details and traffic management plan KA16. 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 degrees dry fruits: 4 to 10 degrees pharma - chemicals and vaccines: - 4 to 10 degree KA17. check and usage of brakes, stepni, lights, petrol, accelerator, steering control, gear, etc. KA18. spacing and air flow specifications for loading into the reefer unit for respective products KA19. appropriate packaging material to be used based on product characteristics, for eg: the materials used for the package must be new, clean and of such a quality as to avoid causing any external or internal damage to the produce KA20. procedure for weighing, sealing and labelling KA21. appropriate temperature for refrigerated transportation KA22. characteristics of goods being handled, for eg: tolerance to exposure to water, stickiness, odour etc. KA23. appropriate medium for client communications
<b>Skills (S)</b>	

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

<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b>
	The user/ individual on the job needs to know and understand how to: SA1. read manufacturer specifications related to the vehicle SA2. read standard operating procedures for service and maintenance
	<b>Writing Skills</b>
	The user/ individual on the job needs to know and understand how to: SA3. write document details of maintenance and service activities SA4. record details of faults and repair operations SA5. write mail or message to be communicated to the client SA6. maintain documentation of the product quality and conditions in transit SA7. maintain documentation of trip details
	<b>Oral Communication (Listening and Speaking skills)</b>
<b>B. Professional Skills</b>	The user/ individual on the job needs to know and understand how to: SA8. understand from the clients on the type of products, the delivery date, quantity, delivery address, etc. SA9. confirm the delivery details with the clients SA10. coordinate with the concerned authority to report on any malfunctions or repair
	<b>Decision Making</b>
	The user/ individual on the job needs to know and understand how to: SB1. take decision on correct materials and tools to be used for vehicle maintenance SB2. evaluate the complaint raised by the customer and identify the right person in the organization to address it SB3. take a non conformance decision on the quality of goods before delivery
	<b>Plan and Organize</b>
	The user/ individual on the job needs to know and understand: SB4. plan the vehicle maintenance and service at regular intervals SB5. plan the driving routes to ensure on time delivery SB6. supervise the maps and driving directions of the reefer/ non reefer vehicle operator to ensure efficient route service is provided
	<b>Customer Centricity</b>
	The user/ individual on the job needs to know and understand: SB7. customer demand and quality requirements SB8. update the clients on non availability of any products or reefer/non reefer vehicle as per their order and requirement SB9. achieve client satisfaction ensuring high level service with timely and quality delivery as per requirement SB10. maintain quality and hygienic vehicle conditions to the extent expected by customers
	<b>Problem Solving</b>
	The user/ individual on the job needs to know and understand how to: SB11. solve customer complaints and reply promptly

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

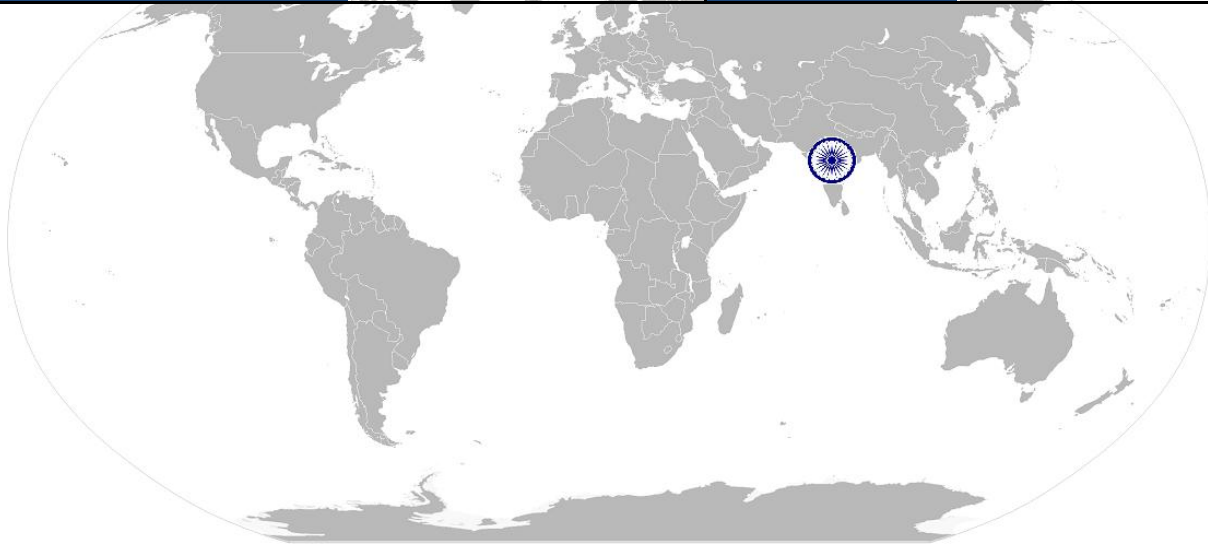
	SB12. resolve issues if vehicle routing and transit is delayed SB13. resolve the faults and malfunctions of the vehicle SB14. perform the emergency repairs such as changing tyres in case of puncture, checking on light bulbs, etc
	<b>Analytical Thinking</b>
	The user/ individual on the job needs to know and understand how to: SB15. analyze the route and incorporate changes to the schedule if needed SB16. investigate on various staff problems and provide with proper solution SB17. assess whether the vehicle meets the required condition after the maintenance and service
	<b>Critical Thinking</b>
	The user/ individual on the job needs to know and understand how to: SB18. analyze process disruptions and delays SB19. monitor the temperature with appropriate device



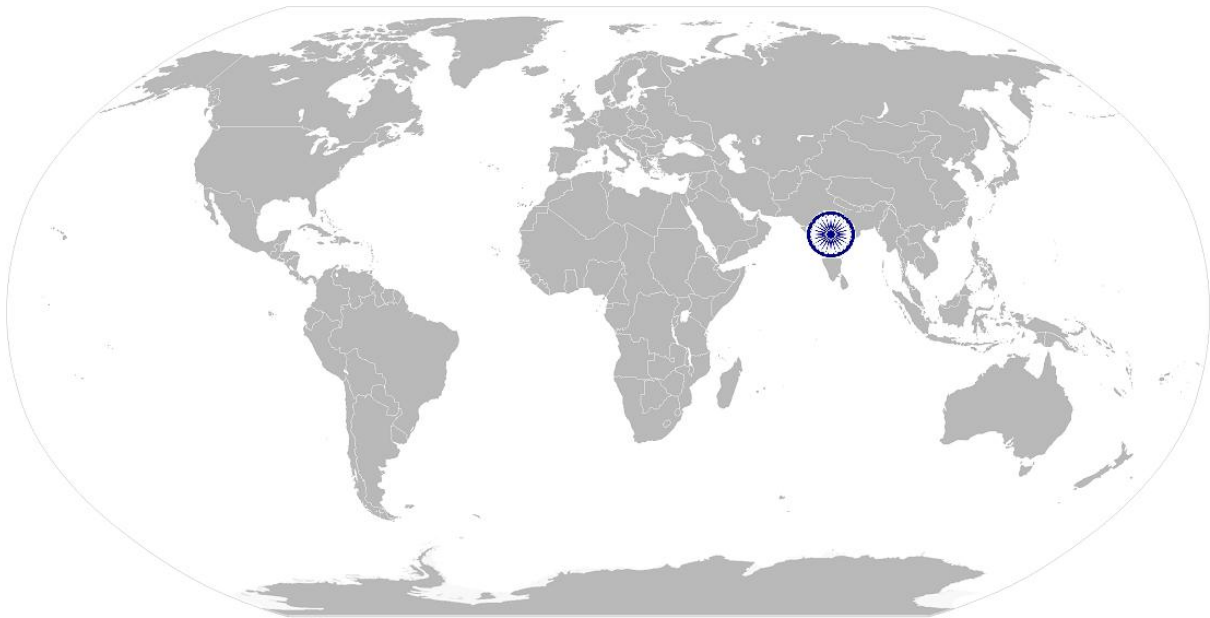
**LSC/N8711**
**Oversee Route Planning and reefer/non-reefer vehicle coordination**

