

Qualification Pack



Commercial Vehicle Driver - LMO

QP Code: LSC/Q1005

Version: 3.0

NSQF Level: 4

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LSC/Q1005: Commercial Vehicle Driver - LMO

Brief Job Description

The Commercial Vehicle Driver- Liquid Medical Oxygen (LMO) is responsible for safely transporting LMO to hospitals, medical and storage facilities while ensuring strict compliance with PESO, MoRTH, and CPCB regulations. This role requires handling hazardous materials and operating cryogenic tankers, along with the ability to perform routine maintenance and manage breakdowns during long-distance travel. The driver must also meet performance targets such as fuel efficiency and on-time delivery, maintaining a high level of safety, responsibility, and reliability throughout.

Personal Attributes

The person should be able to work for long hours, shift-based work, and interstate travel. The individual must be dependable, responsible, polite, and able to remain calm under pressure. Effective communication skills are essential, as the driver interacts with various stakeholders daily. Availability for emergency deliveries, especially during healthcare emergencies, is also a critical requirement.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [LSC/N1014: Carry out maintenance and ensure roadworthiness of LMO vehicle](#)
2. [LSC/N1015: Operate and Drive the LMO Tanker safely and efficiently](#)
3. [LSC/N1013: Handle Liquid Medical Oxygen](#)
4. [LSC/N1017: Handle Emergencies during LMO Transportation](#)
5. [LSC/N1304: Health, safety and security procedures for drivers](#)
6. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Logistics
Sub-Sector	Land Transportation, Liquid Logistics
Occupation	Transport Operations, Vehicle Operations, Liquid Transport Operations
Country	India

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NSQF Level	4
Credits	16
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8331.0301
Minimum Educational Qualification & Experience	8th grade pass with 3 Years of experience as HMV driver (as per HMV regulations of Central motor vehicle rule 1989 - Should have the ability to read and write in English + at least 1 official language) OR Previous relevant Qualification of NSQF Level (3) with 3 Years of experience as HMV driver.
Minimum Level of Education for Training in School	Not Applicable
Pre-Requisite License or Training	HMV License
Minimum Job Entry Age	20 Years
Last Reviewed On	NA
Next Review Date	06/02/2029
NSQF Approval Date	06/02/2026
Version	3.0
Reference code on NQR	QG-04-TLW-04956-2026-V1-LSSC
NQR Version	1.0

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LSC/N1014: Carry out maintenance and ensure roadworthiness of LMO vehicle

Description

This NOS details the preventive maintenance, vehicle's roadworthiness assessment as per organizational requirements and LMO safety requirements.

Scope

The scope covers the following :

- Visual checks
- Preventive maintenance
- Vehicle Checks
- Escalation of a technical problem

Elements and Performance Criteria

Visual checks

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

- PC1.** Wear the appropriate PPE and clothing designed for handling LMO while checking the vehicle
- PC2.** Ensure that there are no flammable items, greasy rags or diesel in the vehicle
- PC3.** Ensure the used tools are cleaned for oxygen service, and the toolkit is stowed in a place away from the cargo
- PC4.** Ensure the vehicle is fitted with GPS tracking and cooperate with monitoring requirements.

Preventive maintenance

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

- PC5.** Conduct regular inspections of essential vehicle systems (e.g., brakes, tyres, fluid levels, electrical systems) to ensure they are in optimal working condition before operating the vehicle.
- PC6.** Follow the manufacturer's maintenance schedule for servicing key components like the engine, transmission, brakes, and exhaust system. Ensure all service activities are conducted in a timely manner to prevent wear and potential failure.
- PC7.** Check and replace parts that have a limited lifespan, such as air filters, fuel filters, wiper blades, and spark plugs, ensuring they meet operational standards.
- PC8.** Inspect tyre pressure, tread depth, and overall tyre condition. Perform tyre rotations or replacements as necessary and ensure the correct tyre specifications are used for optimal vehicle performance.
- PC9.** Regularly check and maintain all critical fluid levels (e.g., engine oil, brake fluid, coolant, power steering fluid) to prevent engine overheating, brake failure, or other system malfunctions.
- PC10.** Inspect the braking system to ensure it is functioning properly, checking brake pads, discs, and fluid levels. Replace worn components as part of routine maintenance.

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- PC11.** Test and maintain the vehicle's electrical systems, including battery charge, alternator performance, and wiring, to prevent electrical failures during operation.
- PC12.** Conduct a thorough visual inspection of the vehicle for signs of wear and tear, such as leaks, cracks, or damaged parts, and address issues before they become critical.
- PC13.** Regularly check that the vehicle's maintenance tools (e.g., jack, wrench, tyre repair kit) are in working condition and stored properly. Clean and maintain tools as needed to ensure they are ready for use.
- PC14.** Identify and report any signs of potential mechanical issues, such as unusual sounds, vibrations, or system failures, during preventive maintenance checks.
- PC15.** Keep accurate records of all preventive maintenance activities performed on the vehicle, including dates, parts replaced, and any issues identified, for reference and future inspections.

Vehicle Checks

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

- PC16.** • • Check that the vehicle meets basic legal and compliance requirements:
 - •The organization guidelines, e.g. rule books
 - •CMVR guidelines from the Ministry of Road Transport & Highway and other guidelines issued by Road Transport Authorities like RTOs
 - •PESO, and medical oxygen-specific transport guidelines
 - •Any other safety, security and environmental guidelines
 - •WHO & MoHFW Oxygen Transport Guidelines (esp. post-COVID)
- PC17.** Ensure that the valid documents are available in the vehicle (License, fitness certification, insurance, copy of registration certificate and road tax paid)
- PC18.** Check vehicle service records indicative of any history of technical defects
- PC19.** Check the safety devices in the vehicle, such as wheel chocks, breakdown signs, spark arrestors, traffic cone and fire extinguisher
- PC20.** Ensure that DCP fire extinguishers are available in the vehicle and have valid 3rd party certification of condition
- PC21.** Check the cooling system, steering, electrical, fluid levels, braking system and other general conditions of the vehicle
- PC22.** Ensure that there are no leakages in the cooling system
- PC23.** Perform the free play test to check the steering
- PC24.** Examine the fluid levels – oil levels, engine oil, gearbox hydraulic oil, brakes fluid, washer liquid and fuel
- PC25.** Check the braking systems to ensure it is working properly
- PC26.** Perform the start-stop test to check the electrical system of the vehicle.
- PC27.** Always stay on the planned route as approved by the transporter

Escalation of technical problem

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

- PC28.** Report actual or possible defects to the senior driver, owner, or service supervisor in detail so that they can diagnose the problem
- PC29.** In consultation with the owner, conclude about the roadworthiness of the vehicle and, if found unfit, decide to use another vehicle.

