



SAFETY TRAINING OF EMPLOYEES

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Prepared by the Safety Advisory Council

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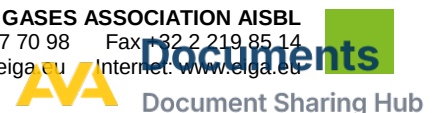


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Amendments to 23/08

Section	Change
All	Editorial revision to include references and latest EIGA style.
3.1	Publications terminology added.
All	Complete rewrite
Leaflets 01 to 22	Moved to individual Safety Training Leaflets in series Doc. 23.xx

1 Introduction

In the gases industry, accidents can and unfortunately do occur at all stages of manufacturing and handling such as production, cylinder filling and handling, maintenance and distribution.

Accidents also occur during the transportation of gases or while performing activities at customer sites, such as installation of equipment and maintenance of installed equipment.

Training helps people acquire the skills, knowledge and attitudes to make them competent in the health and safety aspects of their routine and non-routine work. Competence of staff is a key part of safe operation and it contributes to an effective safety culture.

EU Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work [1]¹ stipulates in its Article 12 that “The employer shall ensure that each worker receives adequate Safety & Health training”. However, regulations, being generic by nature, do not provide sufficiently detailed guidelines as to the content of the training required in a specific industry. This publication collates and shares the vast experience acquired by the industrial and medical gases industry in training employees.

2 Scope and purpose

2.1 Scope

This publication covers the key subject areas related to safety training of staff working for or in the name of EIGA Member companies. Although many recommendations of this publication may apply, it is not intended to cover contracted activities which have to follow specific rules (For examples see EIGA Info TS 03 *Training: induction and refresher training of drivers, management and other transport function personnel* [2] and EIGA Doc 118 *Safe Management of Contractors* [3]).

2.2 Purpose

This publication is intended to serve as a set of guidelines for company managers to develop their own safety training management system. All EIGA member companies should have an internal system to manage training and competence. See EIGA Info HF 02 *Individual - Training and Competence* [4].

3 Definitions

3.1 Publications terminology

3.1.1 Shall

Indicates that the procedure is mandatory. It is used wherever the criterion for conformance to specific recommendations allows no deviation.

3.1.2 Should

Indicates that a procedure is recommended.

3.1.3 May and need not

Indicate that the procedure is optional.

3.1.4 Will

Is used only to indicate the future, not a degree of requirement.

¹ References are shown by bracketed numbers and are listed in order of appearance in the reference section

3.1.5 Can

Indicates a possibility or ability.

3.2 Technical definitions

For the purposes of this publication, the following definitions apply:

3.2.1 Safety training

Providing staff with professional knowledge and skills that relate to specific competence in safety and occupational health.

3.2.2 Competence

Ability to undertake responsibilities and to perform activities to a recognized standard. Competence is a combination of practical and thinking skills, experience, knowledge and commitment.

Training and competence are equally important to new employees, contractors and experienced employees.

4 Training types

Companies shall manage three different types of safety training:

- Training of new employees: this type of training is also aimed at an existing employee who is being transferred to a new job.
- Periodic refresher training on safety rules and practices for experienced employees.
- Extraordinary training.

4.1 Training of new employees

Accident statistics show that newly hired and inexperienced employees are more prone to accidents than others. Data that focuses not on age but on length of service gives similar results and confirms that the frequency rate of work accidents decreases with length of service. However, statistics fail to explain why so many accidents occur with new employees.

A newly hired or transferred individual should learn about the specific details of their job, the hazards of the materials they will be handling and the tools at their disposal. Lack of experience and training increases their vulnerability to all the hazards they are exposed to.

An employee can also be affected by the unfamiliar work environment of a new job which includes both the physical factors such as noise and heat, as well as the new relationships they have to establish with their colleagues and supervisors.

The arrival of new employees is a unique opportunity for management to help them understand the work environment and safety culture and ensure rapid and safe integration. This responsibility shall be accepted by management. A structured safety training programme helps to create an environment of trust which is beneficial to the safety awareness of all new employees.

Safety training for new employees and employees transferred to a new job includes:

- Induction safety training
- Full safety training

Induction safety training shall be performed before an employee starts to undertake any kind of activities related to their job. Induction safety training comprises, for example, the topics of:

- emergency preparedness,
- basic safety information,
- personal protective equipment.

