Cradle to Cradle Interagency Work Group Discussion Questions
August 14, 2007

The Cradle to Cradle Work Group identified questions pertinent to this part of the Green Chemistry Initiative. We welcome your comments and insights to any or all of the questions posted below. Please submit your responses to the California Green Chemistry Initiative Blog page

Existing Chemicals:
1. What if California required all chemical manufacturers and importers of chemicals, regulated by TSCA, to have a baseline toxicity and eco-toxicity data included on their Material Safety Data Sheet (MSDS) in Sections 11 and 12 as listed below?

Section 11 (toxicological information)
Oral LD50
Skin LD50
Eye Irrigation Data
Inhalation LC50
Section 12 (ecological information)
96 hour LC50 fathead minnow
96 hour LC50 bluegill
96 hour EC50 water flea

2. In addition to the above, what if data on toxicity endpoints, such as neurotoxicity, endocrine disruption etc. were required to be included?
New Chemicals:

3. What if TSCA required all new chemicals to have the above mentioned baseline toxicity and eco-toxicity data on the Pre-manufacture Notification (PMN) form? The goal is to identify substances of hazardous properties and to evaluate the risks of human and environmental exposure.

4. What mechanisms could we use to collect information on chemical use in California? Information about chemicals in products?

Potential Information Categories:
5. What factors has your business taken into account (i.e. market, environmental need, external, internal stimuli to develop, etc) to develop and/or manufacture the commodities, products, and/or processes that your business provides? (Please identify the industry type and describe the processes)

6. What was learned during the development of commodities, products, processes that you would recommend to avoid and/or to apply to the development of new Cradle to Cradle (C2C) products or processes?

7. What successes and/or failures i.e. business, environmental perspectives, etc. of these C2C commodities/products, processes would you recommend to avoid or practice?

8. What areas in your business and/or organization's would you explore new innovative possibilities for novel and potentially market successful and environmentally compatible C2C projects?

9. What is the most effective process to ensure there is future increased emphasis on products that can be characterized with C2C in their preparation, manufacture, distribution, disposal?

10. What if legislation mandated take back programs for specified products and commodities?

11. How should California measure the movement towards a Green Chemical Economy?

12. What if, California required establishment of initial "Green Metrics"?
What rate of change will be considered "significant"?
Who should measure the rate of change?

13. Should there be unique C2C standards for common businesses that do similar activities, such as oil refining, polymer syntheses, computer chip manufacturing, agriculture?
How will they be defined?
Who will define them?
If defined, who will monitor/assess their practice?

14. How can California and the US EPA synergize their efforts to move to a Green Chemical Economy?

15. Are there economic strategies to address the possible more costly greening of preparation, manufacture, distribution, disposal?
Who should bear them (if more costly)?
Who decides who should bear them?

16. Are there reasons why we should or shouldn't adopt the Canadian Lists for the list of chemicals requiring information submittal, such as differences in volume or the types of industrial chemicals used in California?

17. Is there a rationale for having a different system for existing and new chemicals and products? What is the rationale? What should the differences be and why?

18. Are there reasons why we should or shouldn't adopt REACH? If we don’t choose to adopt REACH it its entirety, are there aspects that make sense for California?

19. Should a Green Chemistry process be phased in over time and how might the phases be prioritized and structured?

20. What if California adopted a chemical use policy that augmented the federal Hazardous Substance Act of 1960 by 1) amending the definition of products; 2) requiring labeling similar to the Federal Nutrition Labeling & Education Act of 1990, that requires disclosure of chemical information in products and commodities to educate the public about the chemicals and the health hazards and/or implications of their use?

21. What process should be considered to make decisions on chemicals where there is incomplete toxicological information, such as carcinogenicity and mutigenicity?

22. How should the public obtain information about chemicals in products? Should product labeling be required? Should there be a database containing toxicological data that is available to the public?

23. What should the decision process be to determine which chemicals should be modified to be less toxic or to determine if there are available substitutes?

24. How should economic costs be factored into decision making? Are there methods to monetize the costs and benefits of new processes? If so, what are they?

25. Do we need to establish priorities for the review of existing chemicals and what information do we need to establish priorities?