Knowledge and Understanding (KU)

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The individual on the job needs to know and understand:

- KU1.** Guidelines on handling liquid medical oxygen
- KU2.** Hazards associated with liquid oxygen
- KU3.** Organization's instructions or guidelines relating to dealing with and reporting safety and emergency issues
- KU4.** methods of effective and appropriate communication to let others know about the safety, cleanliness and emergency situations
- KU5.** where and how to get help in dealing with safety and emergency situations
- KU6.** Company's policies on: road worthiness requirement, basic compliance to technical requirements and standards, safety and hazards
- KU7.** CMVR guidelines and other specific local regulations
- KU8.** Organization structure
- KU9.** Escalation procedure
- KU10.** MoRTH, PESO, and Hazardous Substances Transport regulations and state regulations.

Generic Skills (GS)

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

- GS1.** Read and understand technical standards of vehicle operation regarding fuel systems and other control systems in the vehicle.
- GS2.** Document technical issues pertaining to vehicle
- GS3.** Effectively communicate the safety and emergency issues
- GS4.** Keep all the safety equipment in an organized manner so that there is no difficulty in finding them
- GS5.** Report potential sources of danger
- GS6.** Follow the prescribed procedure to address safety and emergency issues
- GS7.** Learn from past mistakes regarding use of safety and emergency issues
- GS8.** Assess the impact of hazardous material, activity, incident

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Visual checks</i>	5	8	-	0.5
PC1. Wear the appropriate PPE and clothing designed for handling LMO while checking the vehicle	1	2	-	0.5
PC2. Ensure that there are no flammable items, greasy rags or diesel in the vehicle	1	2	-	-
PC3. Ensure the used tools are cleaned for oxygen service, and the toolkit is stowed in a place away from the cargo	2	2	-	-
PC4. Ensure the vehicle is fitted with GPS tracking and cooperate with monitoring requirements.	1	2	-	-
<i>Preventive maintenance</i>	11	23	-	4
PC5. Conduct regular inspections of essential vehicle systems (e.g., brakes, tyres, fluid levels, electrical systems) to ensure they are in optimal working condition before operating the vehicle.	1	3	-	0.5
PC6. Follow the manufacturer's maintenance schedule for servicing key components like the engine, transmission, brakes, and exhaust system. Ensure all service activities are conducted in a timely manner to prevent wear and potential failure.	1	2	-	0.5
PC7. Check and replace parts that have a limited lifespan, such as air filters, fuel filters, wiper blades, and spark plugs, ensuring they meet operational standards.	1	2	-	0.5
PC8. Inspect tyre pressure, tread depth, and overall tyre condition. Perform tyre rotations or replacements as necessary and ensure the correct tyre specifications are used for optimal vehicle performance.	1	2	-	0.5
PC9. Regularly check and maintain all critical fluid levels (e.g., engine oil, brake fluid, coolant, power steering fluid) to prevent engine overheating, brake failure, or other system malfunctions.	1	2	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. Inspect the braking system to ensure it is functioning properly, checking brake pads, discs, and fluid levels. Replace worn components as part of routine maintenance.	1	2	-	0.5
PC11. Test and maintain the vehicle's electrical systems, including battery charge, alternator performance, and wiring, to prevent electrical failures during operation.	1	2	-	0.5
PC12. Conduct a thorough visual inspection of the vehicle for signs of wear and tear, such as leaks, cracks, or damaged parts, and address issues before they become critical.	1	2	-	0.5
PC13. Regularly check that the vehicle's maintenance tools (e.g., jack, wrench, tyre repair kit) are in working condition and stored properly. Clean and maintain tools as needed to ensure they are ready for use.	1	2	-	-
PC14. Identify and report any signs of potential mechanical issues, such as unusual sounds, vibrations, or system failures, during preventive maintenance checks.	1	2	-	-
PC15. Keep accurate records of all preventive maintenance activities performed on the vehicle, including dates, parts replaced, and any issues identified, for reference and future inspections.	1	2	-	0.5
<i>Vehicle Checks</i>	12	25	-	5
PC16. <ul style="list-style-type: none"> • Check that the vehicle meets basic legal and compliance requirements: • The organization guidelines, e.g. rule books • CMVR guidelines from the Ministry of Road Transport & Highway and other guidelines issued by Road Transport Authorities like RTOs • PESO, and medical oxygen-specific transport guidelines • Any other safety, security and environmental guidelines • WHO & MoHFW Oxygen Transport Guidelines (esp. post-COVID) 	1	3	-	0.5

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC17. Ensure that the valid documents are available in the vehicle (License, fitness certification, insurance, copy of registration certificate and road tax paid)	1	2	-	0.5
PC18. Check vehicle service records indicative of any history of technical defects	1	2	-	-
PC19. Check the safety devices in the vehicle, such as wheel chocks, breakdown signs, spark arrestors, traffic cone and fire extinguisher	1	2	-	0.5
PC20. Ensure that DCP fire extinguishers are available in the vehicle and have valid 3rd party certification of condition	1	2	-	-
PC21. Check the cooling system, steering, electrical, fluid levels, braking system and other general conditions of the vehicle	1	2	-	0.5
PC22. Ensure that there are no leakages in the cooling system	1	2	-	-
PC23. Perform the free play test to check the steering	1	2	-	-
PC24. Examine the fluid levels – oil levels, engine oil, gearbox hydraulic oil, brakes fluid, washer liquid and fuel	1	2	-	0.5
PC25. Check the braking systems to ensure it is working properly	1	2	-	2
PC26. Perform the start-stop test to check the electrical system of the vehicle.	1	2	-	0.5
PC27. Always stay on the planned route as approved by the transporter	1	2	-	-
<i>Escalation of technical problem</i>	2	4	-	0.5
PC28. Report actual or possible defects to the senior driver, owner, or service supervisor in detail so that they can diagnose the problem	1	2	-	-
PC29. In consultation with the owner, conclude about the roadworthiness of the vehicle and, if found unfit, decide to use another vehicle.	1	2	-	0.5



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	30	60	-	10

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National Occupational Standards (NOS) Parameters

NOS Code	LSC/N1014
NOS Name	Carry out maintenance and ensure roadworthiness of LMO vehicle
Sector	Logistics
Sub-Sector	Land Transportation
Occupation	Transport Operations, Vehicle Operations, Liquid Transport Operations
NSQF Level	3
Credits	4
Version	2.0
Last Reviewed Date	06/02/2026
Next Review Date	06/02/2029
NSQF Clearance Date	06/02/2026

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LSC/N1015: Operate and Drive the LMO Tanker safely and efficiently

Description

This OS unit is about driving safely and efficiently while carrying LMO.

