Benzo(a)Pyrene
Hexachlorobenzene

Work Group Co-Chairs:

Tom Tseng, Environment Canada

Steve Rosenthal, U.S. EPA

B(a)P and HCB Challenges

United States

"Seek by 2006, reductions in releases that are within, or have the potential to enter, the Great Lakes Basin, of HCB and B(a)P from sources resulting from human activities"

Canada

"Seek by 2000, a 90% reduction in releases of HCB and B(a)P resulting from human activities in the Great Lakes basin, consistent with the Canada Ontario Agreement"

Accomplishments

Canada: (Great Lakes)

- HCB ~ 62% reduction (1988 baseline)
- B(a)P ~ 45% reduction (1988 baseline)

United States:

- HCB (nationally) ~ 52% (1990 baseline)
- B(a)P (Great Lakes) ~ 74% (1996 baseline)

Reduction Activities

Residential Wood Combustion (~ 50% of B(a)P releases in Basin)

U.S. Activities 2003 – 2004:

- A voluntary initiative to reduce emissions from residential wood combustion has begun. Major components of this initiative include:
- Wood Stove change-out programs
- A Fireplace/Wood Stove website to provide information on health effects of wood smoke, benefits of using EPA-certified wood stoves, how to burn efficiently, safety issues, etc.
- Wood Stove/Fireplace Community-Based Air Toxic Fact Sheet
- Media Outreach Package
- Development of a new ASTM fireplace test method

Reduction Activities

Residential Wood Combustion (~ 50% of B(a)P releases in Basin)

Canadian Activities 2003 – 2004:

- Delivered 51 Burn it Smart public education workshops in 40 Ontario and First Nations communities
- Updated core presentation and held “train the presenter” workshops
- Developed technology demonstration video on impact of certified and uncertified wood stoves
- Prepared Fact Sheets on wood burning stoves
- Held 12 Wood Energy Technology Transfer Inc. training workshops in Ontario

Address http://www.cadmusonline.net/woodstoves/ Go

U.S. Environmental Protection Agency

Smoke-Free Woodstoves and Fireplaces

Recent Additions | Contact Us | Print Version Search: GO

EPA Home > OAR Home > Woodstove and Fireplaces > Woodstove Home

- Woodstove Home
- The Right Woodstove
- Woodstove Efficiency
- Woodstove Safety
- Healthier Home, Cleaner Environment
- Woodstove Changeout Campaign
- Technical Information
- Partners & Links
- Fireplaces
- Outdoor Boilers
- For Air Quality Programs
- Frequent Questions
- Newsroom
- EPA's Indoor Air Quality Program
- Glossary

Do you have an old, inefficient woodstove?
Woodstoves manufactured before 1988 do not burn wood as efficiently or as cleanly as EPA certified woodstoves. Older woodstoves produce more smoke, and smoke is not healthy to breathe. If you heat your home with wood, you can increase the efficiency of your wood burning by one-third and virtually eliminate smoke by upgrading to a model with the EPA label. You won't need to cut, haul, or purchase as much wood.

Are you in the market for your first woodstove?
If so, be sure to select an EPA certified model. All woodstoves manufactured after 1988 must carry the EPA certification, which guarantees better wood-burning efficiency and less pollution.

Do you have a masonry or metal fireplace in your home? If you burn wood in a fireplace for added warmth on cold days, you will gain a more efficient, cleaner heating system by installing an EPA certified fireplace insert. If you use a fireplace occasionally for ambiance, EPA recommends burning manufactured logs, which produce less smoke, or installing decorative gas logs.

EPA certified woodstoves and fireplace inserts provide the heat and ambiance you're looking for, while protecting air quality, both indoors and out.

Choose the right woodstove:

A more efficient, safer, cleaner model that saves $$$

Use your woodstove efficiently and safely

Message to be discussed

Healthier home cleaner environment with an EPA certified woodstove

EPA's WOODSTOVE CHANGEOUT CAMPAIGN

EPA's Woodstove Changeout Campaign

Reduction Activities

Scrap Tire Piles (Potential fires a major source of B(a)P)

