



Model Curriculum

QP Name: Commercial Vehicle Driver - LMO

QP Code: LSC/Q1005

QP Version: 1.0

NSQF Level: 4

Model Curriculum Version: 1.0

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Training Parameters

Sector	Logistics
Sub-Sector	Land Transportation
Occupation	Driving
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8331.0301
Minimum Educational Qualification and Experience	Class V 3 years' experience as driver
Pre-Requisite License or Training	HMV License
Minimum Job Entry Age	20 Years
Last Reviewed On	
Next Review Date	
NSQC Approval Date	
QP Version	1.0
Model Curriculum Creation Date	15/06/2021
Model Curriculum Valid Up to Date	15/06/2022
Model Curriculum Version	1.0
Minimum Duration of the Course	217 hrs
Maximum Duration of the Course	217 hrs

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Assess the road worthiness of the vehicle as per organizational requirements, CMVR guidelines, safety requirements for Liquid Medical Oxygen (LMO), health and COVID-19 precautions.
- Demonstrate efficient driving of LMO tankers as per SOP and safety guidelines.
- Demonstrate defensive driving techniques.
- Follow company's guidelines on safe driving practices; system and processes to ensure safe driving
- Follow appropriate safety measures while driving LMO tankers.
- Follow appropriate health and COVID-19 precautions while driving LMO tankers.

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
ASC/N9703: Assess and ensure road worthiness of the vehicle. NOS Version 1.0 NSQF Level 4	32:00	40:00	00:00	00:00	72:00
Module 1:Assessment of vehicle for road worthiness	32:00	40:00	00:00	00:00	72:00
ASC/N9705: Drive safely and efficiently on the assigned route, including long distance trips NOS Version 1.0 NSQF Level 4	32:00	40:00	00:00	00:00	72:00

Module 2: Driving safely and efficiently	32:00	40:00	00:00	00:00	72:00
ASC/N0012: Practice HSE and security related guidelines NOS Version 1.0 NSQF Level 4	33:00	40:00	00:00	00:00	73:00
Module 3: Compliance to health and safety measures	33:00	40:00	00:00	00:00	73:00
Total Duration	97:00	120:00	00:00	00:00	217:00

Module Details

Module 1: Assessment of vehicle for road worthiness

Mapped to ASC/N9703, v.1.0

Terminal Outcomes:

- Assess the road worthiness of the vehicle as per organizational requirements, CMVR guidelines, safety requirements for LMO, health and COVID-19 precautions.

Duration: 32:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Explain the requirements related to legal and compliance matters such as CMVR guidelines. List the steps of performing basic technical check before the trip. Explain the process of escalating vehicle defects and other issues to superiors. Interpret technical standards of vehicle operation. Discuss the details of the key elements involved in deciding when the vehicle should not be used due to technical and/or compliance issues. List the steps involved in Pre-Trip planning. Describe the special conditions to be considered for LMO. Describe the organization’s policies on road worthiness requirement. 	<ul style="list-style-type: none"> Examine the road worthiness as per guidelines for driving bulk liquid containers, health, and COVID-19 precautions, and LMO guidelines. Demonstrate the checks to be performed in the pre-trip planning of transporting LMO tankers.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Simulators, Cut sectioned models, Heavy motor vehicle for practical.	

Module 2: Driving safely and efficiently

Mapped to ASC/N9705, v.1.0

Terminal Outcomes:

- Demonstrate efficient driving of LMO tankers as per SOP and safety guidelines.
- Demonstrate defensive driving techniques.

Duration: 32:00	Duration: 40:00
<p>Theory – Key Learning Outcomes</p> <ul style="list-style-type: none"> • Describe the health, safety, and security procedures to be followed while driving a commercial vehicle. • Describe the standard driving practices for driving LMO tankers. • List the traffic rules and regulations. • Discuss the mechanism of managing cargo pressure on the road, driving on curvy roads, braking hazards, etc. • Discuss the various defensive driving techniques regarding overtaking, parking, stopping, driving in the rain, driving at night etc. • Explain the steps and safety precautions to be followed while parking LMO tankers. • Describe the steps and safety precautions to be followed during the empty return of LMO tankers. 	<p>Practical – Key Learning Outcomes</p> <ul style="list-style-type: none"> • Demonstrate driving of LMO tankers as per SOP and safety guidelines. • Demonstrate defensive driving techniques. • Demonstrate parking of LMO tankers as per SOP and safety guidelines. • Demonstrate the use of local language to communicate effectively.
<p>Classroom Aids:</p> <p>Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser</p>	
<p>Tools, Equipment and Other Requirements</p> <p>HMV vehicle for practical, Cut sectional models, Simulator</p>	

Module 3: Compliance to health and safety measures

Mapped to ASC/N0012, v.1.0

Terminal Outcomes:

- Apply safety and security measures while driving LMO tankers as per SOP and guidelines.