Scope

The scope covers the following :

- Efficient driving of LMO tankers
- Defensive driving techniques
- Traffic regulations

Elements and Performance Criteria

Efficient driving of LMO tankers

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

- PC1.** Follow the standard driving practices while driving LMO tankers
- PC2.** Follow the working/driving hours assigned; in case of emergency, comply with instructions regarding extended hours.
- PC3.** Follow prescribed work and rest schedules to manage fatigue and ensure safe driving
- PC4.** Operate the vehicle with a co-driver when assigned during emergency situations.
- PC5.** Follow the safety precautions while loading liquid oxygen to the tankers
- PC6.** Maintain a speed limit of 10 km/hr within the factory premises before loading oxygen
- PC7.** Check the availability of cones, signs, PPE, emergency kit, etc.
- PC8.** Check the decanting and venting procedures before driving
- PC9.** Follow the safety precautions while parking LMO tankers
- PC10.** Park the vehicle only on open ground with sufficient air circulation; do not park under high-tension cables (11kV).
- PC11.** Check the pressure gauge once every 4 hours
- PC12.** Follow the safety precautions while unloading the liquid oxygen and exiting the delivery site
- PC13.** Maintain a speed limit of 5 Km/hr while driving at the delivery site
- PC14.** Follow the safety precautions during the empty return of tankers
- PC15.** Ensure that TREM (Transport Emergency) Card and Safety Data Sheet (SDS) are carried at all times and adhered to.
- PC16.** Ensure the availability of Emergency Number and Valid Chief Controller of Explosives (CCoE) Peso Certificate
- PC17.** Follow the assigned geo-fenced route without deviation; if the vehicle enters unspecified zones or misses the route, alerts will be raised.
- PC18.** Enter city limits only after 11 PM and exit before 4 AM, or as per the traffic regulations of the respective city.
- PC19.** Follow Eco-Driving Practices and Emission Compliance to Encourage fuel-saving and low-emission

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Defensive Driving techniques

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

- PC20.** Apply various defensive driving techniques while overtaking, parking, stopping, driving in the rain, driving at night, etc., while maneuvering through turns and curves.
- PC21.** Practice the mechanism of managing cargo pressure on the road while driving on curvy roads, braking hazards, etc.
- PC22.** Use safe driving principles to assess risks and make prompt, situation-based decisions.
- PC23.** Follow necessary precautions and road signs to avoid roll over, braking hazards and possible accidents
- PC24.** Always remain alert while driving and handle stress effectively
- PC25.** Limit stoppages as per prescribed norms and justify any additional stoppages.

Traffic regulations

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

- PC26.** Follow state-specific traffic regulations, including lane discipline, and adhere to lawful procedures while changing lanes or turning.
- PC27.** Maintain a safe following distance from other vehicles and clearly signal your intentions using appropriate indicators. Respond appropriately to permanent and temporary traffic signals, road signs, markings, and hand signals from traffic personnel, using a safe and systematic driving routine.
- PC28.** Use indicators and parking lights when stationary; Choose a safe, legal, and convenient location for stopping the vehicle when required.
- PC29.** Secure the vehicle safely on gradients using hand brakes and wheel chocks; check for approaching cyclists, pedestrians, and other vehicles before opening the door
- PC30.** Remain calm and composed in challenging situations such as traffic congestion or accidents. Avoid confrontations or disputes with other road users and members of the public.
- PC31.** Give priority and right of way to children, the elderly, and persons with disabilities, ensuring their safety and comfort on the road.
- PC32.** Observe movement of pedestrians and stray animals to avoid collision
- PC33.** Comply with relevant rules and best practices when dealing with the general public, and demonstrate awareness and compassion toward stray animals on the road.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** Company's guidelines on safe driving practices, system and processes to ensure safe driving
- KU2.** Reporting structure
- KU3.** Escalation procedure
- KU4.** Safe driving techniques such as avoiding over speeding and following prescribed limits, maintaining a safe distance from other vehicles, avoiding holes, stones, and other strewn objects in case of bridges and underpasses, and avoiding driving when water level is above dangerous mark
- KU5.** Alternate routes in case of natural calamity, road construction work etc.

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- KU6.** Troubleshooting techniques in the event of technical problems like changing wheels using a jack
- KU7.** Traffic regulations
- KU8.** Elements of good driving habits for obtaining fuel efficiency: avoid clutch riding, avoid frequent changing of gears, avoid frequent braking, avoid over speeding, avoid idling of engine beyond a reasonable limit, avoid high idling speed setting in the engine, ensure there is no brake binding, obtain right grade of fuel from authorized outlets only, ensure correct quantity of fuel received as per bill
- KU9.** Driving Efficiency and Eco-Driving Techniques
- KU10.** Fitness of vehicle for safe driving
- KU11.** Awareness of fatigue management practices and the importance of adequate rest to ensure safe driving.
- KU12.** Breakdown condition
- KU13.** Accident and medical emergencies

Generic Skills (GS)

