

Great Lakes Binational Toxics Strategy Stakeholder Forum

June 4, 2008

**Canadian Centre for Inland Waters
Burlington, Ontario**

Benzo(a)pyrene and Hexachlorobenzene

Work Group Co-Chairs:

Steve Rosenthal, U.S. EPA

Tom Tseng, Environment Canada

B(a)P and HCB Challenge Goals

Canada

- Seek a **90% reduction** in releases
- By 2000

United States

- Seek **reductions in releases** that are within, or have the potential to enter, the Great Lakes Basin
- By 2006

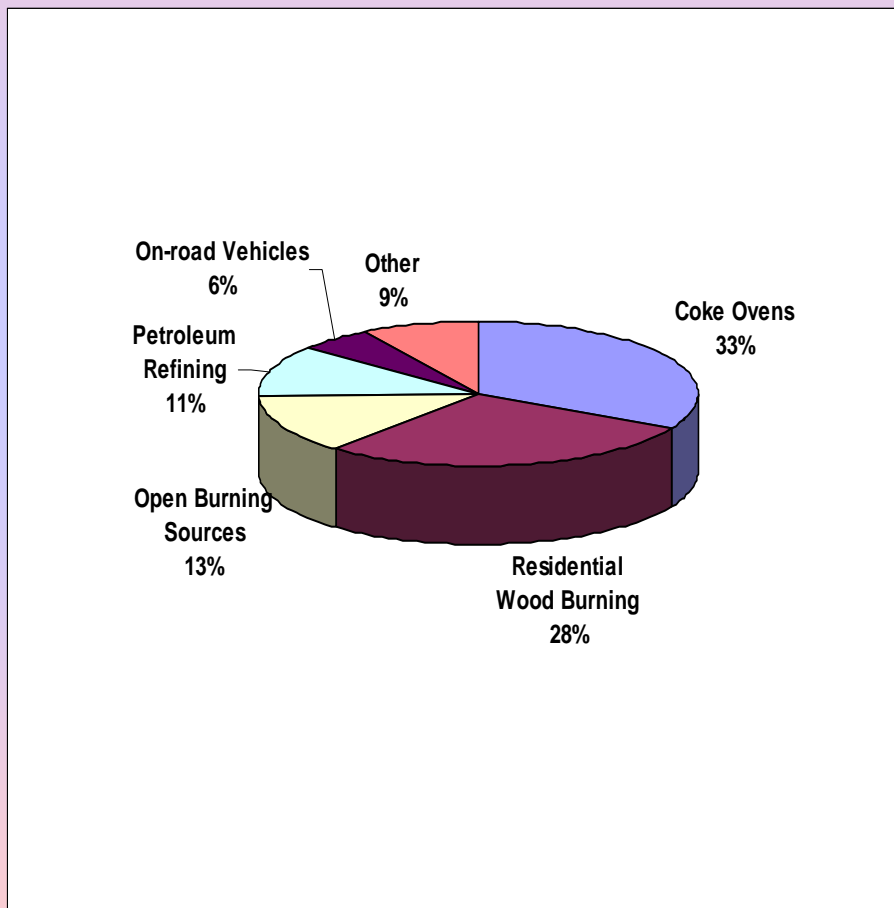
Progress Toward the Challenge Goals

- The U.S. has met its commitments
 - ◆ B(a)P emissions in Great Lakes states **reduced by ~77%** from 1996 to 2001
 - ◆ HCB emissions **reduced** from 1990 to 1999, and further by 2002 (28% reduction from 1999-2002)

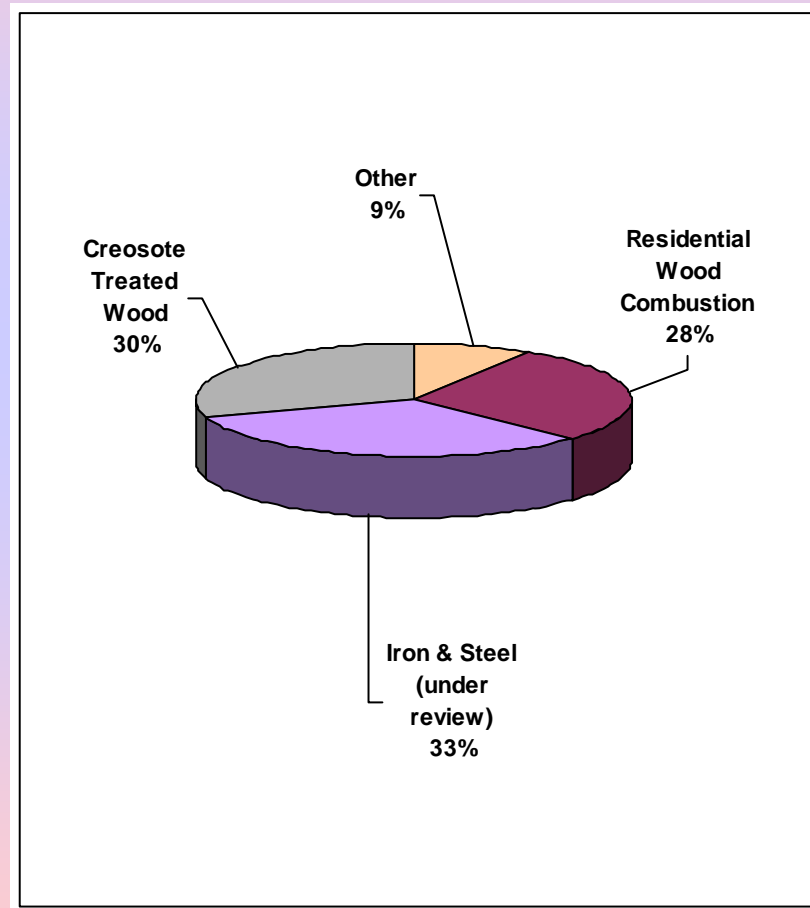
- Canada has not met its commitments
 - ◆ B(a)P releases **reduced by ~52%**, relative to 1988
 - ◆ HCB releases **reduced by ~73%**, relative to 1988

