Safety Transport Information

Prepared by the Safety Advisory Council

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Compliance and Risk Monitoring of Transport Operations through Auditing

Introduction

Road transportation is one of the highest risk activities in the Industrial and Medical Gases Industry. To provide management with a reliable and positive means for identifying levels of compliance with standards, regulations and procedures and potential unacceptable levels of risk from their transport operations a proactive monitoring process is required.

The most common methodology is a “Transport Safety/Compliance audit”, which can for example cover internal processes or contractor performance, but there are also other means such as regular analyses of tachograph and on-board computer data and spot checks; driver assessments.

Non-compliance with work instructions, operating standards, legislative requirements, rules and policies can create substandard conditions that increase the risk of incidents in the field of transport operations.

Scope

This Transport Safety Information provides advice on monitoring compliance and achieving an acceptable level of risk within transport operations through an internal auditing process. The principles apply equally to transport operations managed within the gas companies or with external hauliers.

Definitions

Location: An operating or administrative site with transport activities belonging to an EIGA member company or its contractors. In this document the term *location* may also be used to refer to a discrete part of the site.

Learning more about compliance monitoring

1. Do you have processes in place to ensure the vehicle fleet meets legislation/regulatory requirements of design, maintenance, periodic safety inspections and insurance?
2. Do you have processes in place to ensure compliance with the requirements of drivers working and rest hours and are these documented?
3. Do you have processes in place to ensure compliance with the provisions of ADR?
4. Do you ensure that all internal and external auditors are competent in their required roles?
5. Do you have an audit plan in place for transport operations?
6. Are operations stopped in case of serious non-conformities?
7. Do you have a process to ensure all corrective actions arising from an audit are effectively closed?
8. Do you measure or identify areas of non-compliance and risk, enabling you to improve your operational procedures and processes?

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

THIS TRANSPORT SAFETY INFORMATION SHEET DESCRIBES HOW TO ANALYSE AND IMPROVE OPERATING COMPLIANCE AND THEREBY ACHIEVE AN ACCEPTABLE LEVEL OF RISK WITHIN TRANSPORT OPERATIONS.

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Purpose of Audits

Audits, as described in this document, are intended to help managers identify any unacceptable risks and areas of non-compliance within transport operations before they become potential causes of incidents. They help managers identify suitable corrective actions and put in place risk mitigation measures to reduce any potential exposure within transport operations.

Typically, there are three types of audits that can provide managers with valuable compliance information and status.

- **Internal audit;** performed by either Gas Company employees or their appointed audit provider. An internal audit would include auditing of both in-house and any appointed transport sub-contractor transport operations.
- **External audit;** performed by authorities (i.e. tachographs inspections for drivers' speed and work / rest hours compliance, vehicle roadworthiness inspections).
- **Customer audit;** some customers may conduct an audit to verify transport operational compliance and safety performance of a Gas Company.

This document only covers the internal audit type. Internal audits should monitor issues that could be covered by an external or customer audit.

Internal Audit

The audit criteria shall be aligned with regulations, the Gases Company policies and procedures.

EIGA document Doc 102 *Audit Guidelines* [1] provides basic audit criteria for both bulk and cylinder transport operations.

Criteria which should typically be included in the audit are;

- operational procedures
- management systems
- quality system (clarifying management structure and responsibility)
- documentation
- vehicle maintenance and specification
- training, competency and qualification of drivers and transport function personnel
- emergency procedures on the road
- findings from previous audits, if any.

To maximise the effectiveness of an audit, the audit questions should reflect the above criteria and known risks. See Appendix A for recommended audit topics and questions.

Auditor Competency

It is highly recommended that auditors have experience of working within transport operations.

Auditors should attend a formal auditor training course which contains both theory and practical elements and has a process of testing competency and certifying successful candidates. Such courses can be either in-house or provided by an external body.

A competent auditor should have knowledge of:

- company or contractor management systems including operational processes, procedures and safety policies;
- technical key aspects of transport and distribution operations;
- dangerous goods transportation and other relevant laws, regulations, international and/or national standards;
- worker health and safety risks, including manual handling and driver ergonomics;
- transport incidents.