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

- GS1.** Communicate effectively in the local language and also preferably basic spoken Hindi and basic written English
- GS2.** Communicate information in a format that meets the requirements
- GS3.** Seamless coordination with colleagues
- GS4.** Assist others who require help
- GS5.** Take help from Assistant or junior driver
- GS6.** Stay updated with the new vehicle technologies and functionalities
- GS7.** Gain knowledge/ experience from working on different routes
- GS8.** When on long distance/ inter-state schedule , plan the trip keeping in mind regulations like no entry times and municipal limits in urban areas
- GS9.** Plan and drive based on traffic and road condition using radio links/navigation aids where available
- GS10.** Plan safe handling of life and materials as per the exact load being transported e.g. Special people groups like children, elderly, differently abled or perishable, hazardous goods
- GS11.** Assess the problem, evaluate the possible solution(s) and use an optimum /best possible solution(s)
- GS12.** Identify immediate or temporary solutions to resolve delays and crises
- GS13.** Manage children, aged and differently abled individuals
- GS14.** Effective tackling of passengers and public who may be stressed, frustrated, confused, or angry
- GS15.** Build passenger friendly work environment and use customer centric approach to resolve crisis
- GS16.** Resolve conflict while dealing with public
- GS17.** Resolve technical and non-technical problems

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Efficient driving of LMO tankers</i>	15.5	33	-	6
PC1. Follow the standard driving practices while driving LMO tankers	0.5	2	-	0.5
PC2. Follow the working/driving hours assigned; in case of emergency, comply with instructions regarding extended hours.	1	2	-	0.5
PC3. Follow prescribed work and rest schedules to manage fatigue and ensure safe driving	1	1	-	-
PC4. Operate the vehicle with a co-driver when assigned during emergency situations.	1	2	-	-
PC5. Follow the safety precautions while loading liquid oxygen to the tankers	1	2	-	0.5
PC6. Maintain a speed limit of 10 km/hr within the factory premises before loading oxygen	0.5	1	-	0.5
PC7. Check the availability of cones, signs, PPE, emergency kit, etc.	0.5	2	-	0.5
PC8. Check the decanting and venting procedures before driving	1	2	-	0.5
PC9. Follow the safety precautions while parking LMO tankers	1	2	-	0.5
PC10. Park the vehicle only on open ground with sufficient air circulation; do not park under high-tension cables (11kV).	0.5	1	-	-
PC11. Check the pressure gauge once every 4 hours	0.5	3	-	0.5
PC12. Follow the safety precautions while unloading the liquid oxygen and exiting the delivery site	1	2	-	0.5
PC13. Maintain a speed limit of 5 Km/hr while driving at the delivery site	1	2	-	0.5

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. Follow the safety precautions during the empty return of tankers	1	2	-	0.5
PC15. Ensure that TREM (Transport Emergency) Card and Safety Data Sheet (SDS) are carried at all times and adhered to.	1	1	-	-
PC16. Ensure the availability of Emergency Number and Valid Chief Controller of Explosives (CCoE) Peso Certificate	0.5	2	-	-
PC17. Follow the assigned geo-fenced route without deviation; if the vehicle enters unspecified zones or misses the route, alerts will be raised.	1	1	-	-
PC18. Enter city limits only after 11 PM and exit before 4 AM, or as per the traffic regulations of the respective city.	1	1	-	-
PC19. Follow Eco-Driving Practices and Emission Compliance to Encourage fuel-saving and low-emission	0.5	2	-	0.5
<i>Defensive Driving techniques</i>	3.5	11	-	1
PC20. Apply various defensive driving techniques while overtaking, parking, stopping, driving in the rain, driving at night, etc., while maneuvering through turns and curves.	0.5	2	-	0.5
PC21. Practice the mechanism of managing cargo pressure on the road while driving on curvy roads, braking hazards, etc.	0.5	2	-	-
PC22. Use safe driving principles to assess risks and make prompt, situation-based decisions.	0.5	2	-	0.5
PC23. Follow necessary precautions and road signs to avoid roll over, braking hazards and possible accidents	1	2	-	-
PC24. Always remain alert while driving and handle stress effectively	0.5	2	-	-
PC25. Limit stoppages as per prescribed norms and justify any additional stoppages.	0.5	1	-	-
<i>Traffic regulations</i>	11	16	-	3

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. Follow state-specific traffic regulations, including lane discipline, and adhere to lawful procedures while changing lanes or turning.	1	2	-	0.5
PC27. Maintain a safe following distance from other vehicles and clearly signal your intentions using appropriate indicators. Respond appropriately to permanent and temporary traffic signals, road signs, markings, and hand signals from traffic personnel, using a safe and systematic driving routine.	2	2	-	0.5
PC28. Use indicators and parking lights when stationary; Choose a safe, legal, and convenient location for stopping the vehicle when required.	1	2	-	0.5
PC29. Secure the vehicle safely on gradients using hand brakes and wheel chocks; check for approaching cyclists, pedestrians, and other vehicles before opening the door	1	2	-	-
PC30. Remain calm and composed in challenging situations such as traffic congestion or accidents. Avoid confrontations or disputes with other road users and members of the public.	2	2	-	0.5
PC31. Give priority and right of way to children, the elderly, and persons with disabilities, ensuring their safety and comfort on the road.	1	2	-	0.5
PC32. Observe movement of pedestrians and stray animals to avoid collision	2	2	-	-
PC33. Comply with relevant rules and best practices when dealing with the general public, and demonstrate awareness and compassion toward stray animals on the road.	1	2	-	0.5
NOS Total	30	60	-	10

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National Occupational Standards (NOS) Parameters

NOS Code	LSC/N1015
NOS Name	Operate and Drive the LMO Tanker safely and efficiently
Sector	Logistics
Sub-Sector	Land Transportation
Occupation	Transport Operations, Vehicle Operations
NSQF Level	4
Credits	3
Version	2.0
Last Reviewed Date	06/02/2026
Next Review Date	06/02/2029
NSQF Clearance Date	06/02/2026

Qualification Pack

LSC/N1013: Handle Liquid Medical Oxygen

Description

This NOS details the special precautions and steps to be undertaken while handling Liquid Medical Oxygen

Scope

The scope covers the following :

