Outline for Potential GC3 Green Chemistry and Safer Materials Training - Draft

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Target audience: want people developing technology; ehs and stewardship (use and manufacture); marketing (commercial drives decision making to get on board understanding with different perspective – value proposition – opportunity to sustain business and articulate customer needs); purchasing and supply chain management (decision-makers regarding what goes into products).

Think about modular approach to hone in on breadth of audience.

- Could do deeper drill for chemists/designers
- For marketing/sales – overview of sustainability concepts; cut the chemistry

Approx 3 days (adults learn by self-assessment of technology; breakouts; activities). Teach concepts and then hands on activities; case studies

30-40 people – range of roles in firms - chemists; EHS

<u>Goals:</u>

- Introduce basic concepts - clear understanding and shared language that can be used through supply chains. Solid understanding of the value of these concepts: green chemistry; informed substitution.
- How different companies are integrating GC or how it could be integrated into the firm - examples
- Communication within firm (chemists/designers marketing and ehs) and through supply chain levels (what are customers asking for; not greenwashing, its an opportunity – ie renewable energy) can enhance gc application
- Do with suppliers and manufacturers together
- Taking a product lifecycle approach; how can gc principles be applied at different levels of product development cycle – could enable putting concepts to work. Outdoor Industry Association approach to this is interesting.

<u>Topic areas to cover:</u>

1. Overview of principles of green chemistry
2. Principles of green chemistry in practice
3. The steps/processes of alternatives assessment
4. Who needs to be involved in green chemistry/safer alternatives efforts
5. Evaluating hazards and comparing alternatives for both new and existing chemistries
6. Performance and economic assessments for new and existing chemistries
7. From idea to scale – implementation of green chemistry
8. Examples of green chemistry and safer alternatives in practice
9. Challenges to green chemistry/safer alternatives
10. Making the business case for green/safer chemistry
11. Available tools and resources