Resolution 11-4
Approved September 26, 2011
Indianapolis, Indiana

As certified by
R. Steven Brown
Executive Director

ON CHEMICALS PRIORITIZATION AND THE SAFER CHEMISTRY CHALLENGE PROGRAM

WHEREAS, the 2011 International Year of Chemistry established by the United Nations commemorates the achievements of chemistry; and

WHEREAS, raising awareness of chemistry among the general public to attract young people into the field, as well as highlighting the role of chemistry in solving global problems is critical; and

WHEREAS, the chemical industry is responsible for significant improvements to the health and well being of all Americans and for people around the world, and is vital to the U.S. economy by providing hundreds of thousands of jobs and supplying hundreds of products; and

WHEREAS, there are increasing concerns about the safety of chemicals in commerce and an overwhelming agreement on the need to reform the Toxic Substances Control Act (TSCA) of 1976; and

WHEREAS, the U.S. Centers for Disease Control and Prevention's *National Conversation on Public Health and Chemical Exposures* brought thousands of people from across the United States to create an Action Agenda to help governments strengthen efforts to protect the public from harmful chemical exposures; and

WHEREAS, people expect to be kept safe from harmful chemical exposures and recognize the urgency to protect children and other vulnerable populations and the environment; and

WHEREAS, workers have the greatest risk of industrial chemical exposure given their proximity to chemicals in the workplace, often in high concentrations; and

WHEREAS, many businesses are working to achieve high levels of environmental compliance and performance through sustainable business practices to remain competitive in the global marketplace; and

WHEREAS, the U.S. EPA's National Partnership for Environmental Priorities (NPEP) reduced 42 million pounds of chemicals in partnership with more than 280 public and private organizations; and

WHEREAS, the U.S. EPA Office of Chemical Safety and Pollution Prevention intends to identify priority chemicals for review and possible risk management action under TSCA, and supports enhanced chemicals management and design for environment (DfE) programs to assess the full life-cycle risks posed by the use of toxic chemicals in products; and

WHEREAS, the U.S. EPA Great Lakes National Program Office has awarded a grant to the National Pollution Prevention Roundtable (NPPR) to conduct business technical assistance to reduce the use of priority chemicals of concern through source reduction with a goal to prevent at least 2 million pounds of toxic chemicals from entering the Great Lakes ecosystem; and

WHEREAS, alternatives assessment is a process of identifying and comparing potential chemical and non-chemical alternatives to a chemical of concern to facilitate informed substitution; and

WHEREAS, pollution prevention can achieve toxics use reduction, promote green chemistry and engineering, and provide educational and economic opportunities to develop safer chemicals, processes and products; and

WHEREAS, states, universities, and businesses play an important role in implementing pollution prevention programs, voluntary initiatives, and technical assistance services, including providing assistance to small businesses.

NOW, THEREFORE, BE IT RESOLVED THAT:

ECOS member states should actively participate in U.S. EPA's process for identifying priority chemicals for review and assessment, including providing input on data sources for prioritization. States should provide input on sources of hazard data sources and risk data sources to assist U.S. EPA in selecting specific chemicals from the initial group for further assessment. U.S. EPA's identification process is outlined here: http://www.epa.gov/oppt/existingchemicals/pubs/chempridiscguide.html

ECOS state members, led by the Great Lakes region, support collaborative efforts to work with the National Pollution Prevention Roundtable and other organizations to support the 2025 Safer Chemistry Industry Challenge Program with a goal to reduce the use of chemicals of concern by 25% using 2005 use as a baseline[1].

To the extent possible, states should work in partnership with industry sectors or individual facilities to target chemicals of concern to promote the substitution of hazardous chemicals with less toxic alternatives, green chemistry, research and development, recognition programs, and public education.

ECOS requests the Administrator of the U.S. EPA to endorse and fund toxic use reduction efforts through the State Performance Partnership Agreements, state pollution prevention grants, and public-private partnership efforts.

[1] A description of the program current as of September 2011 is included here as Appendix 1. A candidate list of chemicals current as of September 2011 is included here as Appendix 2.

Appendix 1

2025 Safer Chemistry Industry Challenge Program of the National Pollution Prevention Roundtable (NPPR)

More than ever before, companies are focused on achieving high levels of environmental performance and sustainable business practices. Sustainable business practices create market opportunities and help companies remain competitive in the global marketplace. The environmental benefits that come from these sustainable practices include resource conservation and pollution prevention. Such practices are a means to meet environmental standards and ensure a high quality of life for future generations.

Moving toward safer chemistries is a key part of sustainable business practices, along with energy efficiency and water conservation. To increase their sustainable business practices, companies are looking for greener, safer alternatives in the products they manufacture and use.
Companies can lead by example and model good environmental performance by using a systematic approach for managing environmental responsibilities, taking extra steps to reduce and prevent pollution, eliminating the use of toxic compounds, and substituting safer alternatives.

