

PBT – P2

Preventing Pollution: A Tool to Reduce and Eliminate Persistent Toxic Substances in the Great Lakes Basin

Through collaboration, shared value, and applied problem solving, P2 can influence the management of PTSs by:

- Reducing treatment, transport, and disposal costs
- Minimizing compliance issues and cost associated with regulated wastes
- Reducing future liability through reduced risks to workers, communities, and the environment
- Avoiding costs of accidents and spills
- Improving production times
- Enhancing public image and community relations

Examples of successful P2 practice in the Great Lakes Basin include:

- Household Hazardous Waste Collections
- Mercury Free Hospitals and schools
- Tribal Burn Barrel Strategies
- Pesticide Cleansweep Programs
- Regulatory actions

By targeting specific sources of use, such as:

- schools, hospitals, end-of-life automobiles and dental offices
 - 505 lbs. of elemental mercury recovered from auto switches bound for crushing and shredding operations (NY)
 - 8,187 mercury containing devices reclaimed from households, school laboratories, doctor's offices and clinics, recovering 621 lbs. of mercury (MI)

Current and Future Considerations

- As the global market for manufactured goods becomes more competitive, improved efficiency in the use of natural resources is integral to a sustainable economy and society. Waste reduction and the elimination of potentially harmful substances in the design of products is now becoming an important principal in how things are made.
 - Corporate Social Responsibility (CSR)
 - Environmental Management Systems (EMS)
 - Green Engineering
 - Green Chemistry
 - Design for the Environment (DfE)
 - Environmentally Preferred Purchasing (EPP)

What is working

- The cyclical use of materials
- Targeting specific toxic chemicals for replacement
- Defining materials flows is resulting in the creation of products designed to be recycled
- Service oriented programs are also being created to take back products at end of life
- The use of alternative fuel and energy sources is also considered a marketable indicator in new the Green Label Initiative
- Offering incentives –financial, regulatory, public perception

Where we are going

- The waste reduction and elimination models now being practiced in some industries provide a new vision
- If we consider that in all natural systems, waste equals food, ecosystem sustainability is an easy concept to grasp
- Innovative solutions through strong partnerships are needed to recognize that in both human and natural systems, sustainability is an outcome of relationships among the parts

What is missing:

- Larger scale coherent P2 plan
 - Many local/regional successes but no larger scale program to tie together
 - No prioritization by contaminant, mode of release, etc.
- Integration with other efforts
 - P2 can play a role in many areas (drinking water, wastewater, clean air, AOC cleanup, groundwater, WTE, power generation, etc.), but not all parties are at the table
- Methods to learn from mistakes
 - Focus on lb kept from environment precludes learning from failures