## NOS Version Control

<b>NOS Code</b>	<b>LSC/N8711</b>		
<b>Credits(NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry</b>	<b>Logistics</b>	<b>Drafted on</b>	<b>26/08/16</b>
<b>Industry Sub-sector</b>	<b>Cold Chain</b>	<b>Last reviewed on</b>	<b>11/01/17</b>
<b>Occupation</b>	<b>Operations – Cold Storage</b>	<b>Next review date</b>	<b>11/01/20</b>



# National Occupational Standard



## Overview

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

**LSC/N8712**

**Supervise Data entry/MIS reports management**

National Occupational Standard

<b>Unit Code</b>	<b>LSC/N8712</b>
<b>Unit Title (Task)</b>	<b>Supervise Data entry/MIS reports management</b>
<b>Description</b>	This OS unit is about supervision and management of staff related problems and overseeing data entry operations
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Supervise the work requirement</li> <li>• Monitor MIS and data entry operations</li> <li>• Attend staff related problems and issues</li> </ul> <p><b>Range:</b> Manual platform trolleys, self-propelled platform trolleys, manual or self-propelled pallet trucks, belt, chain or roller conveyors, either gravity or self-propelled</p>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Supervising the work requirement</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. coordinate with the different departments such as storage, transportation, etc.</p> <p>PC2. brief the data entry executive on the various documentations to be done</p> <p>PC3. check the obtained information and documents to be updated</p> <p>PC4. study the documents in detail and understand the requirements</p>
<b>Monitoring MIS and data entry operations</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC5. check the best software tool identified to update the data</p> <p>PC6. identify the latest technology updates that would support the data entry requirements</p> <p>PC7. examine the required software to perform the MIS and data entry operation</p> <p>PC8. monitor the working of the software and the procedure to update</p> <p>PC9. coordinate with the respective departments in case if any additional inputs or documents are required</p> <p>PC10. review the entered information and compare with the original source document</p> <p>PC11. verify the output for errors and brief the data entry operators</p> <p>PC12. ensure the update happens on a regular basis</p> <p>PC13. ensure to maintain the documentation and quality standards to be used in the data entry operation</p> <p>PC14. conduct consistent check on the software and database stored</p> <p>PC15. ensure to maintain the files updated in software as well as the source documents securely</p>
<b>Attending staff related problems and issues</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC16. listen to the complaints or problems of the staff</p> <p>PC17. monitor the issues such as software problem, malfunctions, inadequate or unclear information or any other technical problems</p> <p>PC18. ensure access to relevant files, documents and information to the data entry</p>

**LSC/N8712**

**Supervise Data entry/MIS reports management**

	operator as required PC19. ensure to take proper steps to resolve the issues
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. company's reporting structure KA2. individual's role in cold chain process flow KA3. occupational health and safety standards KA4. existing quality control standards followed by various industry players KA5. quality control standards that are applicable to the company and the products on which they are applicable KA6. company's policies, standard operating procedures and governance structure KA7. action taken in case of breach of defined procedures/work instructions KA8. company's personnel management and incentives rules KA9. clients and suppliers of the company
<b>B. Technical Knowledge</b>	The user/individual on the job needs to know and understand: KB1. how to operate MIS KB2. computer and its terminologies KB3. softwares available to maintain MIS KB4. how to work on different software needed for report writing including MS office suit or open source office KB5. basic data analysis techniques used to make inferences KB6. latest technology updates that would support the data entry requirements KB7. quality control and assurance standards KB8. characteristics of goods being handled, for eg: tolerance to exposure to water, stickiness, odour etc. KB9. appropriate medium for client communications KB10. product names and codes used for labelling
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b> The user/ individual on the job needs to know and understand: SA1. read and understand manuals, SOPs, instructions, memos, reports, job cards etc SA2. review the entered information and compare with the original source document
	<b>Writing Skills</b> The user/ individual on the job needs to know and understand how to: SA3. fill all data processing forms accurately SA4. maintain the files in software as well as the source documents securely
	<b>Oral Communication (Listening and Speaking skills)</b> The user/ individual on the job needs to know and understand how to: SA5. coordinate with the different departments such as storage, transportation, etc.

**LSC/N8712**

**Supervise Data entry/MIS reports management**

	SA6. verify the output for errors and brief the data entry operators
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/individual on the job needs to know and understand how to: SB1. identify the right person from organization to address the problem SB2. identify appropriate software to be used to maintain MIS
	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand: SB3. plan random check on the software and database stored SB4. coordinate with the respective departments in case any additional inputs or documents are required
	<b>Customer Centricity</b>
	The user/individual on the job needs to know and understand: SB5. identify customer demand and quality requirements SB6. achieve client satisfaction ensuring high level service with timely and quality delivery as per requirement
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB7. monitor the issues such as software problem, malfunctions, inadequate or unclear information or any other technical problems SB8. ensure to take proper steps to resolve the issues
	<b>Analytical Thinking</b>
	The user/ individual on the job needs to know and understand how to: SB9. apply basic logic to identify data errors SB10. analyze the database and identify which software will be appropriate to store the database SB11. evaluate if the data is stored correctly in the MIS
	<b>Critical Thinking</b>
	The user/ individual on the job needs to know and understand how to: SB12. analyze process disruptions and delays SB13. investigate on various staff problems and provide proper solution SB14. understand if any new information is required to be captured from customers

