

NOTES from Life Cycle Thinking/Cost Benefit Assessment 10/10/12

AM Session

Industry comments:

None of the proprietary tools work. No existing LCA platforms fit
Some have modified a commercially available platform.
Others developed own internal LCA tool. Overlaid with regulations/fate.
Customized for: product, end user.
DfE products have a separate LCA tool.

Safety is 1st consideration; then market drivers, supply, and Brand attributes.
Brand is most associated with consumer support.

Does screening save time and then only use heavier LCA tool when needed – NO,
would not be cost effective. Use ISO 14040/14044 for LCA

For companies not using anything now, might need to pick pieces/parts of various tools
MCDA approach or pass/fail decision tree. Some might use ladders or circular analysis.
Depends on the specific product/manufacturer.

Need drop dead criteria (pass/not pass), then use LCA thinking. For example, water –
making more water-based products and saving water in the process so water footprint
of company/facility stays the same.

What is acceptable to DTSC to meet statutory/reg requirement?

Since there is no “one-size fits all,” need to balance between flexible and clear outcome/
that meets goal of statute (A-M criteria and regulation requirements). Include a
narrative to describe assumptions and selection.

Sounds like risk assessment.

What if guidance is short – asking for: (1) justifiable assumptions, (2) quality data, (3) comprehensiveness, (4) adequate info for DTSC to make a decision?

Need more specific definitions.

If small manufacturer spent \$100K to do assessment – what about cost to the business
(lost time, opportunity, staff . . .)?

Incremental improvement. Businesses are using LCAs on an ongoing basis in R&D –
continuous product improvement. Business tracks metrics.

Is 3 years of demonstrated improvement acceptable to DTSC given costs, technology,
patents . . .?? How much improvement is enough?

A-M criteria will have different weighting depending on the product. For example,
products that go down the drain might need to weight eutrophication more.

Examples/case studies would help.
Need quantitative approach, built out in iterative way
It's a meta analysis. Show less impact is happening over time.

Screening is helpful **if** it creates more certainty. Screening gets you to a conclusion without doing the work. Screening has to be done anyway. A-M criteria requires analysis. Threshold limit is screening too.

P.M. Session

1. What tools are in use?

- Volvo's in-house Environmental Priority Strategies method- high level screening
- Volvo's in-house E-FMEA, Failure Mode Effect Analysis
- Focused LCA, use internal data
 - Comparative –alternatives and existing
 - Add social and economic factors

2. Challenges?

- Full LCA – time and cost involved, years to complete
- Manufacturer must consider additional requirements, i.e. conflict minerals, social impacts
- Product evaluation

3. Guidance Suggestions

- Include checklist of LC phases and impacts to consider; or questionnaire format
- Need to include- What claims could be made by manufacturer/supplier about product once they go through regulatory AA process successfully
- Map impacts and show examples
- Include screening approaches, focusing on important elements
- Case studies
- Need clarity on what's expected.