NPPR 2025 Safer Chemistry Industry Challenge Program

The NPPR 2025 Safer Chemistry Industry Challenge Program is designed to motivate, challenge, and reward facilities to reduce the use of chemicals, especially hazardous chemicals, through source reduction measures. These measures include the following approaches:

- Making changes in production processes and adopting new technologies
- Moving toward cleaner processes that avoid the use and generation of toxic chemicals
- Changing raw materials to include benign or low toxicity materials that degrade into innocuous substances in the environment
- Using tools and design options in support of green chemistry
- Selecting and using safe alternatives

As part of this program, companies are encouraged to partner with state and local technical assistance programs. Such programs can help identify ways to reduce waste and emissions and move toward safer substitute chemicals, which can result in reduced costs, improved productivity, and regulatory compliance.

Challenge Program Benefits
By making changes and participating in the Challenge Program, companies can:

- Improve employee health and safety
- Minimize risk and liability
- Institute supply chain initiatives
- Improve company image with the community
- Reward investments in the design of increasingly safer chemicals and products
- Reduce cost of compliance and employee protection
- Realize that alternatives may have improved performance
- Improve profitability

Target Chemical List
Companies will develop their target chemical list in two steps: 1) include appropriate chemicals of high concern, and 2) add chemicals of concern specific o your industry or company operations.

Step 1: The following chemicals are of high concern as determined by the U.S. EPA and other organizations and should be considered for reduction or elimination by companies participating in the Challenge Program.

Lead	Polybrominated diphenylethers (PBDEs)
Mercury	Hexabromocyclododecane (HBCD)
Chromium	Phthalates
Cadmium	Bisphenol A (BPA)
Perchloroethylene	Short chain chlorinated paraffins
Perfluorinated compounds (PFCs)	Formaldehyde

Step 2: Select chemicals of concern specific to your industry sector or facility to target for reduction.

Program Reduction Goals (taking into account production ratio)

- Document previous achievements since 2005 (baseline year)
- 10% by 2015
- 20% by 2020
- 25% by 2025

Steps to Participating in the Challenge Program

Step 1. Make the commitment

- Develop and communicate a corporate policy statement indicating management commitment to eliminating or reducing the use of chemicals of concern and substitute safer alternatives
- Form a team with identified team leader to address the project and implications for the business

Step 2. Conduct an assessment

- Work to develop a comprehensive understanding (or inventory) of the chemicals used in processes and products at the facility
- Ask suppliers for data on chemical ingredients of products. Assess the hazardous constituents of the chemicals used
- Categorize chemicals into categories of high, moderate, low or unknown concern/use
- Utilize NPPR's member technical assistance program resources (see Resources section)

Step 3. Set performance goals

- Create a list of chemicals of concern specific to facility operations
- Prioritize chemicals for elimination or reduction, taking into account volume of use, toxicity, potential for exposure, public and/or governmental concern and customer demand
- Publicly share the list of priority chemicals of concern
- Establish elimination/reduction goals and schedules for the targeted chemicals list
- Describe achievements to date

Step 4. Create an action plan

- Identify and select alternatives (see Resources section for screening tools)
    - o Conduct alternatives assessments for the target list of chemicals
    - o Assess hazards and effectiveness of potential alternatives
    - o Identify elimination/reduction opportunities, taking into account technical and cost considerations
- Focus initial elimination/reduction efforts on target list of chemicals for which safer alternatives are readily available
- For each priority chemical of concern, create a workplan with action steps, roles, and timelines

Step 5. Implement the action plan

- Utilize NPPR's member state technical assistance programs
- Utilize internal team to implement needed tasks

Step 6. Evaluate progress

- Establish a metrics system to track elimination/reduction efforts
- Measure and document results
- Publicly report on progress in achieving performance objectives
- Update goals and plan as necessary

Step 7. Recognize and communicate achievements

- Promote new and existing members (website, brochure, newsletter)
- Keep employees informed and publicize accomplishments
- Apply to NPPR MVP2 program
- Make use of state recognition programs
- Develop NPPR web profile, case studies, and success stories
- Develop press release, including notification of legislators
- Use special logo that designates the company as a Challenge Program participant
- Attend and present information at the National Environmental Sustainability Summit

Program resources

Tools for screening chemicals and selecting alternatives

- Green Screen for Safer Chemicals: http://www.cleanproduction.org/Green.Greenscreen.php
- P2Rx Rapid Response and other resources: P2rx.org
- QCAP:
- EPA Chemical Screening Tool for Exposures and Environmental Releases, ChemSTEER: http://www.epa.gov/opptintr/exposure/pubs/chemsteer.htm
- EPA Design for the Environment (DfE): http://www.epa.gov/dfe/alternative_assessments.html

NPPR Training and Technical Assistance resources

- Summit sessions:
    - Emerging chemical policy in states
    - New/developing regulations on toxic chemicals
    - Interrelationship between toxics, energy, and GHGs, and technology development
    - Process innovation
    - Green chemistry
- Training
    - On line training modules
    - Webinars
    - P2 101 training
    - E2 101 training
- Workgroups – Access to workgroup members with extensive background in chemicals policy development
    - Dialog between business and states via NPPR workgroups on topics related to regulation, policy, technology, training, etc.
    - Technical assistance – staffed by scientists and engineers with experience assessing industrial processes
    - Partners – access to other related expertise in energy efficiency, lean, supply chain, etc.