A competent auditor should also be able to demonstrate skills in auditing techniques and audit processes, including communication skills, data analysis, and producing an audit report.

Candidates could be Dangerous Goods Safety Advisors, transport operation managers or fleet managers.

Audit Planning / Frequency

The frequency of audits covering transport operations and related functions will depend on a number of factors. It is recommended that each location with a transport operation should be audited at least once every five years. However, this frequency should be adjusted based on known risks such as:

- locations that have a poor transport incident record or deteriorating incident performance;
- change of transport sub-contractor;
- previous audit results based on the severity and number of negative findings.

Conducting audits

It is good practice as a first step to send an agenda to all participants of the audit. At the beginning of the audit, a meeting between the auditor (or audit team), the location team and management of the relevant organisations should be held. This preliminary meeting is used to explain and agree:

- how the audit is to be structured and conducted,
- the scope of the audit,
- what documentation or evidence the location team may need to provide to demonstrate compliance,
- communication of confidential audit findings.

During the audit the auditor will evaluate the location's compliance to the audit criteria. This is achieved by examination of objective evidence for validation and/or verification of requirements.

There are a variety of tools that may be used when conducting the audit, including:

- **Fill-in forms** requiring simply yes / no answers or other specific responses.
- **Check lists (aide memoire)** providing a detailed listing of all issues to be covered.
- **Questionnaires** which are frequently used as an auditing tool. The questionnaire(s) are usually prepared in a standardised format, see Appendix A. The questions should be used as the basis of a detailed analysis of that area of operations to gather information on how compliance is achieved, not just to get yes or no answers.
- **Audit guidelines** providing broad guidance and instructions to be used by the auditor and identifying aspects that should be investigated.

Audit Findings and Corrective Actions

The findings (positive or negative) from the audit shall be specific, factual and supported by evidence. Evidence can consist of documentation, auditor's notes, photographs, screen shots, working papers, etc.

Auditors shall check if they need to obtain the permission of site management and that of individuals before taking photographs.

It is good practice for the auditor and local management to agree specific actions for each non-compliance and create an overall action plan:

- corrective actions required
- responsible persons for the actions
- an agreed timescale for each action to be completed
- mitigations to achieve an acceptable level of risk pending the action being completed.

The auditor should document the positive and negative findings from the audit and provide local management with a copy of the report.

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Management Actions following the Audit

If the audit has identified areas of non-compliance management should implement a review process to ensure all corrective actions have been satisfactorily completed.

Non-compliances should be summarised for subject experts and relevant management to review, learn lessons and identify potential improvements. These may be in work practices, procedures and training or in standards or, regulations,

There shall also be a process or system to track and follow up on actions and to verify that they are effectively solving the non-compliances identified in the report.

References

[1] EIGA Doc 102 *Audit Guidelines.* www.eiga.eu

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Appendix A: Transport Safety Compliance Audit Questionnaire

Question reference	Question	Document and Section Reference
1	**Transport Management Systems**	
1.1	Do all personnel within the transport function have job descriptions that are accurate and up to date?	
1.2	Do all personnel within the transport function understand their roles and responsibilities?	
1.3	Does the transport function monitor safety performance? E.g. personal injury records, vehicle incidents, near misses	
1.4	Is there an effective incident investigation process in place to maximise learnings identify risks and implement post incident mitigation?	
1.5	Are communications effectively used to reinforce safety principles and are learnings shared internally and externally?	
1.6	Do managers demonstrate visible leadership, conduct site walks and hold safety engagements with employees and contractors within the transport function?	
1.7	Are transport contractors selected and managed according to the Gas Company's guidelines?	
1.8	Are driver records being kept, either by the Gas Company or the contractor? e.g. accident frequency rate, shift patterns, medical checks. Are these items checked for compliance?	
1.9	Are drivers, management and transport function personnel aware of the risks of driver fatigue and are actions being taken to mitigate these risks.	
1.10	Are recognition programs in place to promote good performance.	
2	**Training and Qualifications of drivers and transport function personnel**	
2.1	Is there a process in place on how to recruit a driver?	
2.1	Is there an induction process in place for all drivers?	
2.2	Is there a process in place to ensure all drivers attain the correct level of competence on driving and product handling before being approved to drive on their own?	
2.3	Is there a process in place to ensure drivers receive refresher training on a regular basis?	
2.4	Are training requirements defined for all personnel/roles within the transport function, including contractor employees?	

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Question reference	Question	Document and Section Reference
2.5	Are all transport function personnel trained in the key elements and tasks for their individual roles? E.G, scheduler, dispatcher, supervisor, maintenance staff, transport managers & supervisors.	
2.6	Is there a certified dangerous goods safety adviser in place and do people know who it is?	
2.7	Are personnel investigating incidents trained and competent?	
2.8	Have all drivers received defensive driving training?	
2.9	Have all drivers received rollover prevention training?	
2.10	Does the Gas Company or contractor have a behavioural safety program?	
3	**Documentation**	
3.1	Is the documentation of the driver archived and checked? E.g. driver's license, working hours, training certificates, violations.	
3.2	Is the documentation of the vehicles archived and checked? E.g. vehicle inspections, equipment checks	
3.3	Do contractors receive necessary general documentation? E.g. procedures, vehicle documentation	
3.4	Do contractors receive necessary transport documentation? E.g. ADR transport documents, tour planning	
4	**Transport Operational Procedures**	
4.1	Have all tasks associated with drivers been risk assessed to establish PPE requirements?	
4.2	Is PPE available and in good condition?	
4.3	Is the correct PPE being worn by all relevant staff while on site?	
4.4	Are drivers wearing their seatbelts?	
4.5	Is there a system in place to monitor, analyse infringements and non-compliances taken form vehicle tachographs and on board computers (OBC) relating to speed, driving style, duty hours and rest hours?	
4.6	Is there a system in place to provide feedback to drivers when infringements and non-compliances are found during tachograph and OBC analysis, relating to speed, driving style, duty hours and rest hours?	

Question reference	Question	Document and Section Reference
4.7	Is there a system in place to check and ensure all drivers have all required licences (e.g. driver's licence, ADR licence)?	
4.8	Does the location safety committee proactively address transport risks?	
5.	**Vehicle Maintenance and Specification**	
5.1	Is there an effective vehicle pre trip inspection process in place?	
5.2	Is there a procedure in place that ensures that defects raised are rectified and vehicle equipment cannot re-enter service until authorised to do so?	
5.3	Is there an active maintenance program in place?	
5.4	Are motive units, prime movers / tractors maintained to Original Equipment Manufacturer's (OEM) recommendations?	
5.5	Is the running gear assembly maintained to OEM recommendations?	
5.6	Do all tyres comply with local legislative and company requirements?	
5.7	Are accurate records kept of all vehicle equipment maintenance and repairs?	
5.8	Are the workshops used to maintain vehicle, prime mover /tractors and trailer equipment competent and, where relevant, OEM authorised?	
5.9	Do all new vehicles, prime movers/tractors, trailers and associated equipment entering service fully meet current legislation and company requirements?	
5.10	Has the risk of transporting hazardous products in unventilated enclosed vehicles been assessed?	
5.11	Are all vehicles/semi-trailers labelled correctly to meet ADR requirements?	
5.12	Are all vehicles fitted with specific safety and emergency equipment as required by ADR?	
5.13	Are all workplaces within the vehicle workshops in the location clean and tidy?	
5.14	Are all tools and equipment within the maintenance facility in the location in good condition and stored correctly?	
5.15	Is the required vehicle safety equipment checked?	

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Question reference	Question	Document and Section Reference
6	**Emergency Procedures on the Road**	
6.1	Is there a documented Emergency Procedure in place?	
6.2	Is there evidence that in the event of a serious on the road emergency/incident, a structure is in place with roles clearly defined?	
6.3	Have all persons named on the Emergency Procedure received relevant training to complete their assigned tasks and responsibilities?	
6.4	Is there transport emergency response equipment available and ready for use?	
6.5	Have external emergency response organisations been identified and included in the emergency procedures, e.g. emergency services, specialist heavy vehicle recovery, incident scene clean up?	

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