P2 and TSCA:

Overview of EPA's New National Emphasis Area for Pollution Prevention Grants

Agenda

- Briefly Review P2 Grant Opportunity
- Overview of Pollution Prevention (P2)
- P2 National Emphasis Areas (NEAs)
- Focus on Business-Based P2 Solutions Supporting TSCA Priorities and Chemical Safety
- Overview of Amended TSCA and Priority Chemicals
- Drawing the P2 Connection – Examples and case studies
  - Demonstration projects / research
  - Technical assistance
  - Roundtables
- Guidance for potential grantees
- Questions?

Purpose/Desired Work

- Authorized by Pollution Prevention Act of 1990, EPA seeks grants that
  - Provide technical assistance/training to businesses about source reduction techniques to help them adopt and implement source reduction approaches, and to increase the development, adoption, and market penetration of greener products and sustainable manufacturing practices.

  - Identify, develop, document and share P2 best management practices and innovations so this information may inform future technical assistance, and these P2 approaches and outcomes may be replicated by others.

Eligibility

- Any of the 50 states, District of Columbia, the U.S. Virgin Islands, the Commonwealth of Puerto Rico, any territory or possession of the U.S. (40 CFR 35.345)
- Federally-recognized Indian tribes that meet the requirements for treatment in a manner similar to a state as described (in (40 CFR 35.663),
- Intertribal Consortia that meet the requirements (in (40 CFR 35.504)
- Any agency or instrumentality of the state, including state colleges and universities.

Funding/Match

- EPA anticipates awarding approximately $9.38 million in federal P2 grant funding over a two-year funding cycle (approx. $4.69 million in FY 2018 and approx. $4.69 million in FY 2019).
  - Individual grant awards may potentially be in the range of $40,000-$500,000 for the two-year funding period (between $20,000 - $250,000 incrementally funded per year).
  - Some EPA regions have decided to have lower award caps
  - Avg. number of awards: **~40-50 awards**
- As required by the P2 Act, grant recipients must provide at least a 50 percent match of the total allowable project cost.
  - For example, if the total project cost is $100,000, the applicant must be able to provide $50,000 in cash or in-kind contributions in order to be eligible to receive a $50,000 grant from EPA.

What is P2?

- P2 (source reduction), is any practice which reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment prior to recycling of discarded material, treatment, or disposal; and reduces the hazards to public health and the environment associated with the releases of those substances, pollutants or contaminants.
  - P2 practices include equipment or technology, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in maintenance, training, or inventory control.
  - EPA interprets P2 as including practices that, increase efficient use of water, energy, raw materials, or other resources, or that may protect natural resources through conservation methods.

What is not P2?

- Practices which alter the physical, chemical or biological characteristics or the volume of a pollutant, hazardous substance or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service (refer to PPA Section 66303 and 40 CFR 35.343 AND 35.662).

- Recycling of discarded materials, waste, clean-up, disposal activities, and management of or processing of non-hazardous solid waste (e.g., paper/cardboard, glass, plastics, etc.) are not P2 activities and cannot serve as a basis for P2 grant funding.

- **If any of these activities represent more than a small or ancillary part of the proposed work funded through the P2 Grant, EPA will not consider the proposal for an award.**

National Emphasis Areas (NEAs) for P2 Grants

- NEA #1: Business-Based Pollution Prevention Solutions Supporting Toxic Substances Control Act (TSCA) Priorities and Chemical Safety
- NEA #2: Food and Beverage Manufacturing and Processing
- NEA #3: Hazardous Materials Source Reduction Approaches in States or Communities

NEA #1: Business-Based Pollution Prevention Solutions Supporting Toxic Substances Control Act (TSCA) Priorities and Chemical Safety

- Carry out P2 technical assistance and projects that identify, test, implement and/or disseminate business-based P2 solutions for **TSCA-regulated chemicals.**
- Emphasis placed on chemicals identified **in TSCA 2014 Workplan for chemical assessment.**
- Encourage businesses to identify and adopt chemical and process alternatives, and promote innovative efforts on market-driven research, product design, product substitution and product applications that target source reduction, i.e., reducing the use and release of hazardous substances, pollutants or contaminants.

TSCA Chemicals

- The list of chemicals currently manufactured, processed or imported into the US with uses regulated under TSCA are found on the TSCA Inventory – https://www.epa.gov/tsca-inventory.

- TSCA 2014 Workplan Chemicals – https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-work-plan-chemical-assessments-2014-update.

Priorities for Action under Amended TSCA

The First 10 Chemicals

- Trichloroethylene (TCE)
- Tetrachloroethylene (Perc)
- Methylene Chloride (DCM)
- N-Methylpyrrolidone (NMP)
- 1 Bromopropane (N-Propyl Bromide)
- Carbon Tetrachloride
- Cyclic Aliphatic Bromide Cluster HBCD
- 1,4 Dioxane
- Pigment Violet 29
- Asbestos

PBTs (persistent, bioaccumutive and toxic)

- Decabromodiphenyl ether (decaBDE)
- Hexachlorobutadience (HCBD)
- Pentachlorothiophenol (PCTP)
- Phenol, Isopropylated Phosphate (3:1) (PIP (3:1))
- 2,4, 6-tris(tert-butyl) phenol

First 10 Chemicals Under Amended TSCA

Chemicals	Examples of Sectors	Examples of Uses
Trichloroethylene (TCE)	Dry Cleaners, Vapor Degreasers, Metal Finishers Crafters/Hobbyists, Painters, Consumers	Degreasing, cleaning, spot cleaning, furniture care, lubricants, mold release agents, processing/intermediates
Methylene Chloride (DCM)	Bathtub Refinishers, Furniture Refinishers, Paint stripping, Building/Construction, Consumer Product/Auto Product Manufacturing and others	Solvent for paint stripping, cleaning, degreasing, adhesives/sealants, auto care products, laundry/dishwashing, lubricants, metal products, textile/leather products
Tetrachloroethylene (Perc)	Dry Cleaners, Cleaners, Printers, Auto shops, furniture repair shops, paint contractors, carpet cleaners, and others	Spot cleaners, cleaners including furniture cleaners, degreasing, lubricants, adhesives/sealants, paints/coatings, processing aid,

First 10 Chemicals Under Amended TSCA (cont'd)

Chemicals	Examples of Sectors	Examples of Uses
1 Bromopropane (1-BP) aka n-Propyl Bromide	Electronics, Cleaning, Metal Products, Construction, Furniture, Agricultural, others	Solvent for cleaning/degreasing, Adhesives/Sealants, Ag Products, Insulation
Asbestos	Building and Construction, Remodelers, Auto Brake Workers, Roofers, Coating Companies, manufacturers of various building, vehicle, insulation, coatings, textiles.	Adhesives, Insulation, Sheet Gaskets, Brakes, Asbestos-Containing Diaphrams
HBCD (Cyclic Aliphatic Bromide Cluster)	Building/Construction, Electronics Manufacturing, Furniture/Furnishing Manufacturing, Rug Manufacturing, Auto Manufacturing	Flame Retardant in Foam Insulation, Floor Coverings, Textile and Leather Products, Wire/Electronic Coating

First 10 Chemicals Under Amended TSCA (cont'd)

Chemicals	Examples of Sectors	Examples of Uses
Carbon Tetrachloride	Petrochemical, Paint and Ag Products Manufacturing, Auto Shops, Textile Manufacturing	Brake Cleaning, Traffic Paint, Textile cleaning, Lab Chemical, Etching,
N-Methyl Pyrrolidone (NMP)	Painters, Bathtub Refinishers, Circuit Board Manufacturers, Paint/Coating Manufacturing, Solvent/Chemical Manufacturing, Electronics/Electrical Manufacturing, Petroleum Manufacturing	Solvent for paint stripping, cleaning, degreasing, electrical/electronics process cleaner, ink, toner and colorant products, adhesives/sealants, anti-freeze, furniture/textile/leather care

First 10 Chemicals Under Amended TSCA (cont'd)

Chemicals	Examples of Sectors	Examples of Uses
1,4 Dioxane	Laboratories, Printers, Chemical Manufacturing, Wood Pulping, Pharmaceutical Manufacturing, Spray Foam Manufacturing, and others	Contaminant, Processing Aid,Lab Reagant, Sealant/Adhesive, Hydraulic Fluid, and others
Pigment Violet 29 (PV 29)	Paints and Coatings Manufacturing, Plastics and Rubber Manufacturing including Auto Manufacturing, Industrial Carpet Manufacturing, Commercial Print Ink Manufacturing and others	Dye/Colorant in paint/coating, plastic/rubber (including auto plastics, industrial carpet), merchant ink for commercial printing, paper, adhesion and cleaning/washing agents and others.

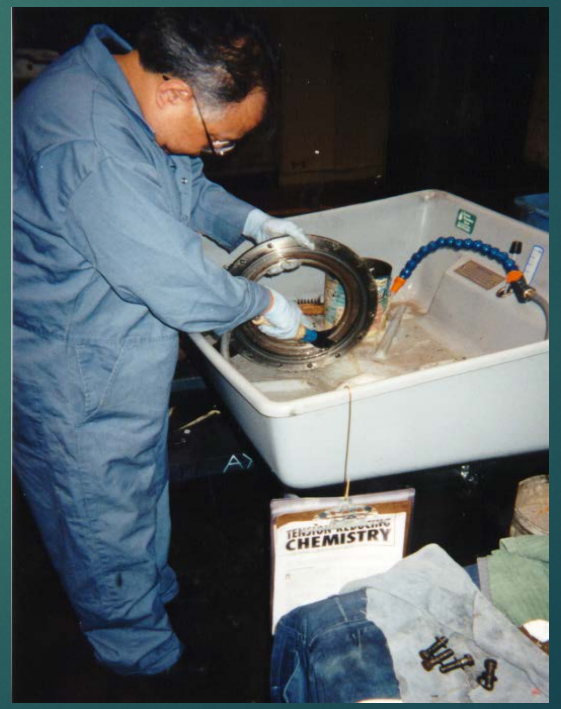
Examples (from appendix)

- Provide technical assistance to businesses to identify and pilot options/alternatives for existing chemicals (governed by TSCA), including those that are TSCA priorities or for which unreasonable risks have been determined.
  - Focus on specific sectors (e.g., automotive, aerospace, electronics.
  - Focus on chemical function (e.g., solvents).
- Facilitate industry collaborations or projects to develop or test alternative chemicals and/or chemical processes that can demonstrably reduce hazards associated with TSCA priority chemicals.
- Facilitate industry collaborations or projects to explore uses and applicability of new and/or innovative chemicals for which P2 claims are made in EPA's New Chemicals Program.
- Conduct outreach with large institutional procurement officials on procurement of environmentally preferable and Safer Choice products, including those purchased up their supply chains.
- Work with an industry significantly impacted by chemical regulation or restriction to develop public-private partnerships to reduce or eliminate use of those chemicals

Examples: Demonstration projects / research

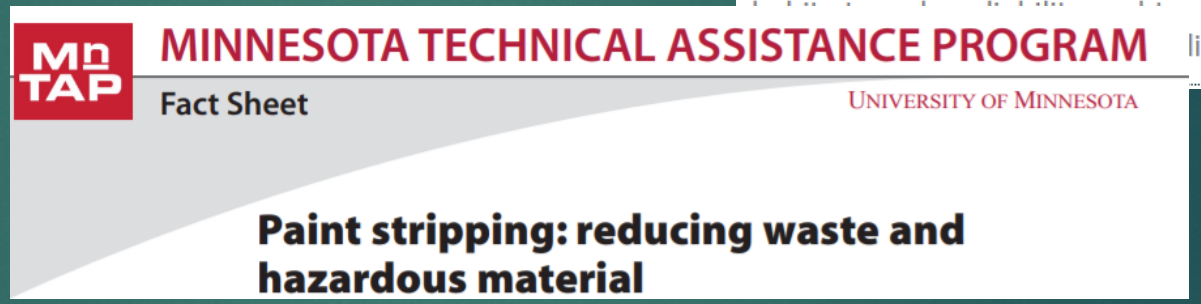
R9 funded P2 Grants that evaluated and demonstrated alternatives to chlorinated and high VOC solvents for:

- auto repair (MeCl, toluene)
- printing
- metal finishing (MeCl, toluene)
- adhesives
- dry cleaning (perc)



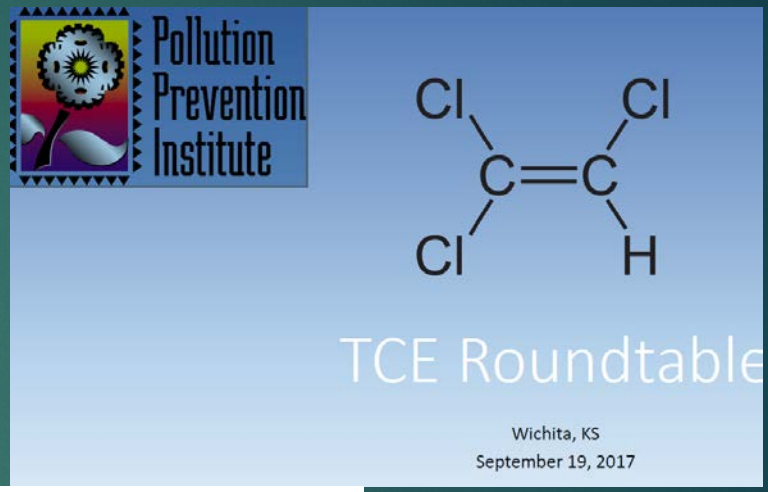
Examples: Technical Assistance

- Region 10: PPRC Technical Assistance
- Region 5: MNTAP
- Region 1: UMASS TURI



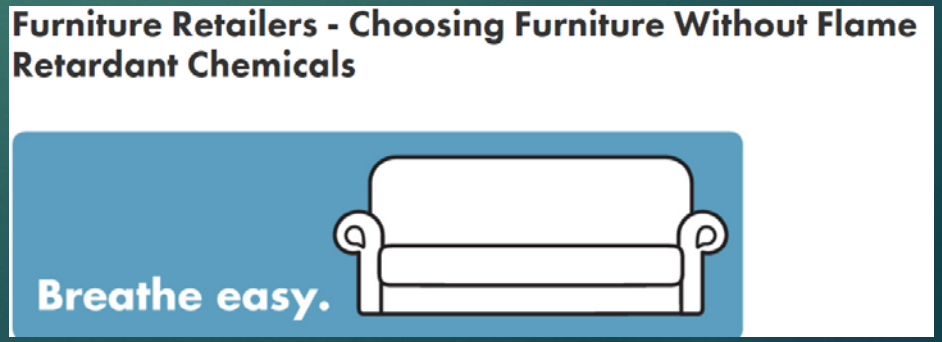
Examples - Roundtables

- Region 7: TCE Roundtable



- Region 2:

- Region 9: San Francisco



Guidance for Potential Applicants

Characterizing the Issues and Audiences

- Use information in the TSCA document available at
  - Scoping documents: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-evaluations-existing-chemicals-under-tsca#ten
  - Use Documents: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/public-meeting-risk-evaluation-scoping-efforts-under-0
- EPCRA Tier 2 data (varies by state)
- State Chemical reporting data (NJ, MA)
- Focus on uses and sectors that are priority for your state(s) or region

Orient toward action

- Look to P2 centers for resources on P2 opportunities (www.p2rx.org)
- Don't be afraid to replicate existing strategies

Resources

- Refer to EPA's P2 Program Grants page for more information on the RFP, and guidance on applying for P2 grants and measuring results (https://www.epa.gov/p2/grant-programs-pollution-prevention).
- Questions on the RFP can be directed to the Agency Contacts listed in Section VII of RFP.

Questions