



SAFETY BULLETIN 29/21

Training: Induction and Refresher Training of Drivers, Management and Other Transport Function Personnel

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Introduction

In most of the Asian countries the local authorities require training of persons involved in the transportation of dangerous goods and training of the vehicle crew. And even some of the Nations require training for the drivers to obtain a license or permit to operate the type of vehicle used for transport. However, the experience in the gas industry demonstrates that the knowledge and skills acquired from this training requires supplementing with training specific for the industrial and medical gases industry to ensure the safe distribution of gases.

Scope

This Safety Bulletin gives advice on the type of training drivers and other transport function personnel should receive when working with products of Class 2 for the industrial and medical gases industry.

Learning more about training

1. Do the drivers have the necessary practical experience with the vehicle and the load before they make journeys and deliveries?
2. Are the drivers and other transport function personnel informed on the incidents and accidents which have taken place in their field of work?
3. Are the drivers and other transport function personnel aware of the specific dangers related to the transport of gases?
4. Do the drivers and loaders know and understand the operating procedures (for example loading, load securing, unloading, preparation procedures for transfilling and operation of specific product handling equipment) and legal requirements they have to apply?
5. Do the drivers and other transport function personnel know what to do in case of emergency?
6. Are all the persons responsible for logistics aware of the constraints of the driver on the road?
7. Do drivers and other transport function personnel know the road safety policy of your company?

8. Are drivers and other transport function personnel aware of the transport related security guidelines of your company?
9. Do you provide drivers with reference materials, for example handbooks?
10. Are drivers trained on driver assist technologies fitted to the vehicle?

If the answer to any of the above questions is 'no', then you should consider taking action!

THIS TRANSPORT SAFETY BULLETIN DESCRIBES THE CONTENT OF THE THEORETICAL AND PRACTICAL TRAINING WHICH SHALL BE FOLLOWED BY DRIVERS AND TRANSPORT FUNCTION PERSONNEL. THIS CONTENT CAN INCLUDE THE REQUIREMENTS OF NATIONAL REGULATIONS.

Driver theoretical training content

In addition to the training required by international, national and local regulations, the driver should receive additional specific training dedicated to the gas or gases to be transported, the type of containment and vehicle equipment (so that the driver is able to identify unsafe situations and react to them). This should include:

- product properties and hazards;
- labelling;
- documentation required for transporting gases;
- vehicle safety equipment;
- personal protective equipment required for the task;
- characteristics of the containment (for example cylinder, bundle, tube, tank, etc.);
- specific loading, load securing and unloading procedures and equipment, relevant to their activity;
- load limitation of the vehicle;
- inspection procedures (for example check list before departure at the beginning of the journey or after parking); and
- safe and secure parking of the vehicle.

Training should also include additional on the road safety items, such as:

- feedback of the incidents / accidents which occurred in the corresponding activity;
- emergency procedures that have to be applied in the event of an incident / accident (for example firefighting);
- instructions of the company on road safety policy (including mobile phone policy);
- transport related company security guidelines;
- the risks of driving including the effects of alcohol, drugs, medication, distraction and fatigue;
- defensive driver training;
- behaviour based safety;
- rollover prevention training (see AIGA TP 18/15 Vehicle Rollover Prevention)
- fatigue prevention training;
- use of driver assist vehicle technologies; and
- accident and incident reporting process.

The method of delivering theoretical training to drivers should be structured in a way to enable the driver to fully benefit from the training content. Consideration should be given to the sequence of the materials, for example, it may help the driver to first spend some time familiarizing themselves with the equipment under supervision before they receive training on how to operate it. Drivers are not used to sitting in classrooms all day so breaking the course content up into smaller modules may help. Practical training, using video or e-learning rather than PowerPoint presentation will also help.

Consideration should be given to ad-hoc training for specific topics which may not be part of the driver's regular curriculum. For example, run a safety campaign on winter driving in the autumn. It may be beneficial to deliver this type of training in small bite sized segments, so called snackable training. These can be short, 1 to 2 minutes, videos designed to give a specific message about a specific topic.

The training modules should be updated as often as necessary, especially when a significant change or event has occurred (for example procedure updates, accident/incident).

Driver training on the job (practical training)

A driver trainer (for example master driver or lead driver) should work closely with the new driver, in order to:

- provide the driver with practical training on relevant driving, loading, load securing, unloading and emergency procedures;
- ensure the driver is familiar and confident with the type of vehicles and equipment to be used and product to be handled;
- provide practical demonstration of elements difficult to comprehend in the theoretical training (for example detection of unsafe situations, practical ways to anticipate or react); and
- assess the driver's ability to apply the procedures and safety instructions.

EACH DRIVER SHOULD RECEIVE REFERENCE MATERIAL CONTAINING THE INFORMATION GIVEN DURING THE TRAINING

Management and other transport function personnel training

What kind of training is necessary shall be determined based on the personnel's responsibilities and duties. Employees shall be trained before assuming responsibilities and shall only perform functions, for which required training has not yet been provided, under the direct supervision of a trained person. The following is an extract from national regulatory agency giving the form of the training:

- Personnel shall be familiar with the general requirements of the provisions for the carriage of dangerous goods.
- Personnel shall be trained, commensurate directly with their duties and responsibilities in the requirements of the regulations concerning the carriage of dangerous goods.
- Safety training:
 - Commensurate with the degree of risk of injury or exposure arising from an incident involving the carriage of dangerous goods, including loading, load securing and unloading, personnel shall be trained in the hazards and dangers presented by dangerous goods.
 - The training provided shall aim to make personnel aware of the safe handling and emergency response procedures.

In addition, AIGA recommends including training on the following:

- company road safety policy; and
- background and causes of accidents and incidents.

Conclusions

Periodically, the drivers and transport function personnel shall receive refresher training which consists of at least:

- major items of the initial training module; and
- changes or events which occurred since the last training (for example regulations, procedures, organizational learnings, updates or accidents).

Training qualification

At the end of any training session, the individual should pass a test or complete a competence assessment in order to check their knowledge and understanding after the training courses. If the result of the test / assessment is not satisfactory, the individual should undergo retraining and retake the test / assessment until they pass or are judged ready to perform the task.

A schedule and records should be kept of any training for all drivers and transport function personnel.

References

[1] *European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)*,

www.unece.org

[2] EIGA Info TS02, *Vehicle Rollover and Other Serious Vehicle Incident Prevention*, www.eiga.eu

[3] AIGA Safety Bulletin, *Transportation Safety - Challenges & Improvement Strategy*. www.asiaiga.org

Further information

1. EIGA Info TS01, *Transport Safety Information, an Overview*, www.eiga.eu
2. EIGA Doc 52, *Load Securing of Class 2 Receptacles*, www.eiga.eu
3. EIGA Doc 56, *CO2 Tanker Driver Manual*, www.eiga.eu
4. AIGA 092, *Prevention of Tow-Away Accidents*, www.asiaiga.org
5. EIGA Doc 81, *Road Vehicle Emergency and Recovery*, www.eiga.eu
6. EIGA Doc 173, *ADR Transport Security Guidelines*, www.eiga.eu
7. EIGA NL 88, *Safety Newsletter on Rollover accidents*, www.eiga.eu
8. AIGA TP 10, *Safe Driving in Bad Weather Conditions*, www.asiaiga.org
9. AIGA TP 18, *Vehicle Rollover Prevention*, www.asiaiga.org

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