Promoting Safer Chemicals in Consumer Products and Services

Maine Governor John Baldacci’s Executive Order
A Presentation for *Characterizing Chemicals in Commerce*
Austin, Texas December 12, 2006

Maine Department of Environmental Protection
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Maine Governor John E. Baldacci’s Executive Order

Promoting Safer Chemicals in Consumer Products and Services


“Continue and expand state leadership in promoting sustainable economic development and environmental public health protection through the elimination of the use of and environmental release and discharge of hazardous chemicals of concern within the next generation.”
Promoting Safer Chemicals
Human and Environmental Safety

“The production, use and disposal of consumer products containing hazardous chemicals poses preventable risks of harm to health and the environment.”
“Further development of safer alternatives to hazardous chemicals in Maine has the potential to spur business growth and create jobs…”
Promoting Safer Chemicals
It Can and is Being Done Profitably

Businesses in Maine such as Tom’s of Maine and Interface, Inc. develop and sell products that are safer for people and the environment and are very profitable.
Promoting Safer Chemicals

- State Government Leads by Example

- Creation of a Task Force Chaired by the Commissioner of Environmental Protection
Leadership by Example
Maine Environmentally Preferable Procurement (EPP)

- Safer Janitorial Supplies
- Lead Free Wheel Weights
- Uniforms that don’t require dry cleaning
- Green Lamps and Ballast
- EPEAT Standards for Computers
EPP Janitorial Supplies
Motivation for Change

- Initial impetus; observation of unsafe and illegal staff use of disinfectants in state facility
- Warehouse not keeping up with current MSDS
- Lack of proper personal protective equipment
Motivation for Change

- Improper use of disinfectant (contact time)
- Lack of understanding of transmission of bacteria and viral disease
- Lack of criteria for selection and purchasing products
• Board of Pesticides control toxicologist works to address through multiple parties including Bureau of Purchases
• Issue expands from worker safety to cradle to grave product selection with Executive Order
EPP Janitorial Supplies Team

- Purchasing staff are experts on purchasing process not environmental, toxicological or health and safety experts.

- EPP Janitorial Supplies team: Bureau of Purchases staff, Board of Pesticides Control Toxicologist, Environmental Specialist, State Safety Officer.
EPP Janitorial Supplies Criteria

• Modeled after Battelle Pacific Northwest Laboratories protocol
  ▪ General Guidelines for product performance
  ▪ Mandatory reporting
    ▪ SARA III, VOC’s or Ozone depleting
    ▪ Cancer, mutations or birth defect status
    ▪ Product demonstration and testing
    ▪ Employee training and technical assistance
EPP Janitorial Supplies Criteria

• Non-mandatory; ranking section
• Product container chemistry
  ▪ biodegradability, type of plastic
• Product toxicity
  ▪ Aquatic, skin, eye, dyes, fragrances
• Product parameters
  ▪ Delivery time, substitutions
EPP Janitorial Supplies
Challenges

• Separation of disinfectants and routine cleaning products has been controversial.
• For more information contact:
  • Jeremy Caron@maine.gov
• Finish and learn from our EPP Request for Proposal (RFP) for Janitorial Supplies

• Develop RFP’s for additional commodity areas

• Any public unit in Maine; county, municipal can choose to use a state RFP
Wheel weights balance tires to prevent uneven wear.

~10% of Lead weights estimated to fall off tires and onto roads.

Weights degrade and contribute to levels of lead in runoff that is toxic to some aquatic organisms.
EPP Lead Free Wheel Weights

- Many alternative materials
- Pros and cons
  - Zinc used in EU but also has aquatic toxicity
  - Coated tungsten used by Minnesota travel management division; they are happy with performance but there are environmental concerns about PFOA and PFOS in coating
  - Maine chose steel coated for low aquatic toxicity
EPP Lead Free Wheel Weights
Getting Started

• Environmental staff defined environmental objectives and concerns
• Vehicle fleet staff instrumental in locating alternatives to meet their performance and supply criteria
• Will review and evaluate performance after one year of use of alternatives
EPP Lead Free Wheel Weights
Off to a Good Start

• Working well on most tires
• Some supply uncertainty with initial order – now resolved
• A small number of rims need alternative tab design
• Change over to coated steel weights occurs during routine tire maintenance
EPP Lead Free Wheel Weights
Leadership by Example

• Coincidently several auto parts distributors and stores have begun carrying the steel weights after state research and a decision that the state would move to steel weights.

• State of Maine also utilizes over 350 auto repair facilities
EPP Lead Free Wheel Weights
Leadership by Example

• Supply availability from local auto parts stores such as NAPA will make it practical for state agencies to request use of the coated steel weights for most state vehicles serviced by auto repair facilities.
EPP Lead Free Wheel Weights
A Growing Trend

• EU banned lead wheel weights July 2005
• Most foreign car manufacturers as well as 2 of the 3 domestic auto manufacturers GM and Ford equip tires with non-lead wheel weights
• Minnesota state fleet, Ann Arbor Michigan and Maine state fleet using non lead wheel weights
Environmental Preferable Procurement
Dry Cleaning Alternatives

- Perc (perchloroethylene/tetrachloroethylene) contamination from historic drycleaner operations

- Alternative cleaning processes are available

- Under Executive Order state provided uniforms will not require dry cleaning [if feasible]
• All uniforms purchased through Central Purchasing [ >$2500 ] do not require drycleaning

• Some small scale clothing purchases are still labelled dry clean only; outreach on alternatives to accompany uniform maintenance allowance checks
Integrated Pest Management

• Risks from pests: bites, stings, infectious disease, allergies and asthma

• Risk from pesticides: acute health risks (i.e., reactions) and long-term health risks (i.e. health effects) and other environmental impacts, economic costs of application
Integrated Pest Management

• Board of Pesticides Control data indicates that the use of lawn care products in Maine tripled 2001 to 2004

• IPM reduces pests and pesticide use
Integrated Pest Management
What is it?

- Sustainable approach to managing pests
- Integrates a variety of prevention and control tactics with other property management practices for systematic, holistic, scheme
- Combines physical cultural, mechanical, chemical and/or biological strategies to disrupt pests
- Minimizes economic, health, and environmental risks
Integrated Pest Management

Multiple Benefits

• Protect Human Health
  ▪ Improve air quality
  ▪ Reduce sick days
  ▪ Improve productivity

• Save Money
  ▪ Reduce property maintenance costs
  ▪ Reduce facility repair emergencies
  ▪ Fewer pest control emergencies

• Protect the Environment
Integrated Pest Management
A Record of Success at GSA

• US General Services Administration: mandated IPM in all Capitol-area GSA managed, leased and owned buildings

• (Greene & Breisch J.Econ.Entomol.2002)
  ▪ 95% decrease in pesticide use
  ▪ 100% reduction in pesticide sprays
  ▪ 15 X increase in non-chemical control divides
  ▪ 89% fewer pest control requests
Integrated Pest Management
Leadership By Example

• IPM required in Maine Schools
  http://www.state.me.us/agriculture/pesticides/schoolipm/
Integrated Pest Management
New Maine Law

• Maine law will require IPM in public facilities including businesses Jan 2007
  http://www.state.me.us/agriculture/pesticides/chapter_26/index.htm

• Executive Order is jumpstarting IPM in select state facilities

• Contact Kathy.Murray@maine.gov
“To identify and promote the use and development of safer alternatives to hazardous chemicals in consumer goods and services made, provided or sold in Maine so as to benefit public health, the environment and the economy for all Maine people”
Promoting Safer Chemicals
Task Force Duties

“Survey relevant knowledge and activities re: promoting safer alternatives to priority chemicals in environmental public policy development, green chemistry R&D and economic incentives”

Develop recommendations for a more comprehensive chemicals policy that requires safer substitutes to priority chemicals in consumer products and creates incentives to develop safer alternatives, on a state and regional basis;”
Promoting Safer Chemicals
Task Force Duties

“Develop recommendations on expanded consumer education, retailer education and training, supply chain information and public right-to-know in order to promote markets for safer alternatives; “

Develop recommendations for submission to the Maine Science and Technology Advisory Council on expanded research and development of safer alternatives to priority chemicals in consumer products, including investment in green chemistry research and development and the possibility of developing bio-based plastics from Maine-based agricultural and forest products.”
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Task Force membership

• State Agencies
• Environmental /Public Health NGOs
• Business and Business Association
• University Researcher, Public, Labor
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Task Force Work to Date

• Survey relevant knowledge

  ▪ Lack of comprehensive and accessible chemical safety information is a burden for businesses who want this information and it adds risk to worker safety.
Promoting Safer Chemicals
Interim Report

• Expected Recommendations

  ▪ Bond funding to support Green Chemistry and related environmental initiatives

  ▪ Increase graduate and undergraduate education in toxicology and environmental health
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Task Force Recommendations

• Education on safer materials through website, educational outreach and chemicals support materials

• Input to K-12 curriculum on toxicology and environmental health
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Task Force Impetus

• Task Force facilitated formation of a consortium interested in bio-based, renewable and biodegradable fiber produced from local feed stock

• The consortium was awarded a Maine Technology Institute seed grant to research the resource availability and economic requirements for manufacturing bio-based fiber from Maine potatoes.
Promoting Safer Chemicals
Next Steps

• Final report October 2007

• Expected final report to focus on expanded consumer education, retailer education and training, supply chain information and public right-to-know to promote markets for safer alternatives