- Safety precautions while handling LMO

Elements and Performance Criteria

Safety precautions while handling LMO

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

- PC1.** Wear appropriate clothing and PPE (face and head shield, full sleeves, covered clothing, covered shoes, 100% cotton or wool, cryogenic gloves) while handling liquid oxygen
- PC2.** Ensure that PPE is worn at all times and any clothing coming in contact with liquid oxygen must be removed immediately
- PC3.** Ensure that there is no smoking, cooking or open flames in any area where liquid oxygen is stored or handled
- PC4.** Ensure that no liquid oxygen or oxygen-enriched air comes in contact with flammable or combustible substances of any kind
- PC5.** Use only oxygen-compatible materials and lubricants
- PC6.** Check that the Cryogenic containers are always in an upright position while being transported, handled or stored
- PC7.** Ensure that the cryogenic containers are not tipped, slided or rolled on their side while moving
- PC8.** Use a suitable hand truck or trolley for moving small containers
- PC9.** Avoid mechanical and thermal shock while moving cryogenic oxygen cylinders
- PC10.** Use only transfer lines and equipment designed for use with cryogenic liquids and ensure that they are well insulated
- PC11.** Ensure that the appropriate protocol is followed while loading of oxygen into tank
- PC12.** Inspect that a diffuser is attached to the transfer hose to reduce turbulence & release of gas while filling up from tanker
- PC13.** Review the decantation and venting procedure for the tank
- PC14.** Monitor the pressure gauge as per the prescribed guidelines and always wear a PPE
- PC15.** Follow the appropriate procedure for rupture disk and valve failure
- PC16.** Follow the emergency protocol for leaks, spills, rupture disk and valve failure
- PC17.** Follow all the statutory requirements of the chief controller of Explosives in India, SMPV rules and follow MSDS guidelines at all times during handling and transportation

Knowledge and Understanding (KU)

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The individual on the job needs to know and understand:

- KU1.** Guidelines on handling liquid medical oxygen
- KU2.** Applicable regulations such as Gas Cylinder Rules 2016 and amendments (version 1 amended 2025) relevant to handling and transport of liquid medical oxygen.
- KU3.** Hazards associated with liquid oxygen such as risks of cold burns, risk of asphyxiation etc
- KU4.** Organization's instructions or guidelines relating to dealing with and reporting safety and emergency issues
- KU5.** Methods of effective and appropriate communication to let others know about the safety, cleanliness and emergency situations
- KU6.** Where and how to get help in dealing with safety and emergency situations
- KU7.** Defensive driving techniques
- KU8.** Safety protocol for leaks, spills, rupture disks, accidents
- KU9.** Loading and decantation process for Liquid oxygen
- KU10.** Safety guidelines for monitoring pressure

Generic Skills (GS)

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

- GS1.** effectively communicate the safety and emergency issues
- GS2.** keep all the safety equipment in an organized manner so that there is no difficulty to find them
- GS3.** report potential sources of danger
- GS4.** follow prescribed procedure to address safety and emergency issues
- GS5.** assess impact of hazardous material, activity, incident

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Safety precautions while handling LMO</i>	30	60	-	10
PC1. Wear appropriate clothing and PPE (face and head shield, full sleeves, covered clothing, covered shoes, 100% cotton or wool, cryogenic gloves) while handling liquid oxygen	1	3	-	0.5
PC2. Ensure that PPE is worn at all times and any clothing coming in contact with liquid oxygen must be removed immediately	1	4	-	0.5
PC3. Ensure that there is no smoking, cooking or open flames in any area where liquid oxygen is stored or handled	1	3	-	0.5
PC4. Ensure that no liquid oxygen or oxygen-enriched air comes in contact with flammable or combustible substances of any kind	3	3	-	1
PC5. Use only oxygen-compatible materials and lubricants	2	4	-	0.5
PC6. Check that the Cryogenic containers are always in an upright position while being transported, handled or stored	2	3	-	1
PC7. Ensure that the cryogenic containers are not tipped, slided or rolled on their side while moving	2	4	-	1
PC8. Use a suitable hand truck or trolley for moving small containers	1	4	-	0.5
PC9. Avoid mechanical and thermal shock while moving cryogenic oxygen cylinders	1	4	-	0.5
PC10. Use only transfer lines and equipment designed for use with cryogenic liquids and ensure that they are well insulated	1	4	-	0.5
PC11. Ensure that the appropriate protocol is followed while loading of oxygen into tank	2	4	-	0.5
PC12. Inspect that a diffuser is attached to the transfer hose to reduce turbulence & release of gas while filling up from tanker	2	3	-	0.5

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. Review the decantation and venting procedure for the tank	3	3	-	0.5
PC14. Monitor the pressure gauge as per the prescribed guidelines and always wear a PPE	2	3	-	0.5
PC15. Follow the appropriate procedure for rupture disk and valve failure	2	3	-	0.5
PC16. Follow the emergency protocol for leaks, spills, rupture disk and valve failure	2	4	-	0.5
PC17. Follow all the statutory requirements of the chief controller of Explosives in India, SMPV rules and follow MSDS guidelines at all times during handling and transportation	2	4	-	0.5
NOS Total	30	60	-	10

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National Occupational Standards (NOS) Parameters

NOS Code	LSC/N1013
NOS Name	Handle Liquid Medical Oxygen
Sector	Logistics
Sub-Sector	Land Transportation
Occupation	Transport Operations, Vehicle Operations
NSQF Level	4
Credits	3
Version	2.0
Last Reviewed Date	06/02/2026
Next Review Date	06/02/2029
NSQF Clearance Date	06/02/2026

Qualification Pack

LSC/N1017: Handle Emergencies during LMO Transportation

Description

This NOS is about effectively handling different types of emergencies while transporting Liquid Medical Oxygen (LMO), including fire, leakage, breakdowns, road accidents, and medical emergencies. It covers preparedness, immediate response, coordination with emergency services, and post-incident procedures to ensure the safety of self, others, vehicle, and cargo.

Scope

The scope covers the following :

- Oxygen Leakage / Gas-Related Emergency
- Fire and Medical Emergency
- Road Accident / Vehicle Breakdown
- Safety and Evacuation
- Preparedness and Preventive Measures
- Documentation and Compliance

Elements and Performance Criteria

Oxygen Leakage / Gas-Related Emergency

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

- PC1.** Identify early signs of potential emergency situations such as hissing/unusual sounds, gas odour (oxygen leaks), pressure gauge fluctuations, or alerts from vehicle safety systems.
- PC2.** Monitor safety indicators in the vehicle (e.g., temperature, pressure) and react promptly to abnormalities.
- PC3.** Shut off valves only if it is safe for the driver to do so and isolate the LMO container if there's a suspected or visible leak.
- PC4.** Use safety equipment like spill kits or oxygen masks as per protocol.
- PC5.** Report any malfunction or wear and tear in LMO-specific components (e.g., pressure systems, valves, temperature control) to prevent breakdowns or leakage.