Duration: 33:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Describe the health, safety, and security procedures in driving the commercial vehicle – LMO tankers. Explain the dangers of LMO. Describe the health and COVID-19 precautions to be followed while driving LMO tankers. Explain the concept of 5S at the workplace. Explain the standard operating procedure for handling LMO tankers. Discuss the standard protocol in case of emergency situations, accidents, and breach of safety. 	<ul style="list-style-type: none"> Demonstrate the safety precautions while driving LMO tankers. Demonstrate the 5S procedure at the workplace. Inspect the vehicle for appropriate and safe conditions. Detect unsafe working conditions. Inspect adherence to SOP while handling LMO tankers. Demonstrate the standard protocol to be followed in case of emergency situations, accidents, and breach of safety. Prepare a note on health, safety, and security violations.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Fire extinguisher, HMV for practical, safety equipment	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
12 th pass		2	LMO Storage and Transportation Handling	-		Trainer must be Training of Trainers (TOT) certified

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Commercial vehicle driver - LMO” mapped to QP: “LSC/Q1005 v1.0”. Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “MEP/Q2601”. Minimum accepted score is 80%

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
12th pass	N/A	2	LMO Storage and Transportation Handling	-		Assessor must be Training of Assessors (TOA) Certified

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Commercial Vehicle Driver – LMO” mapped to QP: “LSC/Q1005 v1.0” with minimum score of 80%.	Recommended that the Trainer is certified for the Job Role: “Assessor”, mapped to the Qualification Pack: “MEP/Q2701” with minimum score of 80%.

Assessment Strategy

The emphasis is on 'learning-by-doing' and practical demonstration of skills and knowledge based on the performance criteria. Accordingly, assessment criteria for each job role is set and made available in qualification pack.

The assessment papers for both theory and practical would be developed by Subject Matter Experts (SME) hired by Logistics Sector Skill Council or with the LSC accredited Assessment Agency as per the assessment criteria mentioned in the Qualification Pack. The assessments papers would also be checked for the various outcome-based parameters such as quality, time taken, precision, tools & equipment requirement etc.

Each NOS in the Qualification Pack (QP) is assigned a relative weightage for assessment based on the criticality of the NOS. Therein each Element/Performance Criteria in the NOS is assigned marks on relative importance, criticality of function and training infrastructure.

The following tools would be used for final assessment:

1. Practical Assessment: This comprises of a creation of mock environment in the skill lab which is equipped with all equipment required for the qualification pack.

Candidate's soft skills, communication, aptitude, safety consciousness, quality consciousness etc. is ascertained by observation and marked in observation checklist. The outcome is measured against the specified dimensions and standards to gauge the level of their skill achievements.

2. Viva/Structured Interview: This tool is used to assess the conceptual understanding and the behavioral aspects with regard to the job role and the specific task at hand. It also includes questions on safety, quality, environment, and equipment etc.

3. On-Job Training: OJT would be evaluated based on standard log book capturing departments worked on, key observations of learner, feedback and remarks of supervisor or mentor.

4. Written Test: Question paper consisting of 100 MCQs (Hard:40, Medium:30 and Easy: 30) with questions from each element of each NOS. The written assessment paper is comprised of following types of questions:

- i. True / False Statements
- ii. Multiple Choice Questions
- iii. Matching Type Questions.
- iv. Fill in the blanks
- v. Scenario based Questions
- vi. Identification Questions

QA Regarding Assessors:

Assessors are selected as per the "eligibility criteria" laid down by LSC for assessing each job role. The assessors selected by Assessment Agencies are scrutinized and made to undergo training and introduction to LSC Assessment Framework, competency-based assessments, assessors guide etc. LSC conducts "Training of Assessors" program from time to time for each job role and sensitize

assessors regarding assessment process and strategy, which is outlined on following mandatory parameters:

- 1) Guidance regarding NSQF
- 2) Qualification Pack Structure
- 3) Guidance for the assessor to conduct theory, practical and viva assessments
- 4) Guidance for trainees to be given by assessor before the start of the assessments.
- 5) Guidance on assessments process, practical brief with steps of operations practical observation checklist and mark sheet
- 6) Viva guidance for uniformity and consistency across the batch.
- 7) Mock assessments
- 8) Sample question paper and practical demonstration

References

Glossary

Term	Description
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.

Acronyms and Abbreviations

Term	Description
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards