

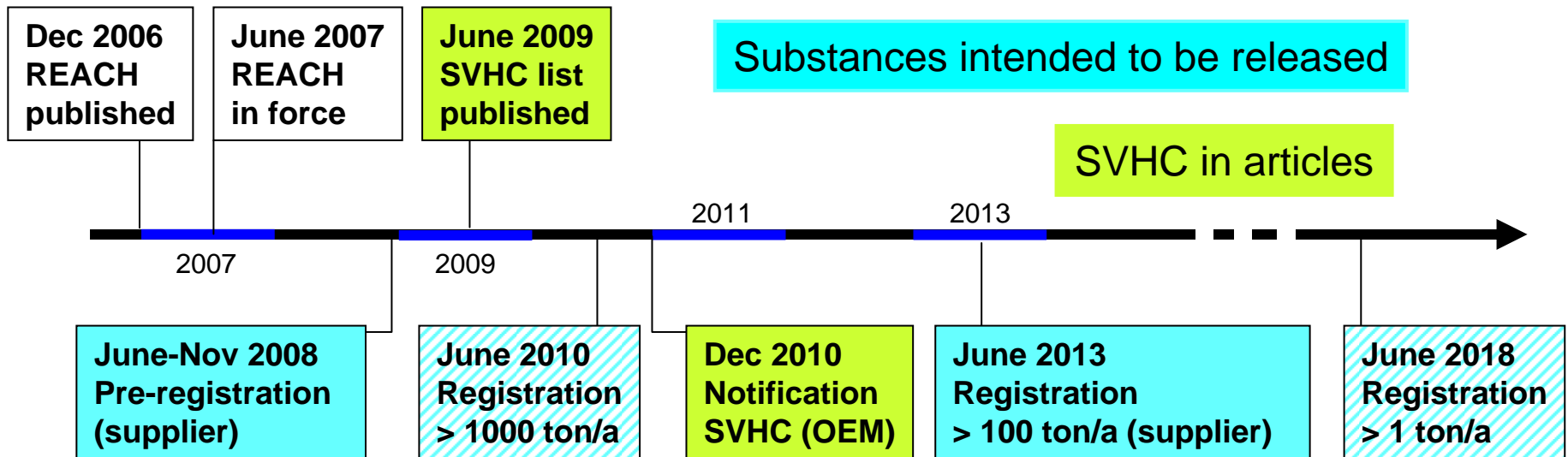
REACH: Staying ahead of the regulation curve

Mark Newton, Dell Sustainability
April, 26 2007

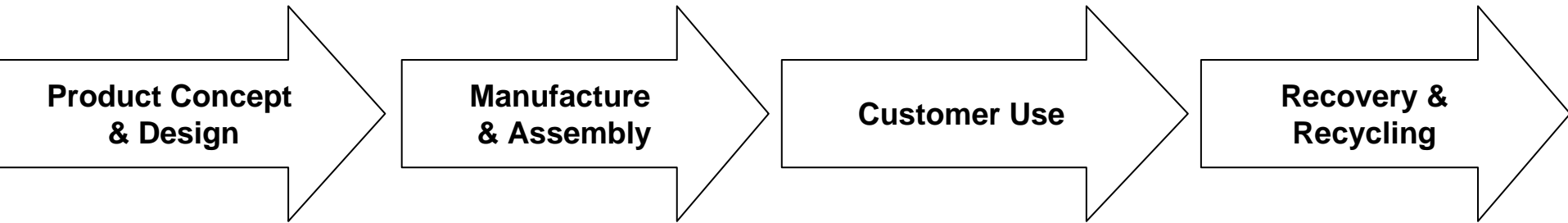


Key Milestones: Obligations under REACH

1. Pre-registration of substances between June 1st 2008 and November 30th 2008 (done by our suppliers)
2. Notification and Information of SVHC contained in products above 0.1% to customers by December 1st 2010. (done by us)
3. Registration of substances until June 1st 2013 (done by suppliers).



Lifecycle Thinking: A Global Commitment

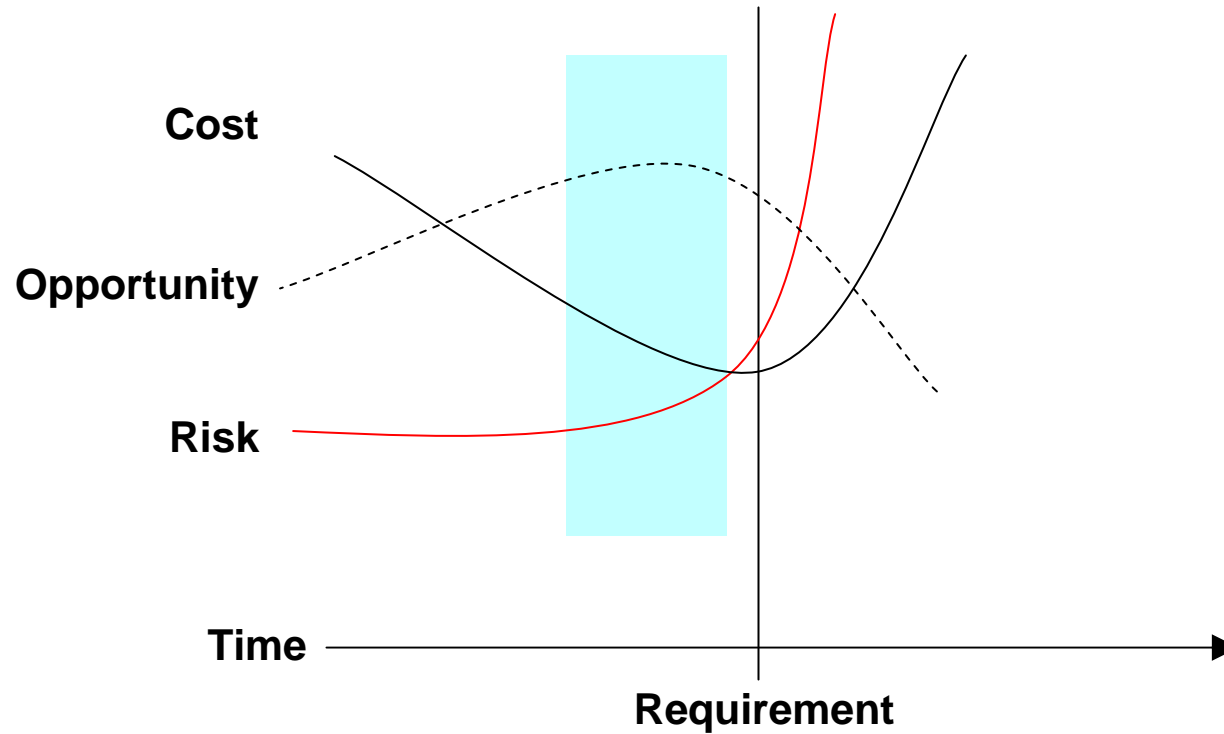


<ul style="list-style-type: none">• Chemical use Policy• Product Energy Efficiency• Global Standardization	<ul style="list-style-type: none">• Efficiency• Reduction & Conservation• Reuse & Recycling	<ul style="list-style-type: none">• Carbon Offset & Logistics Optimization• Ease of Upgrading• Material Elimination & Reduction	<ul style="list-style-type: none">• Producer Responsibility• Responsible Recycling• Transparent Goal Setting & Reporting
--	---	---	--

Integrated initiatives, worldwide execution



Staying ahead of the curve: Business Imperative



Staying ahead of the curve - Materials Management

- **Precautionary approach to product chemical content**
 - Requirements are based on known and anticipated risks
- **Global standards**
 - All Dell products must meet one global restricted materials standard. Example is RoHS.
- **Supply chain management**
 - Informed decisions with respect to substitution.
- **Continued open dialogue with key stakeholders**
 - Critical for identifying next challenges: government, customers, suppliers, competitors, academia and NGOs



Staying ahead of the curve: Supply Chain Management

- **Engineering specifications and contracts**
 - Include compliance thresholds and;
 - potential exemptions
- **Declarations of conformity for each part**
 - Separate part numbers
 - Labeling requirements
- **Declaration of conformity at system level**
- **Analytical test audits of components**



Guidance Document
on
Restricted Materials

Referenced to: A08-00

Table of Contents

1. INTRODUCTION.....	2
1.1 PURPOSE.....	2
1.2 SCOPE.....	2
2. PRODUCT CONTENT RESTRICTIONS.....	2
3. PRODUCT PACKAGING CONTENT RESTRICTIONS.....	4
4. BATTERY CONTENT RESTRICTIONS.....	4
5. SUPPLIER DECLARATION PROCESS.....	5
6. NON-COMPLIANCE RESOLUTION.....	6
APPENDIX A: REPRESENTATIVE LIST OF CAS NUMBERS.....	7



Backup



Substances of Very High Concern (SVHC)

Substances of very high concern are:

- **carcinogens (category 1 and 2)**
- **mutagens (category 1 and 2)**
- **substances which are toxic to reproduction (category 1 and 2)**
- **persistent, bio-accumulative and toxic substances (PBTs),**
- **very persistent and very bio-accumulative substances (vPvBs)**
- **substances identified from scientific evidence as causing equivalent concern to those mentioned above, for example substances which disturb the hormone system (endocrine disruptors)**

There are currently about 900 substances of very high concern

It is expected that REACH will identify another 600 SVHCs the next 11 years.

REACH will therefore address about 1500 substances of very high concern.

Known Substances of very high concern relevant to the IT industry include:

- Beryllium
- Chrome VI
- Zinc
- Arsenic
- Cadmium
- Mercury
- Lead
- Benzo[a]pyrene (PAH)
- Vinyl chloride
- Phthalates
- Acrylonitrile
- Carbon Black
- Organo-tin compounds
- *TBBPA?*