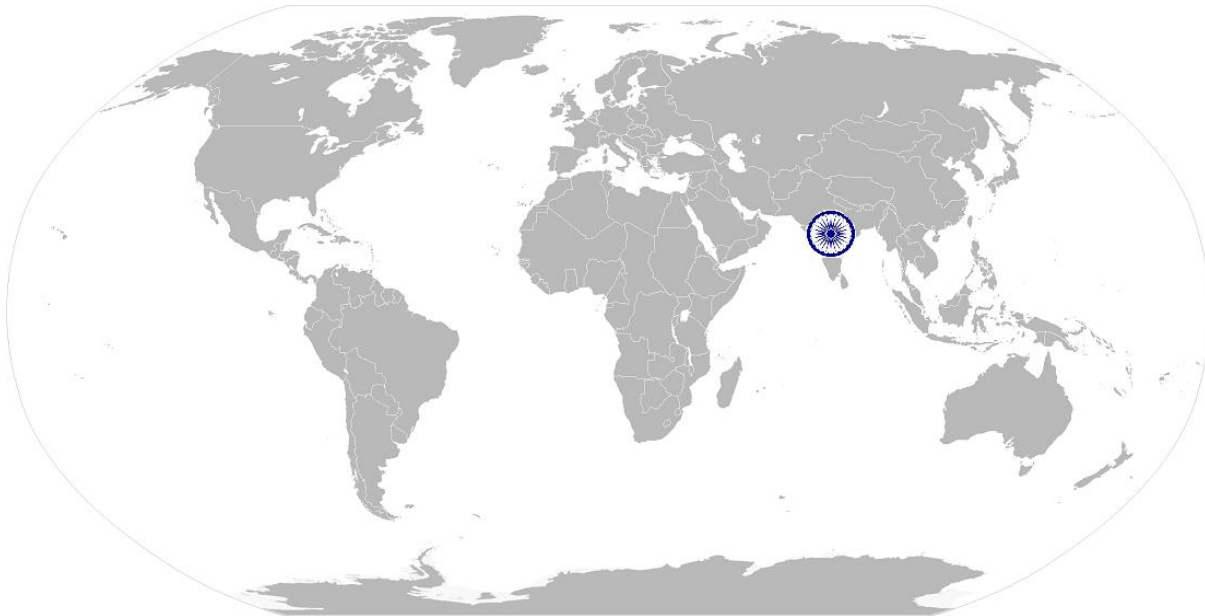


**LSC/N8712**

**Supervise Data entry/MIS reports management**

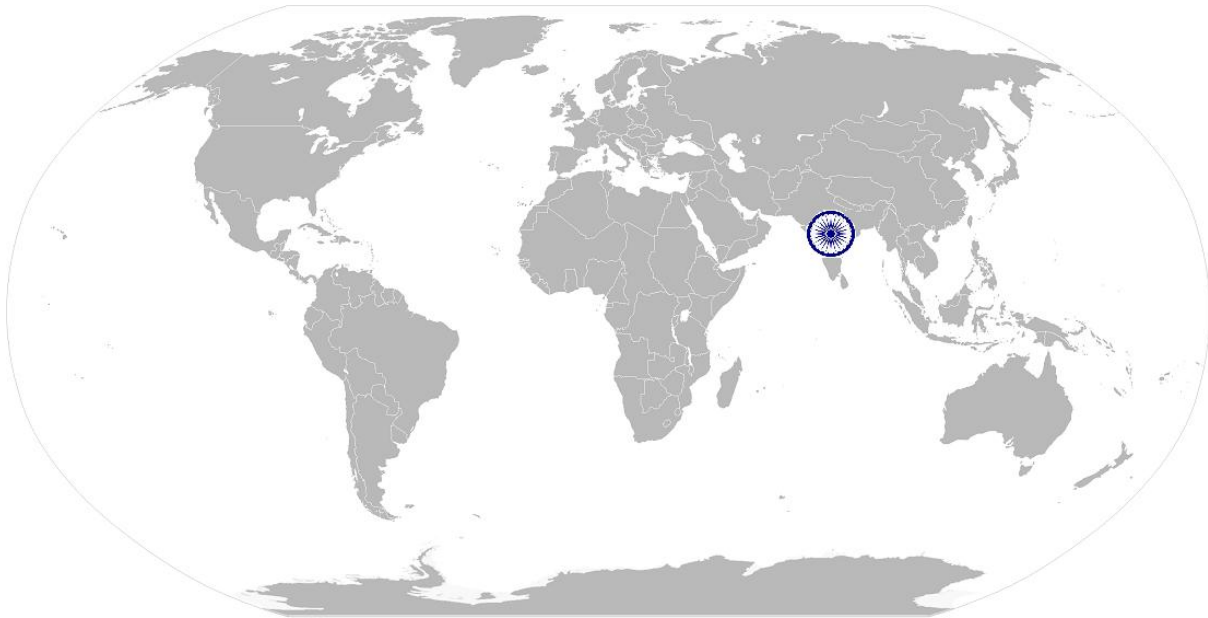
**NOS Version Control**

<b>NOS Code</b>	<b>LSC/N8712</b>		
<b>Credits(NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry</b>	<b>Logistics</b>	<b>Drafted on</b>	<b>26/08/16</b>
<b>Industry Sub-sector</b>	<b>Cold Chain</b>	<b>Last reviewed on</b>	<b>11/01/17</b>
<b>Occupation</b>	<b>Operations – Cold Storage</b>	<b>Next review date</b>	<b>11/01/20</b>



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

# National Occupational Standard



## Overview

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

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

National Occupational Standard

<b>Unit Code</b>	<b>LSC/N9901</b>
<b>Unit Title (Task)</b>	<b>Maintain food and personnel safety, health and hygiene in cold storage plant</b>
<b>Description</b>	This OS unit is about complying with safety, health and hygiene at the workplace to have a hazard-free environment and avoid downtime
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Take precautionary measures to avoid work hazards</li> <li>• Follow standard health, safety and hygiene procedures</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Taking precautionary measures to avoid work hazards</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. assess the various health, safety and environmental hazards in the cold storage</p> <p>PC2. take necessary steps to eliminate or minimize the hazards</p> <p>PC3. analyze the causes of accidents at the workplace</p> <p>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.</p> <p>PC5. ensure the employees have access to first aid kit when needed</p> <p>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</p> <p>PC7. ensure to display safety signs at places where necessary for people to be cautious</p> <p>PC8. use rubber mats in the places where floors are constantly wet</p> <p>PC9. ensure electrical precautions such as insulated clothing, adequate equipment insulation, dry work area, switch off the power supply when not required, etc</p> <p>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.</p> <p>PC11. unplug the control panel, compressor, condensor etc before performing maintenance</p> <p>PC12. report to the superior on any problems and hazards identified</p> <p>PC13. install fire alarms (electrical/manual) in cold store/deep freeze and keep other safety devices like hammer/mallet in the storage area</p>
<b>Following standard health, safety and hygiene procedures</b>	<p>To be competent, the user/individual must be able to:</p> <p>PC14. maintain appropriate ventilation in the cold rooms to avoid unacceptable accumulation of heat, condensation or odours</p> <p>PC15. check and review the cold storage areas frequently</p> <p>PC16. stack items in an organized way and use safe lifting techniques to reduce risk of injuries from handling procedures at the storage areas</p> <p>PC17. ensure no sign of pest infestation and install rodent traps, fly glues and insectocutors wherever needed</p> <p>PC18. follow hygiene &amp; sanitation standards of Government bodies like FSSAI, APEDA and /or EIA or importing countries like FAO, EU standards after PC 20</p> <p>PC19. use effective loading and unloading systems</p>

**LSC/N9901  
plant**

**Maintain food and personnel safety, health and hygiene in cold storage**

	<p>PC20. proper stock rotation (First in First out) to be practised</p> <p>PC21. segregate damaged/ non-conforming products from other products to designate area for appropriate disposition</p> <p>PC22. fumigate containers depending upon product and contamination or as per customers' requirement</p> <p>PC23. avoid smoking, spitting, eating etc near food storage area</p> <p>PC24. ensure reefers are covered, clean, free from pest infestation &amp; other contaminants</p> <p>PC25. dispose cold storage plant waste in the designated areas safely as per company's policies and rules</p> <p>PC26. ensure to be safe while handling machines(generator, compressor, condensor etc), gas (ammonia) and chemicals(ethylene, refrigerants etc)</p> <p>PC27. keep the floors free from oil, water and grease to avoid slippery surface</p> <p>PC28. cut nails regularly and avoid applying nail paint. Avoid wearing bangles, rings, and chains in cold storage</p> <p>PC29. wash hands with soap solution and dry under a dryer as they enter for duty or after using wash room</p> <p>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</p> <p>PC31. ensure workers suffering from abscess, boils etc should be relieved from food handling</p> <p>PC32. develop personal hygiene habits like brushing teeth, taking shower everybody, wearing clean and tidy clothes after ironing etc</p>
<b>Knowledge and Understanding (K)</b>	
<p><b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's HR policies on personnel management</p> <p>KA2. company's reporting structure</p> <p>KA3. occupational health and safety standards</p> <p>KA4. cold storageplant inspection checklist</p> <p>KA5. company's sanitary standard operating procedures</p> <p>KA6. procedures to follow during emergency maintenance issues</p> <p>KA7. technical standards for design and construction of cold storages: Bureau of Indian standards(BIS), International standard(ISO) etc</p>
<p><b>B. Technical Knowledge</b></p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. the purpose and usage of protective gears such as gloves , jackets etc. while working</p> <p>KB2. use of first aid at workplace</p> <p>KB3. cold storage order 1980</p> <p>KB4. food safety and standards act 2006</p> <p>KB5. reporting procedure or heirarchy for signs of damage and potential hazards</p> <p>KB6. methods to minimize accidental risks</p>

