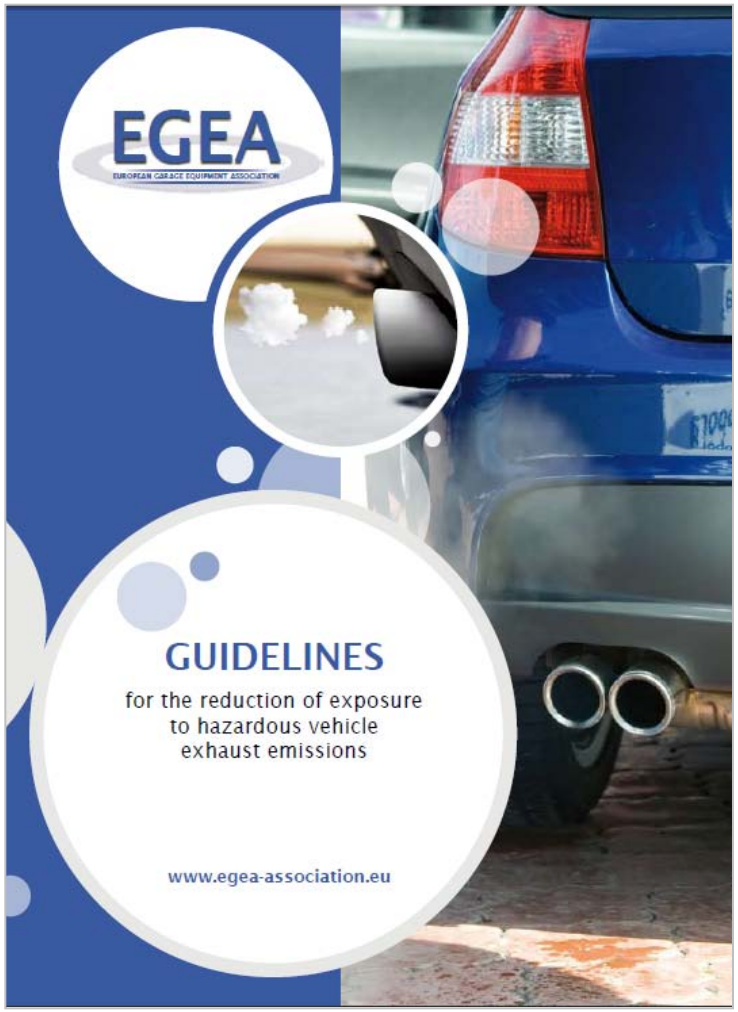
EGEA WG 8 Activities

13th October 2011, Equip'Auto (Paris)

Agenda

1. Opening and welcome by the Chairman
2. Roll call
3. Approval of the minutes of the last WG8 meeting on 27th May 2011
4. WG8 “Guidelines for the reduction of exposure to hazardous vehicle exhaust emissions”
    - 4.1. Presentation and Next Steps
    - 4.2. Promotion of the Guidelines in the European countries by EGEA members
5. Professional promotion activities from EGEA. Press releases other channel
6. Euro VI Heavy Duty Vehicles
7. State of affairs of the situation in Europe: EU/ National Legislations
8. EU Work Protection Legislation: state of affairs
9. Next meetings, frequency and location.

4.1. EGEA WG8 Guidelines: presentation & next steps



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4.1. EGEA WG8 Guidelines: presentation & next steps

EGEA Exhaust Extraction Guidelines

The hazards of combustion engine exhaust emissions

Exposure to hazardous vehicle exhaust emissions in the workplaces is a serious health risk. Exhaust from combustion engines is a complex mixture of many hazardous substances.

