

# Containment - Introduction

- Despite many substitution efforts, carcinogens still play a vital role in trade and industry.
- CMD states that ‘the employer shall ensure that the carcinogen is, in so far as is technically possible, manufactured and used in a closed system’ but often PPE is used instead to avoid exposure.
- Containment solutions are supposed to achieve a minimization of substance dispersion by confining the carcinogen at the source and thus often represent a superior alternative. This is particularly important since carcinogens often lack a threshold effect and adverse health effects occur after a long period of time.

# Containment - Key Questions

- What role do containment solutions play in practice?
- What are obstacles for using containment solutions?
- What kind of assistance and practical solutions are needed to further promote the use of containment solutions?

# What role do containment solutions play in practice?

- Phrase "containment" used in different areas of legislation.
- Common understanding of containment in different industries/different areas of legislation not established/not possible.  
Beyond debate: Hierarchy of controls as fundamental principle.  
⇒ Sector specific guidance reasonable.
- Small scale solutions known (often in the focus: pharmaceutical industry).  
However, limited knowledge about large production scale solutions.  
⇒ Information exchange on good practices required.
- Diffuse emissions from plants cannot be reduced to zero-release.  
A defined breach of containment will be always required (e.g., for cleaning, maintenance).  
⇒ Containment solutions are designed for regular operations only.

# What are obstacles in using containment solutions? (1/2)

- Containment solutions should be selected based on OELs or similar.
  - ⇒ Requires the availability of OELs or recommended exposure levels.
- In addition, exposure determinants (e.g., vapour pressure, dustiness) should be taken in consideration as well.
  - ⇒ Containment solutions must be designed for the specific task and workplace.
- Many containment solutions must be customized for the respective purpose (case-by-case decision on the suitable solution).
  - ⇒ Requires close, interdisciplinary cooperation (knowledge from product safety, OSH and process engineering)
  - ⇒ In principle, containment solutions are part of a holistic exposure control program (including air flow management and organizational measures).

# What are obstacles in using containment solutions? (2/2)

- Consulting from enforcement authorities would be appreciated.  
Follow-up of the progress of technical improvements may be necessary.
- Containment solutions are often more difficult to operate.  
⇒ Requires supervision and additional training/instruction of workers.

# What assistance and practical solution are needed to further promote the use of containment solutions?

- No request for new EU legislation.
- Clarification of the phrase "containment" should be discussed for different uses (e.g., manufacturing, professional use).
- Technical ventilation and organizational control measures are not containment solutions.  
However, the role and coverage range of such control measures in practice should not be neglected and should be part of the discussion as well.
- Overview and interdisciplinary expert exchange about good practices in different industries on EU level is proposed.  
Benefit from existing national technical guidance and learn from other industries, e.g., pharmaceutical industry.
- Consider to develop technical guidance and/or good practice examples on EU level.
- Raise awareness, develop communication concepts and training programs on containment solutions on EU level.