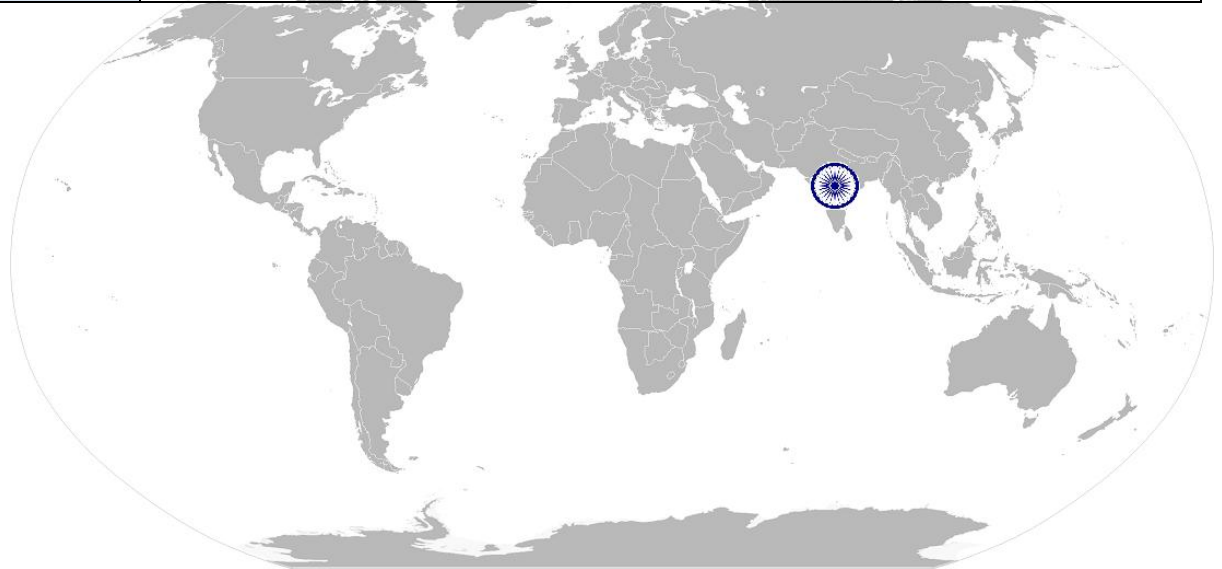
**LSC/N9901 Maintain food and personnel safety, health and hygiene in cold storage plant**

	<p>KB7. safe storage and handling of chemicals like refrigerants, ammonia, ethylene etc</p> <p>KB8. loading and unloading systems</p> <p>KB9. standard operating procedure for safety drills and equipment maintenance</p> <p>KB10. operation of machines: compressor, condenser, evaporator etc</p> <p>KB11. emergency procedures to be followed in case of an mishap such as fire, accidents, etc. and communication of safety instructions to subordinate staff</p> <p>KB12. emergency responses in case of malfunctioning of refrigeration equipment as a whole or its components like evaporator, condenser or compressor</p> <p>KB13. solid, liquid and gaseous waste disposal, treatment norms and equipment</p> <p>KB14. necessary action to be taken for the hazards identified</p> <p>KB15. knowledge of Quality systems like BRC, FSSAI, ISO, FSSC, HACCP etc</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<p><b>Reading Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA1. read and interpret the relevant organisation policies, procedures and diagrams that identify health, safety and safe environmental practices.</p> <p>SA2. read job sheets, company policy documents and information displayed at the workplace for health, safety and environment.</p> <p>SA3. read notes/comments from the senior</p> <p><b>Writing Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA4. fill up documentation related to health, safety and environmental standards, if required</p> <p><b>Oral Communication (Listening and Speaking skills)</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. verbally report health, safety and environmental hazards and poor organisation practice.</p> <p>SA6. communicate to the supervisor about the work health, safety and environmental issues</p> <p>SA7. receive instructions from supervisor on minimizing the risks</p> <p>SA8. communicate with co-workers about the precautions to be taken for hazards free work</p>
<b>B. Professional Skills</b>	<p><b>Decision Making</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. take preventive measures for the identified hazards</p> <p>SB2. select appropriate hand tools and personal protection equipment</p> <p>SB3. identify first aid needs in case of an injury</p> <p><b>Plan and Organize</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB4. formalize and display evacuation plan at strategic locations</p>

**LSC/N9901  
plant**

**Maintain food and personnel safety, health and hygiene in cold storage**

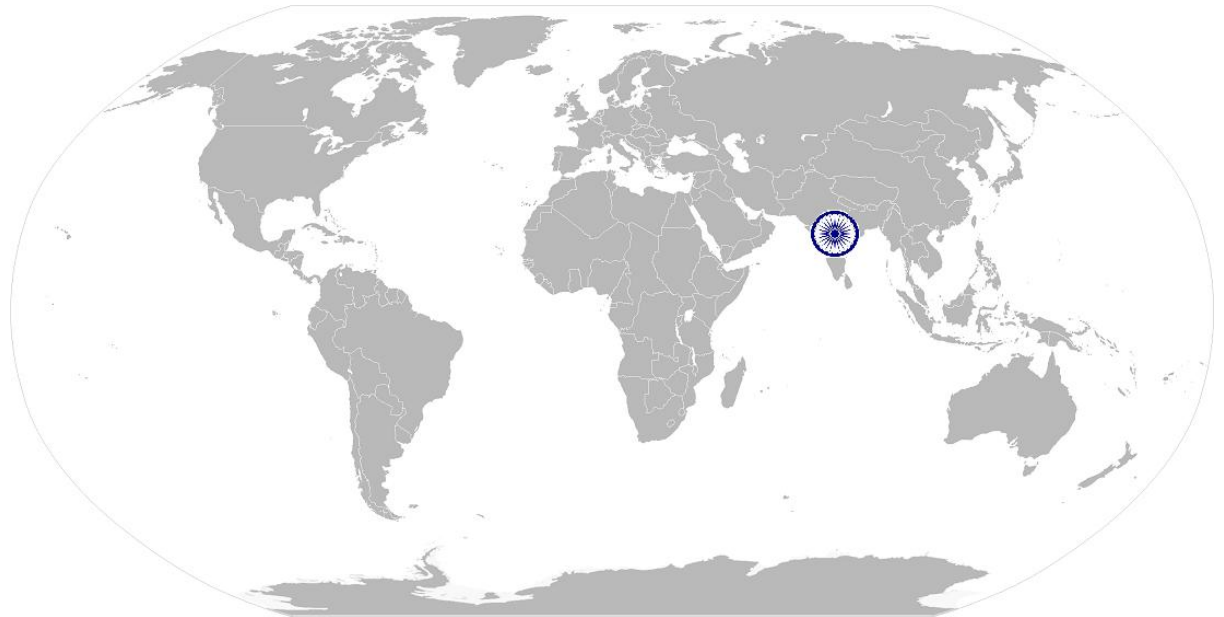
	<b>Customer Centricity</b>
	The user/ individual on the job needs to know and understand how to: SB5. ensure targeted product delivery by practicing stipulated standards of occupational health safety and environmental measures
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB6. take care of personal and equipment protection SB7. identify the hazards and suggest possible solutions
	<b>Analytical</b>
	The user/individual on the job needs to know and understand how to: SB8. use safety equipment such as fire extinguisher during fire accidents SB9. store tools in a safe way SB10. analyse the seriousness of the hazards
<b>Critical</b>	
The user/individual on the job needs to know and understand how to: SB11. evolve smooth workflow by avoiding hazards at workplace SB12. evaluate and apply the possible solutions for the hazards, as necessary	