NPPR background

For over 25 years, the NPPR has supported state, local, and tribal programs to develop, implement, and evaluate efforts to avoid, eliminate and reduce waste generated to air, land, and water. NPPR has been at the forefront of efforts to prevent pollution by promoting activities in product substitution, safer alternatives, and green chemistry. These are ongoing initiatives including technical assistance, information exchange, chemicals policy, forming partnerships, and education.

Requirements for Participation

To qualify for participation, companies must have a systematic approach to eliminating the use of targeted chemicals, demonstrate results, and be recognized for results achieved. Businesses must meet the following criteria:

- Be a member of the National Pollution Prevention Roundtable
- Sign the commitment form on NPPR web site

- Utilize technical assistance provided to company from state programs to identify toxic chemical reduction opportunities
- Develop a plan for chemical reduction
    - Target chemical focus
    - Schedule
    - Action plan
- Conduct six-month reporting on progress
- Be available to be recognized at the 2011 National Environmental Sustainability Summit

Rolling out the Challenge Program

- Develop proposal for and obtain funding
- Develop brochure and resource materials
- Partner with SAC, others?
- Post Challenge program on NPPR web site (8 step program)
    - Description
    - Commitment form
    - Template plan
    - Reporting form
- Oversee promotions and outreach
    - 2011 Summit debut
    - P2RESS and P2OST
    - P2Tech listserve
    - Mailings/emails
- Host webinar to walk through steps

Additional Partnering and Coordination Information

EPA Coordination and Collaboration

- Hold Policy forums (Ken Zs ideas). Bring together industry, EPA and states to talk toxic chemicals reduction policy and green chemistry
- Identify ways to address EPA strategic plan priorities
- Identify educational outreach and technical assistance needs and funding opportunities

Program sponsors: NPPR, US EPA, SAC, industry groups, NGOs, states

- Determine organizational structure and divide up roles and responsibilities
- Establish participation guidelines
- Conduct outreach and recruitment
- Review program performance and issue reports
- Update program components when necessary
- Create budget and seek funding support

Appendix 2

The following list of chemicals for the 2025 Safer Chemistry Industry Challenge Program was developed by NPPR. The list is based on U.S. EPA and various state chemical management programs. The list was developed with input and peer review from NPPR state members. The list includes lists developed by the U.S. EPA's chemical action plans, U.S. EPA National Partnership for Environmental Priorities, the Massachusetts Toxic Use Reduction Institute, the Minnesota Toxic Free Kids Act, and the Washington State Toxic Metals Prevention Program.

Various State and Federal Priority Chemical Lists

EPA NPEP (31), Natl Partnership for Environmental Priorities

http://www.epa.gov/epawaste/hazard/wastemin/priority.htm

1,2,4-trichlorobenzene
1,2,4,5-tetrachlorobenzene
2,4,5-trichlorophenol
4-bromophenyl phenyl ether
acenaphthene
acenaphthylene
anthracene
benzo(g,h,i)perylene
debenzofuran
dioxins/furans
endosulfan,alpha and beta
fluorene
heptachlor and heptachlor epoxide
hexachlorobenzene
hexachlorobutadiene
hexachlorocyclohexane,gamma (lindane)
hexachloroethane
methoxychlor
naphthalene
pendimethalin
pentachlorobenzene
pentachloronitrobenzene (quintozene)
pentachlorophenol
pnenanthrene
polycyclic aromatic compounds (incl PAHs)
polychlorinated biphenyls (PCBs)
pyrene
trifluralin
cadmium
lead
mercury

State Chemicals Lists

Washington State

cadmium
lead
chromium
mercury

Mass TURI 5 Chemicals Study

perchloroethylene
formaldehyde
chromium (hex)
lead
di-2-ethyhexylphthalate (DEHP)

Minnesota Toxic Free Kids Act

http://www.health.state.mn.us/divs/eh/hazard/topics/toxfreekids/highconcern.html

(125 pages, priority chemicals below)

bisphenol A (BPA)
cadmium
decabromodiphenylether (decaBDE)
formaldehyde
hexabromocyclododecane (HBCD)
lead
phthalates

EPA Chemical Action Plans

bisphenol A (BPA)
benzidine dyes and pigments
hexabromocyclododecane (HBCD)
PFCs
nonylphenol/nonyl phenolethoxylates (NP)
penta,octa,deca-bromodephenyl (PBDES)
phthalates
short chain chlorinated paraffins
isocyanates/diisocyanates
siloxanes (future)