Examples of the most hazardous substances in exhaust emissions:

Benzene	Carcinogen to humans (Group 1A)
Diesel engine emissions	Suspected human carcinogenic
Polycyclic aromatic hydrocarbon (PAH)	Suspected human carcinogenic
Hydrocarbons	Suspected human carcinogenic (Group 2A)
Benzene "alpha" pyrene Group 2A	Suspected human carcinogenic
Formaldehyde	Suspected human carcinogenic (Group 2A)
Benz furan Group 2B	Suspected human carcinogenic
Carbon monoxide	Acute toxic (Cat. 3)
Carbon dioxide	Danger of suffocation at high concentrations
Nitric oxide / nitrogen dioxide	Acute toxic (Cat. 1)

FORMULA
to calculate the extraction volume needed:

$$V = Vh \times n \times (0.0363) \times 1.25$$

V =	Volumetric extraction airflow required (m³/h)
Vh =	Cubic capacity of the vehicle to be tested (litre)
n =	Test speed of vehicle (rpm)
0,0363 =	Physical conversion factor
1,25 =	25% proportion of fresh air/ambient air

The individual substances may lead to permanent health complications, especially diesel engine emissions (particles) can cause cancer.

Even modern combustion engines produce harmful exhaust emissions which are not visible to the human eye.

General recommendations

- Exposure to vehicle exhaust emissions indoors should be avoided whenever possible
- If this can not be guaranteed, the workplace should be equipped with an exhaust extraction system to protect workshop technicians and other workers against hazardous substances
- The exhaust emissions should be captured at source which means directly at the exhaust tailpipe. The exhaust nozzle or funnel should be designed so that 100% of the exhaust emissions can be captured
- Exhaust extraction systems should work with negative pressure
- The extraction volume should be at least 25% above the maximum emitted exhaust volume
- The extraction system specification should accommodate the largest engine in use at the workplace (see extraction volume)

Approximate values of recommended extraction volumes

Cars up to 4 litres engines with max. 2500 rpm	= 450m³/h (normal service)
Cars up to 4 litres engines with max. 5000 rpm	= 900m³/h (exhaust tests)
Trucks up to 16 litres engines with max. 1300 rpm	= 1000m³/h (normal service)
Trucks up to 16 litres engines with max. 2500 rpm	= 1800m³/h (exhaust tests)

For other applications like performance tests or tests on special vehicles, individual verification needs to be carried out.

EGEA recommends using a professional for the planning, installation and on-going maintenance support of your exhaust extraction or filtration system.

For further information, please contact the EGEA member in your country or the EGEA Secretariat.

Center spread

4.2. EGEA WG8 Guidelines: promotion in EU countries

- To discuss **how to efficiently distribute/disseminate the Guidelines at local level**
  - Via local Automotive organisations
  - Via local newsletters
  - Via websites
  - Etc...

- The important matter is **to communicate that inhaling vehicle exhaust (like diesel fumes) is a serious health hazard for people**. Exposure in more concentrated levels (like workshops) can lead to a number of suspected cancers like:
  - Testicular cancer
  - Skin cancer
  - Brain cancer
  - Prostate cancer
  - Stomach cancer
  - Colon cancer

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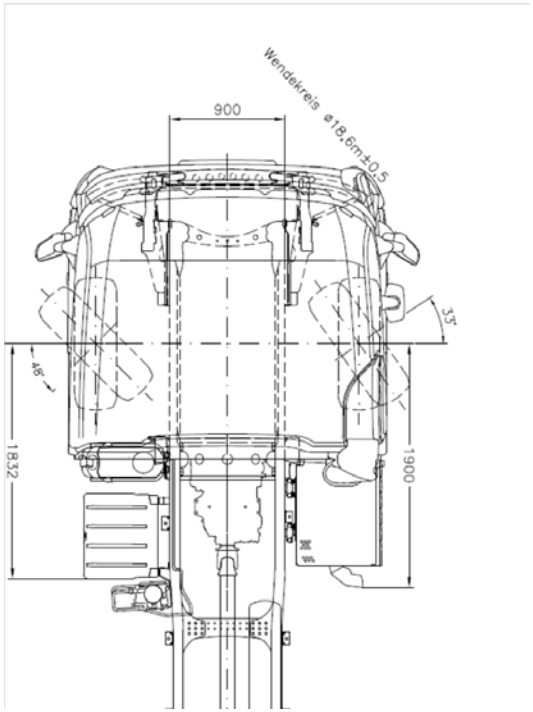
5. EGEA WG8 Guidelines: promotion via EGEA