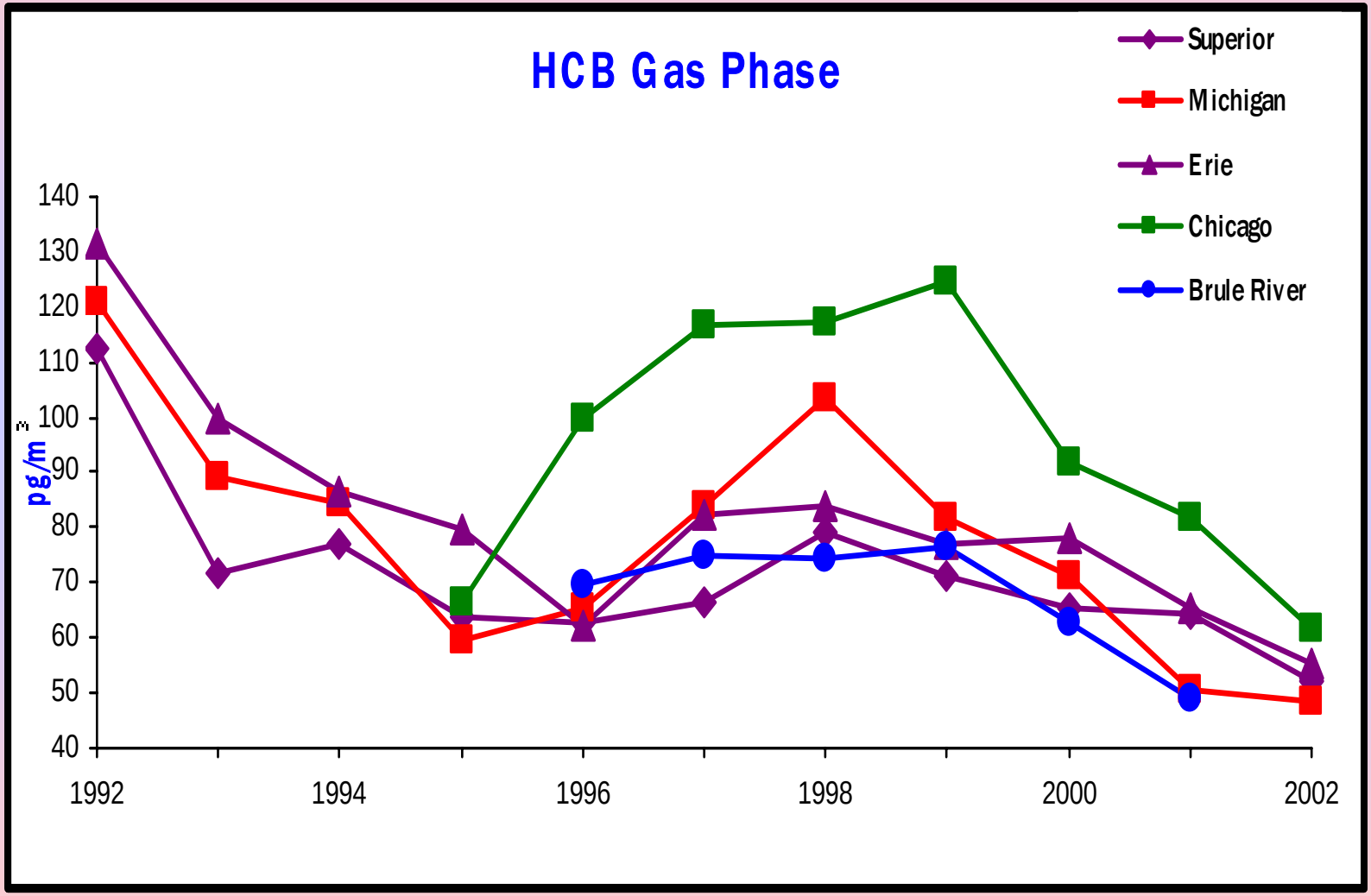
U.S. Activities 2003 – 2004:

- A Scrap Tire Pile Mitigation Support Project underway
- 90% of GIS mapping of large tire piles completed in 10 states including 5 Great Lakes States
- Best Practices guidebook on stockpile mitigation to be completed by end of 2004
- Scrap tire pile cleanup forum held in Chicago