Fire and Medical Emergency

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

- PC6.** Identify fire risk from LMO vapor in oxygen-enriched environments.
- PC7.** Check whether it is safe to disconnect power sources.
- PC8.** Once confirmed, disconnect all power sources according to standard safety procedures.
- PC9.** Operate the battery cut-off switch immediately in case of emergency to eliminate any ignition source
- PC10.** Use appropriate firefighting equipment or sand to control minor fires, ensuring personal safety first.
- PC11.** Avoid use of water or incorrect extinguishing methods for LMO-related fires.
- PC12.** Call fire services immediately and provide details about LMO cargo.

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- PC13.** Park the vehicle in an isolated location, preferably against the wind, during emergencies to reduce risk of fire or exposure.
- PC14.** Evacuate the area and instruct others to maintain a safe distance (as per HAZMAT safety norms).
- PC15.** Administer first aid to self or others in case of minor injuries or health incidents (if trained).
- PC16.** Ensure that proper first aid kits for cold burns are available in the vehicle
- PC17.** Implement safety protocols for medical emergencies involving self or others (e.g., symptoms of hypoxia, heatstroke, or panic attacks), and administer first aid where appropriate.

Road Accident / Vehicle Breakdown

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

- PC18.** Activate emergency brakes and switch off the ignition safely if required; activate vehicle hazard indicators and place safety cones, reflective triangles, or barricades to warn other road users.
- PC19.** Inform authorities and follow vehicle breakdown protocols.
- PC20.** Coordinate with alternate transport or towing services.
- PC21.** Ensure bystanders and the public remain at a safe distance from the breakdown site by using cones, hazard lights, or warning signs

Safety and Evacuation

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

- PC22.** Turn on hazard lights and place warning triangles or cones to alert other road users.
- PC23.** Evacuate the area and instruct others to maintain a safe distance (as per HAZMAT safety norms).
- PC24.** Move the vehicle to a safe zone, if possible and safe to do so, to prevent escalation.
- PC25.** Secure the cargo area to prevent movement or spillage of LMO tanks during an emergency stop or accident.
- PC26.** Inform the control center, nearby emergency response teams, and local authorities (fire, police) immediately in case of a serious incident. Immediately contact the assigned company emergency SPOC
- PC27.** Cooperate fully with responding authorities and emergency personnel.
- PC28.** Maintain continuous communication with the company emergency coordination center throughout the incident to receive guidance and updates.
- PC29.** Carry and maintain an updated contact list of police, fire department, and emergency services for all locations along the route.

Preparedness and Preventive Measures

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

- PC30.** Conduct pre-trip safety and emergency equipment checks to minimize risk of in-transit incidents.
- PC31.** Participate in regular emergency response drills and simulations conducted by the employer or regulatory bodies.
- PC32.** Ensure emergency equipment (first aid kit, fire extinguisher, PPE, etc.) is regularly inspected and in working condition.

Documentation and Compliance

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

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- PC33.** Follow all safety and compliance procedures as laid out in LMO transport SOPs.
- PC34.** Ensure proper documentation of the incident, including time, location, nature of emergency, actions taken, persons involved, and reporting details.
- PC35.** Refer to and follow instructions provided in TREM (Transport Emergency) Card and Safety Data Sheet (SDS) during emergencies.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** LMO properties, hazards, and safety precautions as per Gas Cylinder Rules and PESO guidelines.
- KU2.** Types of emergencies likely to occur during LMO transportation and their implications.
- KU3.** Emergencies may arise not only due to gas but also due to liquid oxygen at extremely low temperatures (around-180 Degree Celsius).
- KU4.** Limitations of oxygen masks in LMO-related emergencies and the need for use of appropriate cryogenic personal protective equipment.
- KU5.** Contents of the TREM card, including details and contact information of first responders and related emergency services.
- KU6.** Emergency response plans, evacuation protocols, and SOPs laid out by the employer and authorities.
- KU7.** Locations of emergency services along major routes and helpline numbers.
- KU8.** Use of PPE, fire extinguishers, spill containment kits, and first aid equipment.
- KU9.** Use of Class D fire extinguishers and safe firefighting distances.
- KU10.** Emergency vehicle shutdown procedures.
- KU11.** Emergency braking and spill containment for cryogenic liquids.
- KU12.** Road safety protocols for hazardous material transport.
- KU13.** Importance of timely communication and reporting in mitigating hazards.
- KU14.** Legal and organizational responsibilities regarding accident reporting and compliance.
- KU15.** Dangers of asphyxiation and oxygen enrichment.
- KU16.** First aid, CPR, and handling cryogenic burns.
- KU17.** Symptoms of frostbite or asphyxiation from oxygen leaks.

Generic Skills (GS)

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

- GS1.** Read and understand emergency instruction manuals, SOPs, road signs, and warning labels.
- GS2.** Communicate clearly and concisely during stressful situations with authorities and team members.
- GS3.** Maintain composure and make logical decisions under pressure.
- GS4.** Record emergency details clearly in written format or through electronic means.
- GS5.** Follow instructions from control centers or emergency responders.



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GS6. Apply crowd control measures at the incident spot to ensure safety of the public and responders.

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Oxygen Leakage / Gas-Related Emergency</i>	5	10	-	2
PC1. Identify early signs of potential emergency situations such as hissing/unusual sounds, gas odour (oxygen leaks), pressure gauge fluctuations, or alerts from vehicle safety systems.	1	2	-	0.5
PC2. Monitor safety indicators in the vehicle (e.g., temperature, pressure) and react promptly to abnormalities.	1	2	-	0.5
PC3. Shut off valves only if it is safe for the driver to do so and isolate the LMO container if there's a suspected or visible leak.	1	2	-	0.5
PC4. Use safety equipment like spill kits or oxygen masks as per protocol.	1	2	-	-
PC5. Report any malfunction or wear and tear in LMO-specific components (e.g., pressure systems, valves, temperature control) to prevent breakdowns or leakage.	1	2	-	0.5
<i>Fire and Medical Emergency</i>	11	21	-	3
PC6. Identify fire risk from LMO vapor in oxygen-enriched environments.	1	2	-	0.5
PC7. Check whether it is safe to disconnect power sources.	1	2	-	0.5
PC8. Once confirmed, disconnect all power sources according to standard safety procedures.	1	2	-	-
PC9. Operate the battery cut-off switch immediately in case of emergency to eliminate any ignition source	1	2	-	-
PC10. Use appropriate firefighting equipment or sand to control minor fires, ensuring personal safety first.	1	2	-	0.5
PC11. Avoid use of water or incorrect extinguishing methods for LMO-related fires.	0.5	2	-	0.5