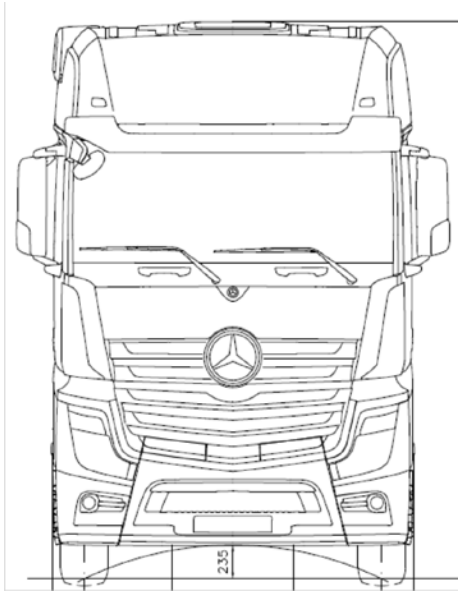
- **WG8 Guidelines already available on EGEA website (www.egea-association.eu)**

- **EGEA Press Release?**
- **Others?**

6. Euro VI Heavy Duty Vehicles

- **Release of new Mercedes-Benz Actros** (Euro VI requirements)
  - What can we learn?
  - Risks assesment?
- **Other items on Euro VI**





7. EU Legislations: State of Affairs (1)

- **Council Directive 89/391/EEC** on the introduction of measures to encourage improvements in the safety and health of workers at work
- **Council Directive 98/24/EC** on the protection of the health and safety of workers from the risks related to chemical agents at work
  - **Directive 2000/39/EC**
    (list of indicative occupational exposure limit values)
  - **Directive 2006/15/EC**
    (second list of indicative occupational exposure limit values)
  - **Directive 2009/161/EC**
    (third list of indicative occupational exposure limit values)
- **Council Directive 2004/37/EC** on the protection of workers from the risks related to exposure to carcinogens or mutagens at work
- **Regulation (EC) N°1272/2008** on the Classification, Labelling and Packaging of substances and mixtures

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7. EU Legislations: State of Affairs (2)

Implementation?

- 'Directives' → Implementation is up to Member States
- Numerous/important differences in the Directive's implementation on a national level

Enforcement?

- No strong legal basis for enforcement by EU Commission, up to Member States
- Enforcement at national level via labour inspectors & via Health National Ministries

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7. EU Legislations: State of Affairs (3)

Actions at EU level?

Risk Assessment in the use of dangerous substances European Campaign

European Campaign on the risk assessment in the use of dangerous substances (www.chemicalscampaign.eu)

Objective: to develop initiative in each of the Member States, through their systems of Labour Inspection, as part of the risks inherent in the use of hazardous substances in workplaces and should be directed to the assessment of chemical risks in micro and small enterprises, focusing especially on companies up to 50 workers, who constitute, as we know, the most of economic actors in Europe.

Development of some support tools for labour inspectors:

- Checklists changeable by MS
- Information materials
- Recommended method + operating tools+ guidelines
- Monitoring and assessment sheets

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7. National Legislations: State of Affairs

Actions at National level?

- The **implementation and enforcement of EU legislation is left to Member States**

- Therefore, **action is required at national level**, e.g. at your national health Ministry & contact your labour inspection body

- **EGEA WG8 members to check legislation in place at national lev**el (follow-up from last WG8 meetings):
  - Scandinavia: Mikael Brandsten
  - Netherlands: Jan Maarten de Groot
  - France & Belgium: Thomas Galtie
  - Italy: Alberto Fina
  - Switzerland: Erhard Luginbühl
  - Spain: Mikael Brandsten
  - Poland &Czech. Rep.: Karsten Meinshausen
  - UK: Marcus Laan

9. Other topics + Next meetings

- **Scheduling:**
  - **Next meeting (date + location)**

- **Other items:**
  - **Round table (questions / remarks)**

Thank you!

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EUROPEAN GARAGE EQUIPMENT ASSOCIATION