

OCTOBER 6-7<sup>TH</sup> 2010

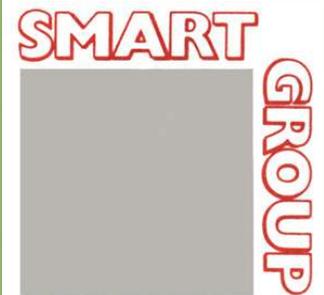
# SMART GROUP 26<sup>th</sup> ANNIVERSARY CONFERENCE

*ADDRESSING THE ISSUES FACING YOUR INDUSTRY TODAY:*

**RoHS & REACH – ARE THEY KILLING THE INDUSTRY IN EUROPE?**

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**SMART GROUP TECHNICAL COMMITTEE VICE-CHAIR**



# REACH =

## Registration, Evaluation, Authorisation and Restriction of Chemicals



- REACH is a European regulation which became enforced in law on June 1<sup>st</sup> 2007
- The purpose is to unify chemical management policy and regulation across the 27 different EU member states
- The organisation responsible for managing the administrative and technical aspects of REACH is the European Chemicals Agency (ECHA)



[http://echa.europa.eu/home\\_en.asp](http://echa.europa.eu/home_en.asp)

# Registration

Chemical producers must register safety data for all substances produced or imported in quantities above one tonne a year to ECHA. Less information is required for substances with lower production amounts.



# Evaluation



ECHA evaluates safety data for these higher volume substances and any chemicals which cause high concern for health and safety.

# Authorisation



“Substances of Very High Concern” (SVHC) will be phased out and replaced by safer alternatives, unless industry can show ‘adequate control’ of the risk from authorised usage, or that the benefit from authorised use outweighs the risks.

SVHCs are:

- carcinogens, mutagens, reproductive toxins;
- persistent, bio-accumulative and toxic;
- or of similar concern to human health and the environment.

# Restriction

Certain chemicals may be completely banned, or some uses restricted, if ECHA recommends that such action is necessary.



# Some Important Definitions in REACH



**Substance:** *A chemical element and its compounds in the natural state or obtained by any manufacturing process, including any necessary additives and any impurity deriving from the process used.*

**Preparation:** *A mixture or solution of two or more substances.*

**Article:** *An object which during production is given a special shape, surface or design, which determines its function to a greater degree than does its chemical composition.*

**Supplier:** *Any manufacturer, importer, distributor, or downstream user placing on the market a substance, on its own, in a preparation or in an article.*

**Downstream User:** *Any natural or legal person established within the community, other than the manufacturer or the importer, who uses a substance, either on its own or in a preparation, in the course of his industrial or professional activities.*

# Substances of Very High Concern (SVHC)



- ECHA maintains a list of SVHC which are candidates for future restriction.

[http://echa.europa.eu/chem\\_data/authorisation\\_process/candidate\\_list\\_table\\_en.asp](http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp)

- Suppliers within the EU have a duty to inform customers of any SVHC content above 0.1% by weight (or 0.2% by volume if gaseous) in substances, preparations or articles they sell.
- Suppliers must also provide information about the safe use of these substances and preparations or articles which contain them.

# REACH KILLER No.1?



- EU suppliers must respond to customers' requests for information on SVHC within 45 days and must not charge to provide this.
  - **The reality is that this just doesn't happen, with most companies still reporting that only around 50% of suppliers respond to requests for information within that period if at all.**

# The SVHC Moving Target



- The SVHC “Candidate List” is updated regularly to add new substances, so there will need to be repeated exchanges of information along the supply chain each time the list is changed.
  - The first batch of 15 were listed in October 2008
  - A second batch was added in January 2010
  - A third batch in June 2010
- Now a total of 38 candidate substances listed.
- A further 11 substances were proposed at the end of August 2010 and are under consultation now until October 14<sup>th</sup> 2010.
- Expectation is that further additions will be made every 6 months.

# REACH KILLER No.2?



- Each time the SVHC “Candidate List” is updated, the supply chain needs to be polled for information on the use of the new substances and any new uses of previous substances.
- Suppliers are required if requested to provide that information within 45 days of a new substance being published on the list.
  - **A process we know already is not working properly!**

# Substance Authorisation



- The next phase after candidate SVHCs are identified and listed is Authorisation.
- ECHA will identify and recommend high priority SVHCs from the "Candidate List" to be included in the "Authorisation List" (Annex XIV of the REACH regulation.)
- Of the current list of 38 substances on the Candidate list, 6 have recently been added to the Authorisation List, with a further 9 still under consideration.

[http://echa.europa.eu/chem\\_data/authorisation\\_process/annex\\_xiv\\_rec/subst\\_spec\\_docs\\_en.asp](http://echa.europa.eu/chem_data/authorisation_process/annex_xiv_rec/subst_spec_docs_en.asp)

- When substances are confirmed by the EU to be on the list requiring authorisation, they may not be used in the EU without prior approval after a pre-determined "sunset date" and only then under strict conditions.

# The Authorisation List



- 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)
- 4,4'-Diamino diphenyl methane (MDA)
- Bis (2-ethylhexyl) phthalate (DEHP)
- Benzyl butyl phthalate (BBP)
- Dibutyl phthalate (DBP)
- Hexabromocyclododecane (HBCDD)

# REACH KILLER No.3?



- Additions to the SVHC lists are often driven by lobbying from campaigning organisations like ChemSec.  
<http://www.chemsec.org>
- ChemSec maintain a SIN (Substitute It Now) database which is a list of substances which they consider meet the EU definition of SVHC.  
<http://www.sinlist.org/>
- **The ChemSec SIN list currently contains 356 substances!**
- ChemSec have created an online web portal in conjunction with other European organisations to help suggest alternative chemicals to SVHCs.  
<http://www.subsport.eu/>
- **That portal does not yet have any alternative substances listed!**

# REACH KILLER No.4?



- **When substances are added to the SVHC list, it appears that no consideration is given to what may be required to replace it as a safer alternative. For example:**
  - Dibutyl phthalate (DBP) and Bis-2ethylhexyl-phthalate (DEHP) were proposed as SVHCs in the first batch of candidate substances.
    - Both recently moved to the Authorisation list along with benzyl butyl phthalate (BBP)
  - Industry looked to similar substances such as Diisobutyl phthalate (DIBP) as a replacement plasticiser.
  - DIBP was added to the SVHC candidate list in the second batch!

# Registration



- Registration information for specific hazardous substances and all substances imported/produced in quantities > 1000 tonnes per annum must be submitted by suppliers/importers/producers in the EU to ECHA by 30<sup>th</sup> November 2010.
- ECHA estimated that this deadline applies to 12,000 substances already on the market in the EU.
- ECHA warned that as of 27 April 2010 only 4,415 substances were listed on their website as being intended for registration.
- It also warned that many of the registration dossiers they had already received were incorrect or incomplete.

# REACH KILLER No.5?



- What happens to the manufacturing process of a EU based “downstream user” if a substance used in a vital component or consumable is not registered in time by the supplier/producer?
  - **Will you still have a legal supplier by 1<sup>st</sup> December 2010?**
  - **Downstream customers may require advance assurances that your supply chain will be unaffected.**

# A small aside...

## A Law Of Unintended Consequences?



- It's not just Europe causing difficult data collection and reporting demands for electronics producers...
- ***“Dodd-Frank Wall Street Reform and Consumer Protection Act”*** was signed into US law on 21 July 2010
  - One section of this act imposes a new reporting requirement on US companies that manufacture products for which certain "conflict minerals" are necessary to their functionality or production and originate in the Democratic Republic of the Congo and neighbouring countries.
  - **Companies will be obliged to indicate products which may not be “conflict material-free.”**
  - Affected are:
    - Casserite ore → Tin
    - Wolframite ore → Tungsten
    - Coltan → Tantalum and Niobium
    - Gold
    - possibly adding in future: Cobalt, Nickel and Copper which are also mined in that area.

# WEEE =



## Waste Electrical and Electronic Equipment

- European Directive which set minimum requirements to be implemented in EU Member States by 13 August 2004.
  - UK was late implementing and its regulations only came into force in January 2007.
  - Defines ten product categories to be tackled.
  - The purpose is to reduce the amount of WEEE and its hazardous content going to landfill at the end of its life.

# RoHS =



## Restriction Of Hazardous Substances

- European Directive which was required to come into force on 1<sup>st</sup> July 2006 in the national laws of all EU Member States.
- Restricts six substances
  - lead, mercury, cadmium, hexavalent chromium, PBB, PBDE
- Applies to only 8 of the 10 product groupings defined in the WEEE Directive.
- The purpose is to reduce hazardous content at the start of the product lifecycle and so make it safer when it becomes WEEE at the end of its life.

# Directive Recast



- Both the WEEE and RoHS Directives are in the process of limited revision known as “re-casting.”
  - This is co-decision negotiation process which involves the European Commission, the European Council of Ministers and the European Parliament.
  - The Commission launched the process in December 2008 with suggested amended texts for both Directives.

# RoHS KILLER No.1?



- The original 2008 proposal was updated by the Commission as a new compromise text in September 2009.
- The Environment Committee of the Parliament submitted its own amended version in June 2010.
- The European Council has published its own position and reaction to the other proposals.
  - **Much uncertainty remains for industry as the decision process has been delayed whilst agreement is sought to bring a final legal text to the Parliament for a first reading.**

# RoHS KILLER No.2?



- **“OPEN SCOPE”?**
  - **ALL products are IN scope unless specifically excluded or exempted in the text**
  - removes interdependence with WEEE’s 10 categories
  - EP Environment Committee proposed and appears to be strongly in favour
  - Several Members States (e.g. UK) have strong reservations expressed via the Council
  - The Commission also prefers to keep the scope to defined product categories
  - Current Belgian president of the Council has suggested a compromise whereby this provision would only be enforced six years after the new law has been passed and will first require a full impact assessment to be carried out and its finding agreed.

# RoHS KILLER No.3?



- **ADDING TO THE “RoHS-6”?**

- EC draft adds no new substances but identifies some possible future candidates which are already SVHC candidates for REACH.
- EP is keen to add all halogenated flame retardants and PVC
  - “The question is not whether electrical and electronic equipment industry can phase out these chemicals, but when!” - Jill Evans, MEP and rapporteur on the RoHS recast for the Environment Committee.
- EP has also suggested nano-materials need to be considered.

# RoHS KILLER No.4?



- **CE Marking**

- **recast RoHS Directive set to require conforming products to carry the CE mark and accompanying Declaration of Conformity**
  - for example, as per EMC Directive and Low Voltage Directive already.
- Increased burden of proof on producers?
- Component and consumable supplier documentation for RoHS evidence trail no longer sufficient alone?

# Current State of Play



- Details of the current procedural position of the RoHS recast can be found at:

<http://www.europarl.europa.eu/oeil/file.jsp?id=5723432>

- The equivalent procedural position of the WEEE recast may be found at:

<http://www.europarl.europa.eu/oeil/file.jsp?id=5723502>

- Political agreement hoped to be achieved for both on the 14<sup>th</sup> October 2010.
- First reading of any agreed new versions in Parliament suggested to be at the sitting on 22nd November 2010.

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