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. Call fire services immediately and provide details about LMO cargo.	1	2	-	-
PC13. Park the vehicle in an isolated location, preferably against the wind, during emergencies to reduce risk of fire or exposure.	1	1	-	-
PC14. Evacuate the area and instruct others to maintain a safe distance (as per HAZMAT safety norms).	1	2	-	0.5
PC15. Administer first aid to self or others in case of minor injuries or health incidents (if trained).	0.5	1	-	-
PC16. Ensure that proper first aid kits for cold burns are available in the vehicle	1	1	-	-
PC17. Implement safety protocols for medical emergencies involving self or others (e.g., symptoms of hypoxia, heatstroke, or panic attacks), and administer first aid where appropriate.	1	2	-	0.5
<i>Road Accident / Vehicle Breakdown</i>	2.5	7	-	1
PC18. Activate emergency brakes and switch off the ignition safely if required; activate vehicle hazard indicators and place safety cones, reflective triangles, or barricades to warn other road users.	1	2	-	0.5
PC19. Inform authorities and follow vehicle breakdown protocols.	0.5	1	-	-
PC20. Coordinate with alternate transport or towing services.	0.5	2	-	-
PC21. Ensure bystanders and the public remain at a safe distance from the breakdown site by using cones, hazard lights, or warning signs	0.5	2	-	0.5
<i>Safety and Evacuation</i>	6.5	14	-	2
PC22. Turn on hazard lights and place warning triangles or cones to alert other road users.	0.5	2	-	0.5

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. Evacuate the area and instruct others to maintain a safe distance (as per HAZMAT safety norms).	1	2	-	-
PC24. Move the vehicle to a safe zone, if possible and safe to do so, to prevent escalation.	1	2	-	0.5
PC25. Secure the cargo area to prevent movement or spillage of LMO tanks during an emergency stop or accident.	0.5	2	-	-
PC26. Inform the control center, nearby emergency response teams, and local authorities (fire, police) immediately in case of a serious incident. Immediately contact the assigned company emergency SPOC	1	2	-	0.5
PC27. Cooperate fully with responding authorities and emergency personnel.	0.5	2	-	-
PC28. Maintain continuous communication with the company emergency coordination center throughout the incident to receive guidance and updates.	1	1	-	0.5
PC29. Carry and maintain an updated contact list of police, fire department, and emergency services for all locations along the route.	1	1	-	-
<i>Preparedness and Preventive Measures</i>	2.5	3	-	1
PC30. Conduct pre-trip safety and emergency equipment checks to minimize risk of in-transit incidents.	1	1	-	-
PC31. Participate in regular emergency response drills and simulations conducted by the employer or regulatory bodies.	0.5	1	-	0.5
PC32. Ensure emergency equipment (first aid kit, fire extinguisher, PPE, etc.) is regularly inspected and in working condition.	1	1	-	0.5
<i>Documentation and Compliance</i>	2.5	5	-	1
PC33. Follow all safety and compliance procedures as laid out in LMO transport SOPs.	1	2	-	0.5

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC34. Ensure proper documentation of the incident, including time, location, nature of emergency, actions taken, persons involved, and reporting details.	0.5	2	-	0.5
PC35. Refer to and follow instructions provided in TREM (Transport Emergency) Card and Safety Data Sheet (SDS) during emergencies.	1	1	-	-
NOS Total	30	60	-	10

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	LSC/N1017
NOS Name	Handle Emergencies during LMO Transportation
Sector	Logistics
Sub-Sector	
Occupation	Transport Operations, Vehicle Operations
NSQF Level	4
Credits	3
Version	1.0
Last Reviewed Date	06/02/2026
Next Review Date	06/02/2029
NSQF Clearance Date	06/02/2026

Qualification Pack

LSC/N1304: Health, safety and security procedures for drivers

Description

This unit is about ensuring compliance with health, safety and security procedures

Scope

The scope covers the following :

- Follow health, safety and security procedures
- Ensure compliance to health, safety and security

Elements and Performance Criteria

Follow health, safety and security procedures

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

- PC1.** Make note of all safety processes in different location (cargo loading area, ramp operation area, etc.) with reference to area of operation.
- PC2.** Wear all PPE such as goggles, ear plugs, helmet, mask, shoes, etc. as applicable in the cargo movement area.
- PC3.** Follow standard driving practice to ensure safety of life and material.
- PC4.** Follow organizational protocol to deploy action in case of signs of any emergency situation or accident or breach of safety.
- PC5.** Undertake periodical preventive health check ups and stay physically fit for driving attentively.
- PC6.** Undertake fitness test including mandatory certified eye test once every 6 months.
- PC7.** Take appropriate breaks, have adequate sleep, drink water etc and perform stretch exercises when required.
- PC8.** Follow security procedures like green gate in port, customs area, factory security, etc.
- PC9.** Comply with data safety regulations of the organisation.
- PC10.** Follow standard safety procedures and precautions while handling hazardous / fragile cargo.

Ensure compliance to safety and security

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

- PC11.** Recognise unsafe conditions and safety practices at the loading area and report it to concerned authority.
- PC12.** Inspect the activity area and equipment for appropriate, safe condition.
- PC13.** Always follow road safety and traffic rules.
- PC14.** Never drink alcohol before or during your trip and avoid taking medication without doctor consultation during driving.
- PC15.** Undergo alcohol check-up before every trip and ensure zero alcohol consumption.
- PC16.** Comply with Alcohol Detector Sensor (ADS) readings installed in the vehicle
- PC17.** Check if extinguishers and safety gear are available in the vehicle and in working condition.
- PC18.** Participate in fire drills of the organization.