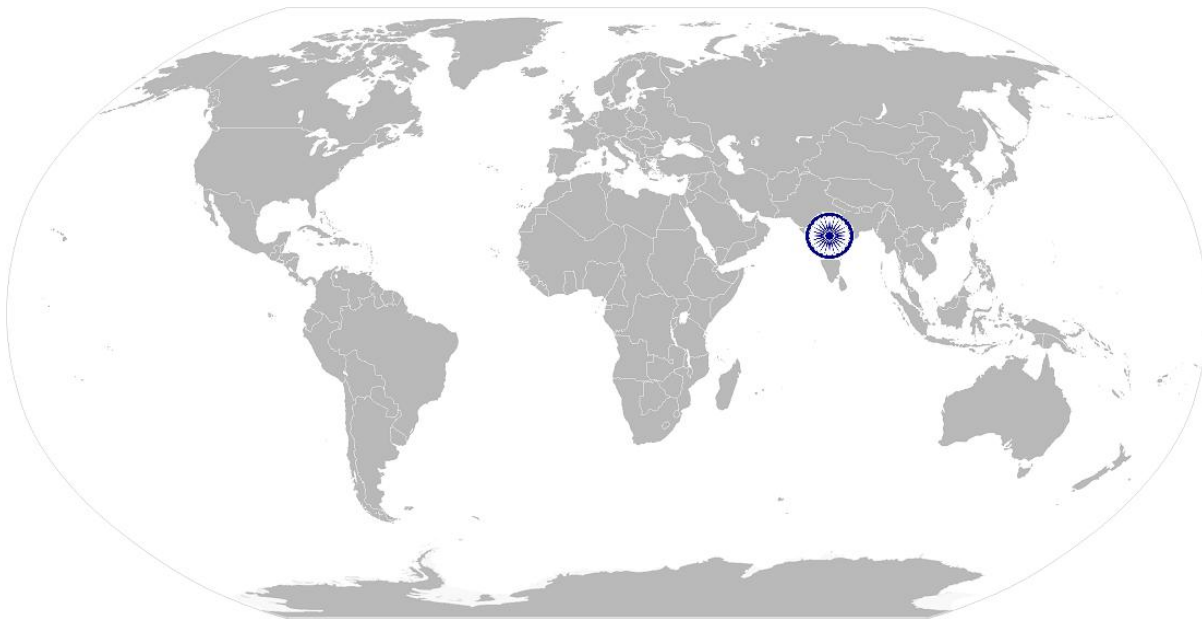
**LSC/N9901      Maintain food and personnel safety, health and hygiene in cold storage plant**

**NOS Version Control**

<b>NOS Code</b>	<b>LSC/N9901</b>		
<b>Credits(NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry</b>	<b>Logistics</b>	<b>Drafted on</b>	<b>26/08/16</b>
<b>Industry Sub-sector</b>	<b>Cold chain</b>	<b>Last reviewed on</b>	<b>11/01/17</b>
<b>Occupation</b>	<b>Operations – Cold Storage</b>	<b>Next review date</b>	<b>11/01/20</b>



# National Occupational Standard



## Overview

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



**LSC/N9902**

**Communicate effectively with colleagues and clients**

<b>Unit Code</b>	<b>LSC/N9902</b>
<b>Unit Title (Task)</b>	<b>Communicate effectively with colleagues and clients</b>
<b>Description</b>	This OS unit is about coordinating and communicating effectively with seniors, colleagues and clients to achieve a smooth workflow
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Interact with seniors</li> <li>• Communicate with colleagues</li> <li>• Communicate effectively with clients</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Interacting with seniors</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. understand the work output requirements, targets, performance indicators and incentives</p> <p>PC2. deliver quality work on time and report any anticipated reasons for delays</p> <p>PC3. escalate unresolved problems or complaints to the relevant superior</p> <p>PC4. communicate project progress proactively to the superior</p> <p>PC5. receive feedback on work standards</p> <p>PC6. document the completed work schedule and handover to the superior</p>
<b>Communicating with colleagues</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC7. exhibit trust, support and respect to all the colleagues in the workplace</p> <p>PC8. aim to achieve hassle free cold chain operation</p> <p>PC9. help and assist colleagues with information and knowledge</p> <p>PC10. seek assistance from the colleagues when required</p> <p>PC11. identify the potential and existing conflicts with the colleagues and resolve</p> <p>PC12. pass on essential information to other colleagues on timely basis</p> <p>PC13. maintain the etiquette, use polite language, demonstrate responsible and disciplined behaviors to the colleagues</p> <p>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</p> <p>PC15. put team over individual goals and multi task or share work where necessary supporting the colleagues</p> <p>PC16. highlight any errors of colleagues, help to rectify and ensure quality output</p> <p>PC17. work with cooperation, coordination, communication and collaboration, with shared goals and supporting each others performance</p>
<b>Communicating effectively with clients</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC18. ask relevant questions to the client and identify their needs</p> <p>PC19. possess strong knowledge on market and cold chain operation</p> <p>PC20. brief the client clearly on potential costs and challenges involved in the cold chain industry</p> <p>PC21. communicate with the client in a polite, professional and friendly manner</p> <p>PC22. build effective but impersonal relationship with the client</p> <p>PC23. ensure the appropriate language and tone are used with clients</p>

**LSC/N9902**

**Communicate effectively with colleagues and clients**

	<p>PC24. listen actively and have a two way communication</p> <p>PC25. be sensitive to the gender, cultural and social differences such as modes of greeting, formality, etc.</p> <p>PC26. understand the client expectations correctly and provide the appropriate products and services</p> <p>PC27. understand the client dissatisfaction and address or escalate their complaints effectively</p> <p>PC28. maintain a positive, sensible and cooperative manner all time</p> <p>PC29. ensure to maintain a proper body language, dress code, gestures and etiquettes towards the client</p> <p>PC30. avoid interrupting the client while they talk</p> <p>PC31. ensure to avoid negative questions and statements to the client</p> <p>PC32. inform the client on any issues or problems before hand and also on the developments involving them</p> <p>PC33. ensure to respond back to the client immediately for their voice messages, e-mails, apps, etc.</p> <p>PC34. develop good rapport with the client and promote other products and services</p> <p>PC35. seek feedback from the client on their understanding to what was discussed</p> <p>PC36. explain the terms and conditions clearly</p>
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**Knowledge and Understanding (K)**

<p><b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <p>KA1. vision, mission and values of the company</p> <p>KA2. business and performance of the company</p> <p>KA3. company's policies on personnel management, effective team work at workplace</p> <p>KA4. company's HR policies</p> <p>KA5. company's reporting structure</p> <p>KA6. company's documentation policy</p> <p>KA7. company's customer profile</p> <p>KA8. occupational health and safety standards</p> <p>KA9. company's policy on business ethics and code of conduct</p>
<p><b>B. Technical Knowledge</b></p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. methods for effective communication with various categories of people and the different departments in the organization</p> <p>KB2. significance of team coordination and productivity targets of the organisation</p> <p>KB3. how to record the job activity as required on various types of documents</p> <p>KB4. how to use computer or smartphone to communicate effectively and productively</p> <p>KB5. significance of helping colleagues with specific issues and problems</p> <p>KB6. importance of meeting quality and time standards as a team</p> <p>KB7. how to practice effective listening and talking</p> <p>KB8. effective use of voice tone and pitch for communication</p> <p>KB9. how to demonstrate ethics and convey discipline to the clients</p> <p>KB10. how to build effective working relationship with mutual trust and respect</p>