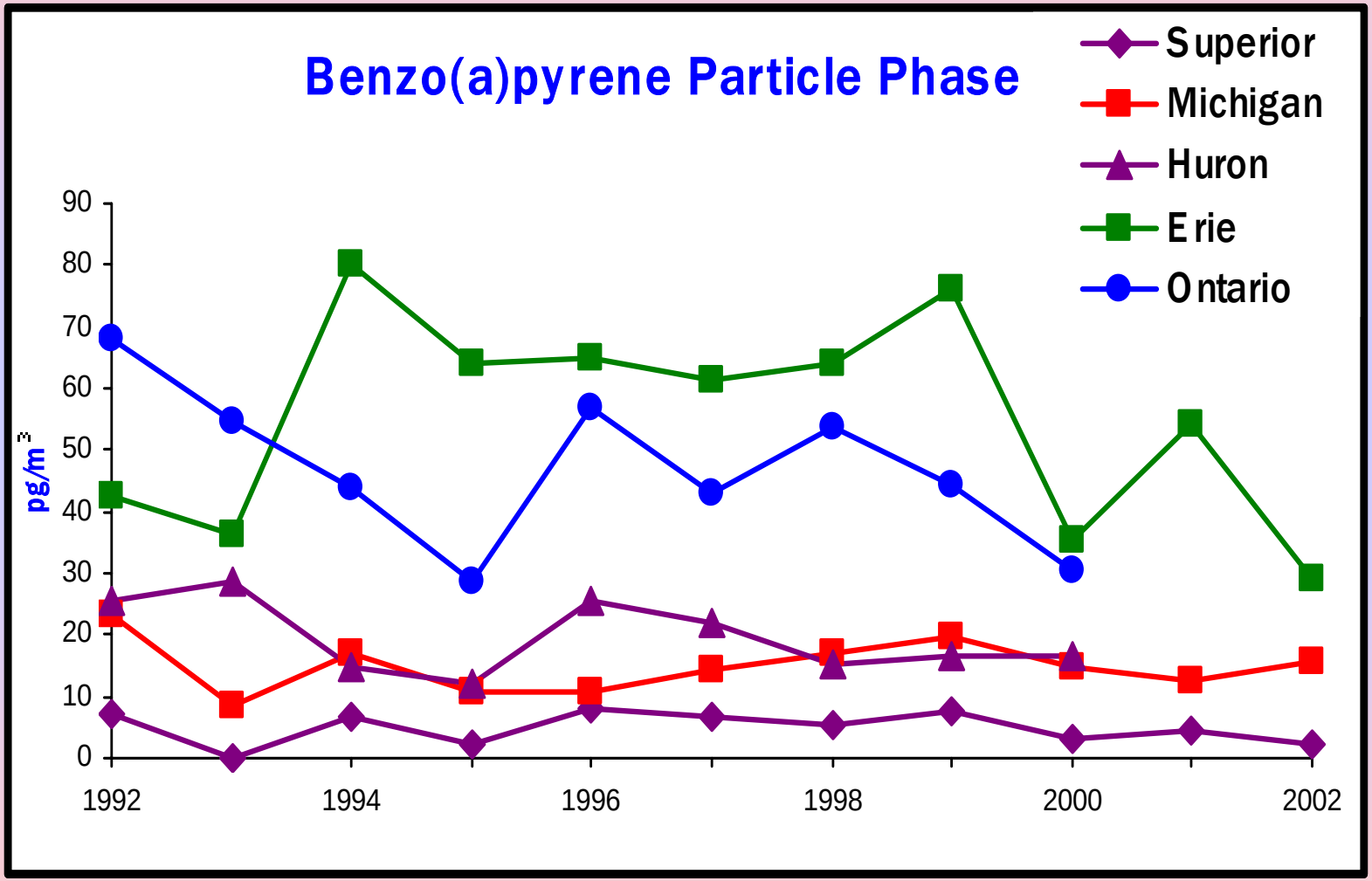
Canadian Activities 2003 – 2004:

- March 2004, issue paper prepared documenting information on toxic emissions from tire fires in basin
- Ontario Tire Stewardship scrap tire diversion program approved in September 2004, awaiting Ontario Ministry of the Environment approval

IADN Atmospheric Monitoring Results



IADN Atmospheric Monitoring Results



Outlook

Canadian HCB Challenge: Goal 90% reduction

- 75% of releases from non-point sources: open burning activities, and use of products containing trace HCB levels
- Remaining releases from sectors where reductions driven by other contaminants and/or priority programs, eg., thermal power generation, waste incineration, and iron & steel
- Lack of accurate HCB release estimate from pesticide application a barrier to measuring Challenge progress
- Canada to concentrate action on non–point sources and improving accuracy of release/reduction estimates
- Further incremental HCB reductions anticipated, but unlikely 90% reduction goal will be met by 2006

Outlook

Canadian B(a)P Challenge: Goal 90% reduction

- 90% of releases from non-point sources: residential wood combustion, use of creosote-treated wood, and vehicle emissions; and from the iron & steel sector
- Significant technological and societal changes needed to effects meaningful reductions within non-point sources
- Canada to concentrate action on these major source sectors
- Further incremental B(a)P reductions anticipated, but 90% reduction goal will not be met by 2006

Outlook

U.S. HCB Challenge: Seek reductions

- Continue to encourage chemical manufacturers to reduce HCB emissions
- Confirmation of pesticide application emissions and identify potential for future reductions
- Continue to improve HCB emission estimates, especially for combustion sources

Outlook

U.S. B(a)P Challenge: Seek reductions

- Continued progress is expected from residential wood combustion, the largest source of B(a)P
- Best Practices Tire Pile Clean-up Guidebook is near completion
- Training on scrap tire clean-up and putting out fires will be conducted next year
- Inventory improvement work will be done, especially on identifying missing sources