

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

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## RMM's for dermal exposures



- ▶ 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

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# 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
  - ▶ [http://www.esig.org/uploads/ModuleXtender/Publications/161/BPG\\_UK\\_web\\_0611.pdf](http://www.esig.org/uploads/ModuleXtender/Publications/161/BPG_UK_web_0611.pdf)

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# Dermal exposure assessments for REACH dossiers - Outlook

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- ▶ 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

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# 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?

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