**LSC/N9902**

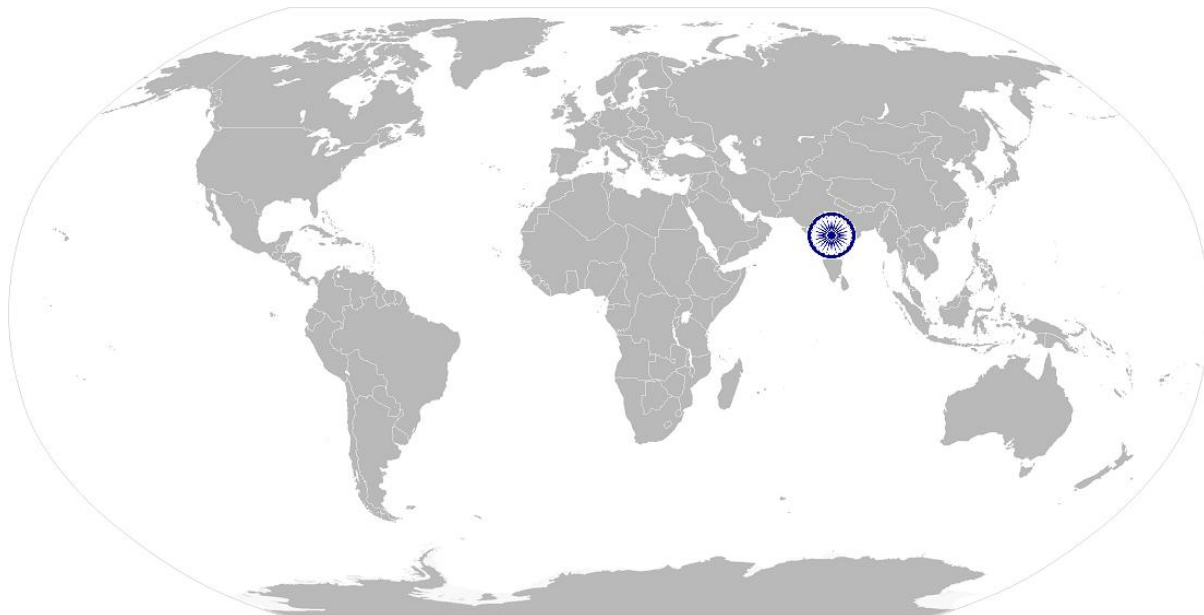
**Communicate effectively with colleagues and clients**

	<p>within the team</p> <p>KB11. importance of dealing with grievances effectively and in time</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b>
	The user/ individual on the job needs to know and understand how to:
	SA1. read job sheets, company policy documents and information displayed at the workplace
	SA2. read notes/comments from the senior
	<b>Writing Skills</b>
	The user/ individual on the job needs to know and understand how to:
	SA3. fill up documentation pertaining to job requirement
	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/ individual on the job needs to know and understand how to:
	SA4. interact with team members to work efficiently SA5. communicate effectively with senior to achieve smooth workflow SA6. communicate effectively with the clients to build a good rapport with them SA7. use language that the client or colleague understands SA8. use the communication systems of the company, e.g., telephone, fax, public announcement systems SA9. E-mail and use Internet for communicating SA10. use of audio-visual aids to communicate complex issues
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/ individual on the job needs to know and understand how to:
	SB1. spot and communicate potential areas of disruptions to work process and report the same
	SB2. report to supervisor and deal with a colleague individually, depending on the type of concern
	<b>Plan and Organize</b>
	The user/ individual on the job needs to know and understand how to:
	SB3. plan communication strategy in order to avoid conflicts and work disruption
	<b>Customer Centricity</b>
	The user/ individual on the job needs to know and understand how to:
	SB4. practice patient listening, careful talking and paraphrasing in order to avoid misunderstanding
<b>Problem Solving</b>	
The user/ individual on the job needs to know and understand how to:	
SB5. coordinate with different departments and multi-task as necessary SB6. contribute to quality of team work and achieve smooth workflow SB7. share work load as required SB8. delegate work in consultation with senior or as necessary instead of allowing work to pile up	
<b>Analytical</b>	

**LSC/N9902**

**Communicate effectively with colleagues and clients**

	The user/ individual on the job needs to know and understand how to: SB9. resolve recurring inter-personal conflicts by clear and two-way dialogue
	<b>Critical</b>
	The user/ individual on the job needs to know and understand how to: SB10. improve work processes by interacting with others and adopting best practices



**LSC/N9902**

**Communicate effectively with colleagues and clients**

## **NOS Version Control**

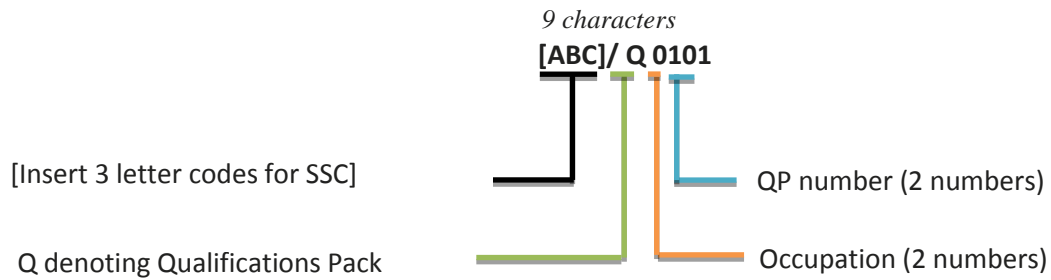
<b>NOS Code</b>	<b>LSC/N9902</b>		
<b>Credits(NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
<b>Industry</b>	<b>Logistics</b>	<b>Drafted on</b>	<b>26/08/16</b>
<b>Industry Sub-sector</b>	<b>Cold Chain</b>	<b>Last reviewed on</b>	<b>11/01/17</b>
<b>Occupation</b>	<b>Operations – Cold Storage</b>	<b>Next review date</b>	<b>11/01/20</b>



## Annexure

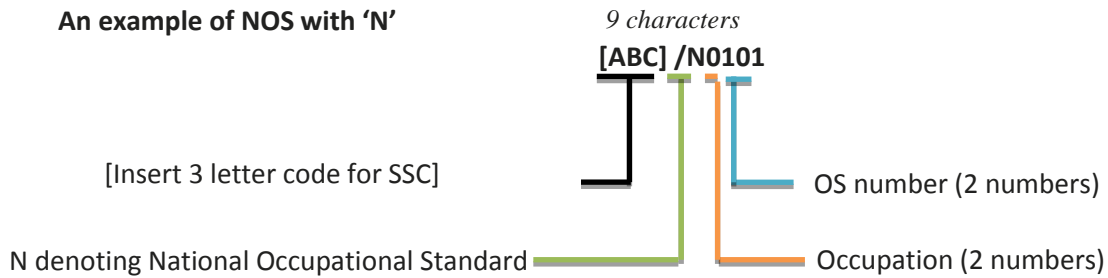
### Nomenclature for QP and NOS

#### Qualifications Pack



#### Occupational Standard

##### An example of NOS with 'N'



[Back to top...](#)

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

<b>Sub-sector</b>	<b>Range of Occupation numbers</b>
Land Transportation	11,14
Shipping Transportation	12,14
Air Transportation	13
Warehousing Storage	21,23
Warehouse Packaging	22,23
Courier and Mail Services	30
Shipping / Port Operation	46 – 60
Air cargo operation	61 – 75
EXIM logistics	76 – 85
Cold Chain Logistics	86 - 95
Generic Occupations	96 – 99

<b>Sequence</b>	<b>Description</b>	<b>Example</b>
<b>Three letters</b>	Industry name	LSC
<b>Slash</b>	/	/
<b>Next letter</b>	Whether <b>QP</b> or <b>NOS</b>	Q / N
<b>Next two numbers</b>	Occupation code	01
<b>Next two numbers</b>	OS number	01

## CRITERIA FOR ASSESSMENT OF TRAINEES

**Job Role** Cold Chain Manager

**Qualification Pack** LSC/Q8702

**Sector Skill Council** Logistics

### Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3. 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 this criteria
5. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

