



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

Dear Sustainable Materials Management Coalition:

I would like to congratulate the Sustainable Materials Management Coalition (SMMC) for developing Guidance on Life Cycle Thinking and Its Role in Environmental Decision Making. This document uses practical, real-world examples to illustrate the value of considering environmental impacts from a life cycle perspective when making environmental decisions.

The EPA values the opportunity to collaborate with stakeholders on important environmental issues. Our collaboration with the SMMC has been particularly fruitful as the SMMC works to make Sustainable Materials Management and life cycle thinking accessible to decision makers who are not life cycle analysis experts. The guidance document provides examples that demonstrate that the “obvious” answer isn’t always the right answer, and show how life cycle thinking can be used to make better environmental decisions. The document also discusses the importance of transparency and communicating with the public, so that the value and strength of the decision is understandable to everyone.

In recent years, there has been a great deal of research and discussion about the rate at which we are using our planet’s limited natural resources, and the impacts of resource consumption. In 2006, the UNEP International Resource Panel reported that by 2050, world consumption of minerals, ores, fossil fuels and biomass will reach 140 billion tons per year, unless economic growth is decoupled from the rate of natural resource consumption. A report published by the EPA in 2009, Opportunities to Reduce or Avoid Greenhouse Gas Emissions through Materials and Land Management Practices, estimated that approximately 42% of U.S. greenhouse gas (GHG) emissions are attributable to materials management activities and approximately 16% of U.S. GHG emissions are related to land management choices – two areas where life cycle thinking can lead directly to more sustainable outcomes.

Life cycle thinking is an essential tool for informing sustainability programs, and it provides a common platform for evaluating alternatives – whether you are looking at alternative policies, processes, products, materials or outcomes. The EPA articulated the concepts of life cycle thinking and applied life cycle analysis in a report we published in 2009, entitled Sustainable Materials Management: The Road Ahead, which provides a roadmap to a materially-sustainable future based on life cycle materials management. The Road Ahead has informed a paradigm shift across the EPA to encourage the use of a full life cycle-perspective of how we should source, use and manage materials in order to minimize environmental impacts.

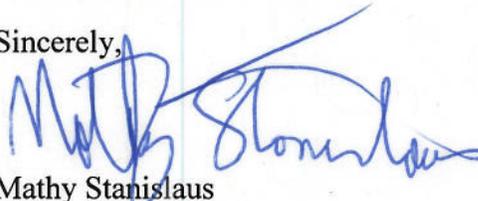
For example, the EPA recently issued draft guidelines for environmental performance standards and eco-labels that will help the federal government buy greener and safer products. These draft guidelines demonstrate life cycle thinking, requiring hot spot emphasis and encouraging consideration of the full range of product life cycle stages, including explanation if any significant life cycle stage is excluded

from consideration. The draft guidelines would also promote standards that consider the full range of environmental attributes, again encouraging explanation if any significant environmental attribute is excluded from consideration. In addition, the draft guidelines address other critical approaches, like disclosure of ingredients and weighting methodologies, signaling the federal government's intention to use standards and ecolabels that are clear, complete, and effective in protecting human health and the environment.

The core life cycle thinking elements that are important considerations in green purchasing decisions are also important considerations when evaluating other activities, such as product design or processes development: 1) consider all stages in the life cycle, 2) understand and evaluate all relevant environmental attributes and impacts, 3) disclose all assumptions, and 4) communicate completely and clearly. A key component of all sustainability programs or goals is the application of life cycle thinking to products and materials management. Life cycle thinking is also important to increase the safety of chemical plants.

The EPA appreciates the opportunity to work with SMMC on this valuable document, and we look forward to increasing our use of life cycle thinking to improve decision making.

Sincerely,



Mathy Stanislaus
Assistant Administrator