REACH Annex XVII Restrictions; The Challenges of Enforcement and Analysis

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Chemicals, Pollution and Cancer (UK)

- Annual NHS costs for cancer services are £5 billion
- Pollution and chemicals in our environment account for ~3% of all cancers.
- ◆ Approx. £150 million chemical / pollution cancer expenditure each year.



The Lasting Effects of Chemicals in the Environment

- Today we are still living with the effects of contamination from chemicals which were phased out many years ago.
- A 'Cocktail Effect' of chemicals is being created by a variety of chemicals entering the bloodstream and tissues.
- Recent Studies have estimated the health costs of exposure to endocrine disrupters at between £113bn-£195bn



The Chemical Compliance Team

♦ What we do

- **♦** REACH
- **♦** POPs
- **♦** PCBs
- **♦** F-gas and ODS
- Chemical Source Control

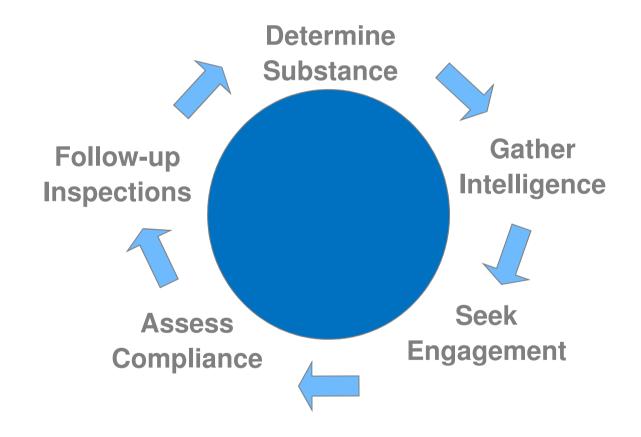


CCT Campaign Approach

- Desktop Research
- Targeting
- Engagement
- Assess Compliance
- ◆ Follow- up including enforcement



Enforcing Annex XVII Restrictions





Challenges of Enforcing Annex XVII Restrictions

- Mercury in measuring devices
 - Historically ideal substance for measuring devices
 - Toxic and persistent



- Exemption for thermometers required to perform tests to specific standards
- Difficulties monitoring exempt uses



Challenges of Enforcing Annex XVII Restrictions

- Lead carbonates and lead sulphates in paint products
- Historically popular due to their quick-drying properties, resistance to corrosion and durability.
- Poisonous



Restriction limits the use of lead-based paints to the restoration of historic buildings, monuments and fine works of art



Challenges of Analysis

- Issues with recommended analytical methods.
- Limited laboratories with accredited methodology - unaccredited testing methods.
- ◆ No suitable analytical methodology.



Challenges of Analysis - Examples

◆ PBDEs in Plastic Pipes



PVC Shower Curtains





Successes

- Disposal of over 31,000 non-compliant fireworks 25kg of HCB.
- Successful prosecution 1st in Europe.
- Registration ~310,000 pieces of previously unaccounted potentially PCB contaminated equipment.
- Destruction of 315kg of redundant Lindane products.
- Removal of ~192 mercury products from sale.



Successes

- Investigated 273 companies for compliance with the F-gas Regulations.
- Removal of 80 ODS products from sale.
- An estimated 607.1 grams of TBT is potentially released from plastic pipes on houses direct to watercourses in England and Wales each year.
- Analysis of prison effluent has shown concentrations of chemicals of national concern that are still being emitted in quantities that potentially breach the Environmental Quality Standards.