	<b>Performance Criteria</b>	<b>Total Marks (350)</b>	<b>Out of</b>	<b>Theory</b>	<b>Skills Practical</b>
<b>LSC/N8708 Administer manpower planning and labour management across cold chain operations</b>	PC1. identify HACCP (Hazard Analysis and Critical Control Points), HAZMAT (Hazardous Material) and other training certifications required to be taken by workers	50	3	1	2
	PC2. ensure timely revision of training requirements based on technological developments and new equipments introduced in the facility		4	1	3
	PC3. attend conferences and seminars conducted by national cold chain associations for updates in cold chain segment		3	1	2
	PC4. update maintenance and quality assurance department about technological developments incorporated in company's cold chain operations		4	1	3
	PC5. ensure updated training requirements are appropriately communicated to workers and keep track of workers employed across departments		4	1	3
	PC6. identify location from where workers should be hired, based on urgency of requirement		3	1	2
	PC7. identify skill sets required in workers for product specific operations, for eg: ability to handle stress during urgent delivery requirement etc.		4	1	3
	PC8. provide prior information on expected labor force requirement to head hr		3	1	2



	PC9. supervise transfer of employees from one department to the other based on requirement		3	1	2
	PC10. initiate discussion with workers to analyze the cause of worker attrition		3	1	2
	PC11. assist head hr in designing corrective mechanism to reduce attrition		3	1	2
	PC12. take charge of illness or injury incurred to workers during cold chain operations and update the same to head hr		3	1	2
	PC13. ensure timely fitness reports are prepared for every employee		3	1	2
	PC14. take non conformance decision in case employee fitness levels do not match the requirements and analyze the cause of illness or injury of employees		3	1	2
	PC15. update the instructions on fitness requirements and safety measures in the cold storage facility		4	1	3
	<b>POINTS</b>		<b>50</b>	<b>15</b>	<b>35</b>
	<b>TOTAL POINTS</b>			<b>50</b>	

	<b>Performance Criteria</b>	<b>Total Marks (350)</b>	<b>Out of</b>	<b>Theory</b>	<b>Skills Practical</b>
<b>LSC/N8709 Oversee Ensure smooth and effective execution of cold chain operation</b>	PC1. initiate action to prevent occurrence of any microbiological non-conformities at any stage of cold chain operations	50	3	1	2
	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		3	1	2
	PC3. stop operations whenever there is likelihood of occurrence that could affect product safety and personnel safety or any other emergence		3	1	2
	PC4. ensure effective implementation of cleaning schedule for all equipments and machines is followed		4	1	3
	PC5. understand requirements of cold storage equipments from perishable product handling specialist		4	1	3
	PC6. identify expenditure required on refrigeration equipments and associated tools		4	1	3
	PC7. estimate maintenance and upgradation expenditure expected to be incurred on machines and equipments		4	1	3
	PC8. identify worker expenses incurred for day-to-day activities such as food, travel etc.		3	1	2

	PC9. ensure correct details of number of workers is provided to budget control team		3	1	2
	PC10. estimate maximum expenditure that might be required to be incurred in situations of crisis, for e.g.: accident, leakage, injury etc.		3	1	2
	PC11. ensure timely compliance of calibration schedule for equipments is followed		3	1	2
	PC12. update maintenance head and follow up in case equipments and instruments are not functioning properly		4	1	3
	PC13. follow up with maintenance head in case of uninterrupted supply of electricity and water		3	1	2
	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		3	1	2
	PC15. supervise upgradation of evaporators, compressors etc.		3	1	2
	<b>POINTS</b>		<b>50</b>	<b>15</b>	<b>35</b>
	<b>TOTAL POINTS</b>				<b>50</b>

	<b>Performance Criteria</b>	<b>Total Marks (350)</b>	<b>Out of</b>	<b>Theory</b>	<b>Skills Practical</b>
<b>LSC/N8710 Monitor and improvise perishable product handling activities</b>	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	50	3	1	2
	PC2. ensure standardisation of handling units of perishable products across all stages of cold chain		3	1	2
	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		3	1	2
	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		3	1	2
	PC5. attend seminars and conferences organized by cold chain associations to get information about latest updates in the sector		3	1	2
	PC6. identify the appropriate product flow capacity – volume of commodities that must be handled per unit of time and determine the appropriate cooling method and system based on volume of commodity handled per unit of time		3	1	2
	PC7. conduct regular check up of the ripening chamber and ensure proper documentation is		3	1	2

	done at every stage and supervise pre-cooling temperature and storage conditions			
	PC8. identify scope for resource integration or cross-functional utilization of equipments across the cold chain and participate in decision making for no. of fans, water pump capacity, refrigeration of condensing unit etc.		3	1 2
	PC9. supervise grading, sorting, washing and drying activities on the goods received in pack house and supervise packaging for safe transport if the routing requires long travel to reach the pre-cooling unit or refrigerated consumption centres		4	1 3
	PC10. 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.		4	1 3
	PC11. identify rural areas to be supported in the form of back end village level pack houses		3	1 2
	PC12. ensure goods are properly transported from back end pack house to the appropriate cold chain facility and uniform practices are followed at all cold storage facilities and maintain high levels of hygiene at all stages of the product's life		4	1 3
	PC13. 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		4	1 3
	PC14. determine the step at which CCP (critical control point) can be applied in order to eliminate the hazard, establish the target levels/tolerances and establish/implement monitoring systems for controlling the CCPs and identify corrective actions when a deviation occurs at a CCP		4	1 3
	PC15. establish a documentation system for procedures and records		3	1 2
	<b>POINTS</b>		<b>50</b>	<b>15 35</b>
	<b>TOTAL POINTS</b>			<b>50</b>

	Performance Criteria	Total Marks (350)	Out of	Theory	Skills Practical
<b>LSC/N8711</b> <b>Oversee Route Planning and reefer/non-reefer vehicle coordination</b>	PC1. answer phone calls and emails of the clients regularly and promptly, follow proper behavioural etiquettes with the clients whether face to face or on phone or e-mail	50	3	1	2
	PC2. be updated on availability of the products with the order received, ensure the availability of vehicle in proper working condition meeting the safety standards, availability of the vehicle operator for the delivery, verify reefer vehicle		4	1	3

papers are in order and check the reefer vehicle maintenance and cleanliness on daily basis			
PC3 be aware of the other delivery schedules for the day, review and revise transportation and delivery schedule based on priority, take confirmations from the client and schedule the delivery and update the order details and the time of booking to the MIS person for record	4	1	3
PC4. understand from the clients on the type of products, the delivery date, quantity, delivery address, etc. and confirm the delivery details with the clients also updating them on non availability of any products or reefer/non reefer vehicle as per their order and requirement	3	1	2
PC5. assign the reefer/ non reefer vehicle operator to be sent for the delivery, ensure the reefer/non reefer vehicle operators carry the necessary materials such as maps, GPS, client details, etc. ; monitor the various actions of the reefer/ non reefer vehicle operator such as safety and maintenance of the vehicle, defrosting the reefer unit etc.	4	1	3
PC6. plan the driving routes to ensure on time delivery, brief the operator about the client and delivery details, coordinate the transportation routes and time schedule based on customer requirement advice the reefer/non reefer vehicle operators on their duty and responsibility to be carried out during the trip	5	2	3
PC7. ensure the order details and the products match, check the temperature and pre cool of the reefer unit as set by the reefer vehicle operator and 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	4	1	3
PC8. supervise the maps and driving directions of the reefer/non reefer vehicle operator to ensure efficient route service is provided, incorporate changes to the schedule if required	4	1	3
PC9. verify the trip sheets submitted by the reefer/non reefer vehicle operator for mileage and fuel usage	3	1	2
PC10. listen to the customer complaints and problems, investigate on various staff problems and provide with proper solution and ensure to take proper steps to rectify those problems with immediate action	3	1	2
PC11. communicate with the reefer/non reefer vehicle operators during trip in case of any emergency and monitor the issues of reefer/non reefer vehicle operator such as licensing, safety, accidents, etc.	3	1	2