For induction training, Doc 23.01 *Safety Training Leaflet for new employees* should be used. This publication is designed to be used by the employee's immediate manager to serve as a training plan, record and a feedback document.

Completion of the *Safety Training Leaflet for new employees* is not a substitute for full safety training. The Safety Training Leaflet is divided into sections but neither these sections nor the order of the items in a section constitutes a priority list.

Full safety training shall cover all relevant topics related to the activities performed and can be delivered in a classroom and/or at the work place, as well as in other formats.

Regarding the training program and intensity, the full safety training can last a few hours, a few days or even a few months. During this time the employee shall not be allowed to work unsupervised.

4.2 Periodic Refresher Training

Personnel shall be retrained (or where specified, their competency levels must be reassessed) as follows:

- At the frequencies specified in the training program.
- If significant change occurs in the operation or work environment.
- If lack of understanding of the topic is demonstrated.
- When a significant revision to the training material is issued.
- When regulatory or company's requirements change.
- When the employee was involved in an incident or near miss, indicating a lack of knowledge and/or awareness

If employee understanding of a topic is judged to be unsatisfactory according to a reassessment, then complete retraining must be undertaken.

4.3 Extraordinary training

Extraordinary training shall be performed when an incident or near miss occurs in a similar type of operation elsewhere and relevant lessons have been derived or dedicated campaigns are carried out.

5 Training process

5.1 Training plan

Each manager shall ensure that a training plan is compiled for all employees working in their area of responsibility that identifies the necessary training requirements for their job-function. Training plans shall be regularly reviewed.

5.2 Training programme

Each manager shall prepare a written Safety Training Programme consistent with the function of the employee/s. They should do this using different safety training materials:

- Safety Training Leaflet for new employees in case of Induction Safety Training. See Appendix 3.
- Safety Training Leaflets appropriate to the employee's job. See Appendix 1, 2 and 3.
- Safety videos.
- Training Packages (internal and external presentations or videos etc. which address specific topics relevant to the gas industry).
- Technical equipment manufacturers' guidance such as instruction booklets and manuals.
- Operating Instructions.
- Task / Job Risk Analyses.

- Other materials (books, magazines, brochures, etc.).

Various combinations of different training materials can fulfil the scope of the defined safety training. The duration and timing should be defined, and trainees should be named.

Documentation of training and assessments must be recorded in each employee's training record. If employee understanding of a topic is judged to be unsatisfactory according to the assessment, then complete retraining must be undertaken.

6 Programme selection matrix

Appendix 1 of this publication provides a training programme selection matrix. This matrix provides a listing of Training Topics (in alphabetical order) that are relevant to activities carried out in the industrial and medical gases industry on the vertical axis and on the horizontal axis lists typical job positions or roles within the industry. The matrix indicates whether training is recommended (R) or conditional depending on the specific position (C).

Appendix 2 provides references, where available, to EIGA Publications and Safety Training Leaflets that may assist in providing or developing materials for each topic.

7 Execution of safety training

It is not sufficient to just hand over written material to the trainee. The trainer, manager or supervisor shall work through each document to give the trainee the best opportunity to understand it. The training material should be supplemented by practical exercises or on-the-job-training exercises. For some content, e-learning or self-study can be appropriate formats, but it must be assessed if the appropriate level of competency has been achieved.

8 Competency assessment

The understanding of the trainee shall be checked after their safety training has been completed. Comprehension tests or job-observation shall be performed and documented.

9 Training of contractors

For contracted work, the contractor is responsible for safety training for all their personnel working for the industrial gases company. They are also responsible for any additional training required to maintain competency levels of their personnel. In general, the contractor should follow the same basic principles of safety training as described in this document.

All contractors and subcontractors' personnel shall be required to attend a health, safety and environmental induction training carried out by a representative of the industrial gases company prior to receiving authorisation to enter the site or commencing work.

Please refer to EIGA Doc 118, *Safe Management of Contractors* [3].

10 References

Unless otherwise stated the latest edition shall apply.

- [1] Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work. European Union OJ L 183, 29.6.1989, p.1.
- [2] EIGA Info TS 03 *Training: Induction and Refresher Training of Drivers, Management and Other Transport Function Personnel*, www.eiga.eu
- [3] EIGA Doc 118 *Safe Management of Contractors*, www.eiga.eu
- [4] EIGA Info HF 02 *Individual: Training and Competence*, www.eiga.eu