Risk Management Measures for dermal exposure – beyond gloves ....

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Why do some diesel pump nozzles leak more than others? – Preventative maintenance?

- Contained systems, e.g. Sample points
- Increase distance between person and source, e.g. Long-handled tools
Protective gloves

- Not every glove is protective for every chemical or petroleum product
  - Need to match glove material with products
    - Glove break-through laboratory testing is standardised (EN 374)
- Gloves in routine use were tested for diesel and kerosine
  - Some companies used poor quality gloves
- Gloves assumed to reduce exposure by >80%
  - If proper material, worker trained/supervised
- Awareness: contaminated gloves as source of exposure
  - Proper glove donning and decontamination procedures
Dermal exposure assessments for REACH dossiers - Outlook

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Observations from studies completed so far

- New area of exposure assessment for downstream oil industry – but required under chemical regulations
- Studies provide ‘Tier-2 data’ that can override (grossly) conservative Tier-1 estimates
  - But data sets are small, may not be ‘representative for the EU’
- Expensive, labour-intensive, large variability
Conclusions & Next Steps

- Lack of standardisation of methods and sampling strategies
  - Nature of Petroleum Substances also of relevance (e.g. High viscosity products are handled hot; volatile substances evaporate from skin)
- Exposure pathways can be complex, e.g. button on pump contaminated by hand
- Include in REACH dossiers as ‘supporting data’ or first obtain larger data sets?