	PC12. send confirmation message or email to the clients along with the delivery summary and invoice, coordinate with the client for payment details and maintain good rapport and relationships with the client		3	1	2
	PC13. monitor the control and discipline of the reefer/non reefer vehicle operator with the work, track the vehicles before and during the journey, verify the documentations provided by the reefer/non reefer vehicle operator and report and document the details of the travel		3	1	2
	PC14. monitor the safe and quality delivery of products at the appropriate temperature, pressure, humidity and other required parameters maintained and achieve client satisfaction ensuring high level service with timely and quality delivery as per requirement		4	1	3
	<b>POINTS</b>		<b>50</b>	<b>15</b>	<b>35</b>
	<b>TOTAL POINTS</b>			<b>50</b>	

	<b>Performance Criteria</b>	<b>Total Marks (350)</b>	<b>Out of</b>	<b>Theory</b>	<b>Skills Practical</b>
<b>LSC/N8712 Supervise Data entry/MIS reports management</b>	PC1. coordinate with the different departments such as storage, transportation, etc. and brief the data entry executive on the various documentations to be done	50	3	1	2
	PC2. check the obtained information and documents to be updated and the best software tool identified to update the data		3	1	2
	PC3. study the documents in detail and understand the requirements		3	1	2
	PC4. identify the latest technology updates that would support the data entry requirements		4	1	3
	PC5. examine the required software to perform the MIS and data entry operation and monitor the working of the software and the procedure to update		5	2	3
	PC6. coordinate with the respective departments in case if any additional inputs or documents are required		3	1	2
	PC7. review the entered information and compare with the original source document and verify the output for errors and brief the data entry operators		4	1	3
	PC8. ensure the update happens on a regular basis and to maintain the documentation and quality standards to be used in the data entry operation		4	1	3
	PC9. conduct consistent check on the software and database stored		3	1	2
	PC10. ensure to maintain the files updated in software as well as the source documents securely		4	1	3

	PC11. listen to the complaints or problems of the staff		3	1	2
	PC12. ensure to take proper steps to resolve the issues of staff and software		3	1	2
	PC13. monitor the issues such as software problem, malfunctions, inadequate or unclear information or any other technical problems		4	1	3
	PC14. ensure access to relevant files, documents and information to the data entry operator as required		4	1	3
	<b>POINTS</b>		<b>50</b>	<b>15</b>	<b>35</b>
	<b>TOTAL POINTS</b>			<b>50</b>	

	Performance Criteria	Total Marks (350)	out of	Theory	Practical
<b>LSC/N9901</b> <b>Maintain food and personnel safety, health and hygiene in cold storage plant</b>	PC1. assess the various health, safety and environmental hazards in the cold storage; take necessary steps to eliminate or minimize the hazards; analyze the causes of accidents at the workplace; take preventive measures to avoid risk of burns and other injury due to contact with hot surfaces, gas, fire, hot fluids/ liquids, etc	50	5	2	3
	PC2. ensure the employees have access to first aid kit when needed; 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;		2	1	1
	PC3. ensure to display safety signs at places where necessary for people to be cautious; use rubber mats in the places where floors are constantly wet; ensure electrical precautions such as insulated clothing, adequate equipment insulation, dry work area, switch off the power supply when not required, etc; practice correct emergency procedures: operating fire extinguishers, emergency exits, etc; unplug the control panel, compressor, condenser etc before performing maintenance; report to the superior on any problems and hazards identified		5	2	3
	PC4. install fire alarms (electrical/manual) in cold store/deep freeze and keep other safety devices like hammer/mallet in the storage area		3	1	2
	PC5. maintain appropriate ventilation in the cold rooms to avoid unacceptable accumulation of heat, condensation or odors; check and review the cold storage areas frequently		5	2	3
	PC6. stack items in an organized way and use safe lifting techniques to reduce risk of injuries from handling procedures at the storage areas; use effective loading and unloading systems; proper stock rotation (First in First out) to be practiced;		5	2	3

	segregate damaged/ non-conforming products from other products to designate area for appropriate disposition			
	PC7. ensure no sign of pest infestation and install rodent traps, fly glues and insectocutors wherever needed; follow hygiene & sanitation standards of Government bodies like FSSAI, APEDA and /or EIA or importing countries like FAO, EU standards; fumigate containers depending upon product and contamination or as per customers' requirement	5	2	3
	PC8. avoid smoking, spitting, eating etc near food storage area; cut nails regularly and avoid applying nail paint. Avoid wearing bangles, rings, and chains in cold storage; develop personal hygiene habits like brushing teeth, taking shower everybody, wearing clean and tidy clothes after ironing etc; wash hands with soap solution and dry under a dryer as they enter for duty or after using wash room	2	1	1
	PC9. ensure reefers are covered, clean, free from pest infestation & other contaminants	3	1	2
	PC10. dispose cold storage plant waste in the designated areas safely as per company's policies and rules	5	2	3
	PC11. ensure to be safe while handling machines(generator, compressor, condenser etc), gas (ammonia) and chemicals(ethylene, refrigerants etc); keep the floors free from oil, water and grease to avoid slippery surface	3	1	2
	PC12. 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	5	2	3
	PC13. ensure workers suffering from abscess, boils etc should be relieved from food handling	2	1	1
	<b>POINTS</b>	<b>50</b>	<b>20</b>	<b>30</b>
	<b>TOTAL POINTS</b>		<b>50</b>	

	Performance Criteria	Total Marks (350)	out of	Theory	Practical
<b>LSC/N9902 Communicate effectively with colleagues and clients</b>	PC1. understand the work output requirements, targets, performance indicators and incentives	50	4	2	2
	PC2. deliver quality work on time and report any anticipated reasons for delays; escalate unresolved problems or complaints to the relevant superior; receive feedback on work standards; document the completed work schedule and handover to the superior		4	2	2
	PC3. exhibit trust, support and respect to all the colleagues in the workplace		3	1	2
	PC4. aim to achieve hassle free cold chain operation		4	2	2
	PC5. help and assist colleagues with information and knowledge; seek assistance from the colleagues when		3	1	2

	required ; pass on essential information to other colleagues on timely basis; highlight any errors of colleagues, help to rectify and ensure quality output			
	PC6. identify the potential and existing conflicts with the colleagues and resolve	4	1	3
	PC7. maintain the etiquette, use polite language, demonstrate responsible and disciplined behaviors to the colleagues	3	1	2
	PC8. 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; put team over individual goals and multi task or share work where necessary supporting the colleagues; work with cooperation, coordination, communication and collaboration, with shared goals and supporting each others performance	3	1	2
	PC9. ask relevant questions to the client and identify their needs; brief the client clearly on potential costs and challenges involved in the cold chain industry	4	2	2
	PC10. possess strong knowledge on market and cold chain operation	4	2	2
	PC11. communicate with the client in a polite, professional and friendly manner; build effective but impersonal relationship with the client; ensure the appropriate language and tone are used with clients; listen actively and have a two way communication; be sensitive to the gender, cultural and social differences such as modes of greeting, formality, etc.; maintain a positive, sensible and cooperative manner all time ; ensure to maintain a proper body language, dress code, gestures and etiquettes towards the client; avoid interrupting the client while they talk	6	2	4
	PC12. understand the client expectations correctly and provide the appropriate products and services; understand the client dissatisfaction and address or escalate their complaints effectively; ensure to avoid negative questions and statements to the client; ensure to respond back to the client immediately for their voice messages, e-mails, apps, etc. ; develop good rapport with the client and promote other products and services; inform the client on any issues or problems before hand and also on the developments involving them; seek feedback from the client on their understanding to what was discussed	6	2	4
	PC13. explain the terms and conditions clearly	2	1	1
	<b>POINTS</b>	<b>50</b>	<b>20</b>	<b>30</b>
	<b>TOTAL POINTS</b>		<b>50</b>	
	<b>GRAND TOTAL</b>	<b>350</b>		