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- PC19.** Ensure that standard material handling procedure are being followed while loading.
- PC20.** Check if all the safety and security related tags, labels and signage are placed in the cargo.
- PC21.** Confirm if loading instrument is certified and operational.
- PC22.** Implement 5S at workplace.
- PC23.** Check if cargo has passed security checks and report in case of any violation.
- PC24.** In case of accident/ collision, check whether everyone involved are fine, and treat for medical injuries as needed and to the level of your training and inform to authorities/ medical team and follow SOP.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** health, safety and security policies and procedures
- KU2.** special instructions for hazardous cargo handling
- KU3.** defined standard operating procedures
- KU4.** risk and impact of not following defined procedures/work instructions with reference to health, safety and security operations
- KU5.** use of fire extinguishers and the importance of undergoing training from a certified third party for handling fire-related emergencies.
- KU6.** escalation matrix for reporting identified problem
- KU7.** basics of Occupational Safety and Health Administration (OSHA)
- KU8.** need for periodic refresher training on safety procedures and regulatory requirements.
- KU9.** implementation and practice of 5S
- KU10.** necessary security procedures for airport, customs area, etc.
- KU11.** tools and equipment for material handling
- KU12.** standard material handling procedures while handling cargo
- KU13.** safety and security signage and their functions
- KU14.** different security tags, labels and signage
- KU15.** handling procedure for hazardous / fragile cargo
- KU16.** security procedures for dangerous / hazardous shipment
- KU17.** different PPE, their usage and purpose
- KU18.** safe driving techniques

Generic Skills (GS)

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

- GS1.** effectively communicate during emergency issues
- GS2.** keep all the safety equipment in an organized manner so that there is no difficulty to find them
- GS3.** report potential sources of danger
- GS4.** follow prescribed procedure to address safety and emergency issues



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GS5. learn from past mistakes

GS6. assess impact of hazardous material, activity, incident

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Follow health, safety and security procedures</i>	14	25	-	4
PC1. Make note of all safety processes in different location (cargo loading area, ramp operation area, etc.) with reference to area of operation.	2	3	-	1
PC2. Wear all PPE such as goggles, ear plugs, helmet, mask, shoes, etc. as applicable in the cargo movement area.	2	3	-	1
PC3. Follow standard driving practice to ensure safety of life and material.	1	2	-	-
PC4. Follow organizational protocol to deploy action in case of signs of any emergency situation or accident or breach of safety.	1	3	-	-
PC5. Undertake periodical preventive health check ups and stay physically fit for driving attentively.	1	2	-	-
PC6. Undertake fitness test including mandatory certified eye test once every 6 months.	1	2	-	-
PC7. Take appropriate breaks, have adequate sleep, drink water etc and perform stretch exercises when required.	1	3	-	-
PC8. Follow security procedures like green gate in port, customs area, factory security, etc.	1	3	-	-
PC9. Comply with data safety regulations of the organisation.	2	2	-	1
PC10. Follow standard safety procedures and precautions while handling hazardous / fragile cargo.	2	2	-	1
<i>Ensure compliance to safety and security</i>	16	35	-	6
PC11. Recognise unsafe conditions and safety practices at the loading area and report it to concerned authority.	1	3	-	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. Inspect the activity area and equipment for appropriate, safe condition.	1	2	-	1
PC13. Always follow road safety and traffic rules.	2	2	-	-
PC14. Never drink alcohol before or during your trip and avoid taking medication without doctor consultation during driving.	1	3	-	-
PC15. Undergo alcohol check-up before every trip and ensure zero alcohol consumption.	1	2	-	-
PC16. Comply with Alcohol Detector Sensor (ADS) readings installed in the vehicle	1	2	-	-
PC17. Check if extinguishers and safety gear are available in the vehicle and in working condition.	1	3	-	-
PC18. Participate in fire drills of the organization.	1	3	-	-
PC19. Ensure that standard material handling procedure are being followed while loading.	1	3	-	1
PC20. Check if all the safety and security related tags, labels and signage are placed in the cargo.	1	3	-	1
PC21. Confirm if loading instrument is certified and operational.	1	2	-	-
PC22. Implement 5S at workplace.	1	2	-	1
PC23. Check if cargo has passed security checks and report in case of any violation.	1	2	-	-
PC24. In case of accident/ collision, check whether everyone involved are fine, and treat for medical injuries as needed and to the level of your training and inform to authorities/ medical team and follow SOP.	2	3	-	1
NOS Total	30	60	-	10

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	LSC/N1304
NOS Name	Health, safety and security procedures for drivers
Sector	Logistics
Sub-Sector	Land Transportation
Occupation	Vehicle Operations, Transport Operations
NSQF Level	4
Credits	1
Version	2.0
Last Reviewed Date	06/02/2026
Next Review Date	06/02/2029
NSQF Clearance Date	06/02/2026

Qualification Pack

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

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Introduction to Employability Skills

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

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

Constitutional values - Citizenship

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

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

Becoming a Professional in the 21st Century

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

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

Basic English Skills

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

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

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team

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Diversity & Inclusion

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

PC7. communicate and behave appropriately with all genders and PwD

PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

PC9. use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

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

Essential Digital Skills

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

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

PC13. use internet and social media platforms securely and safely

Entrepreneurship

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

PC14. identify and assess opportunities for potential business

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

Customer Service

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

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

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

KU5. how to use basic spoken English language

KU6. Do and dont of effective communication

KU7. inclusivity and its importance

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

KU9. different types of financial products and services

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

Generic Skills (GS)

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

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

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Assessment Criteria

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

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

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	12/03/2026
Next Review Date	12/03/2029
NSQC Clearance Date	12/03/2026

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) 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 centre (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria
5. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS
6. In case of unsuccessful completion, the trainee may seek re-assessment on the Qualification Pack

Minimum Aggregate Passing % at QP Level : 70

Qualification Pack

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

Minimum Passing % at NOS Level: 50

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

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
LSC/N1014.Carry out maintenance and ensure roadworthiness of LMO vehicle	30	60	0	10	100	20
LSC/N1015.Operate and Drive the LMO Tanker safely and efficiently	30	60	0	10	100	20
LSC/N1013.Handle Liquid Medical Oxygen	30	60	0	10	100	20
LSC/N1017.Handle Emergencies during LMO Transportation	30	60	0	10	100	20
LSC/N1304.Health, safety and security procedures for drivers	30	60	-	10	100	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
Total	170	330	-	50	550	100



Qualification Pack

Acronyms

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

Qualification Pack

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.

Qualification Pack

Knowledge and Understanding (KU)	<p>Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.</p>
Organisational Context	<p>Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.</p>
Technical Knowledge	<p>Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</p>
Core Skills/ Generic Skills (GS)	<p>Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.</p>
Electives	<p>Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.</p>
Options	<p>Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.</p>