B(a)P Sources – Great Lakes Region

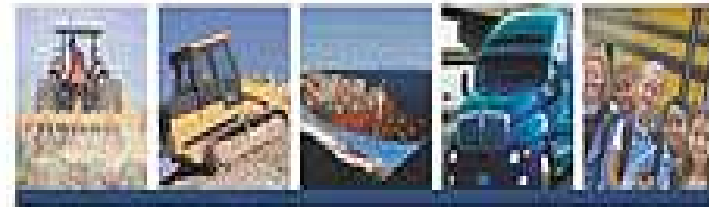
2002 Great Lakes Basin Regional B(a)P Emissions 26,858 kg (59,087 lbs)



2005 Ontario B(a)P Sources 8,340 kg (18,348 lbs)



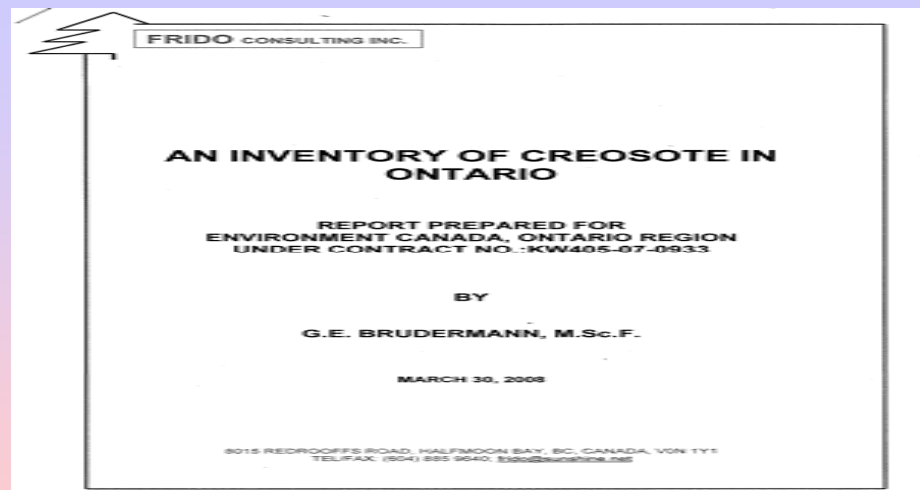
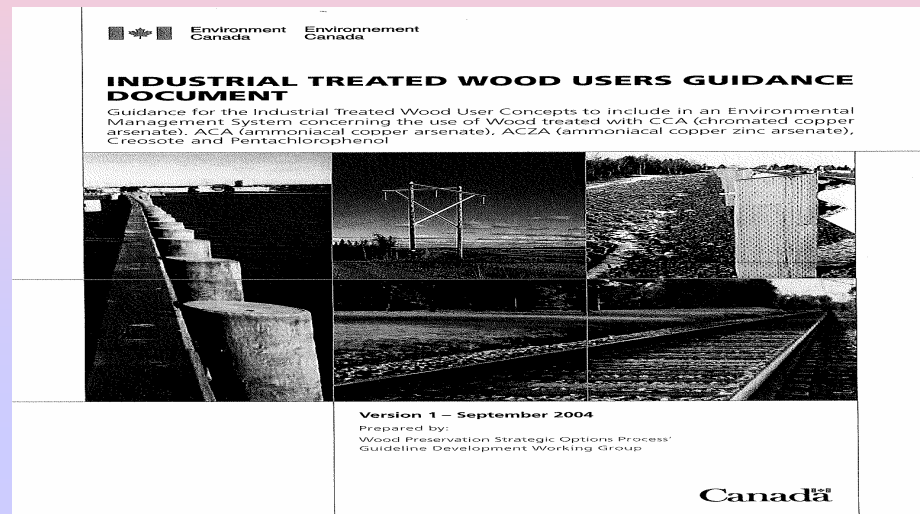
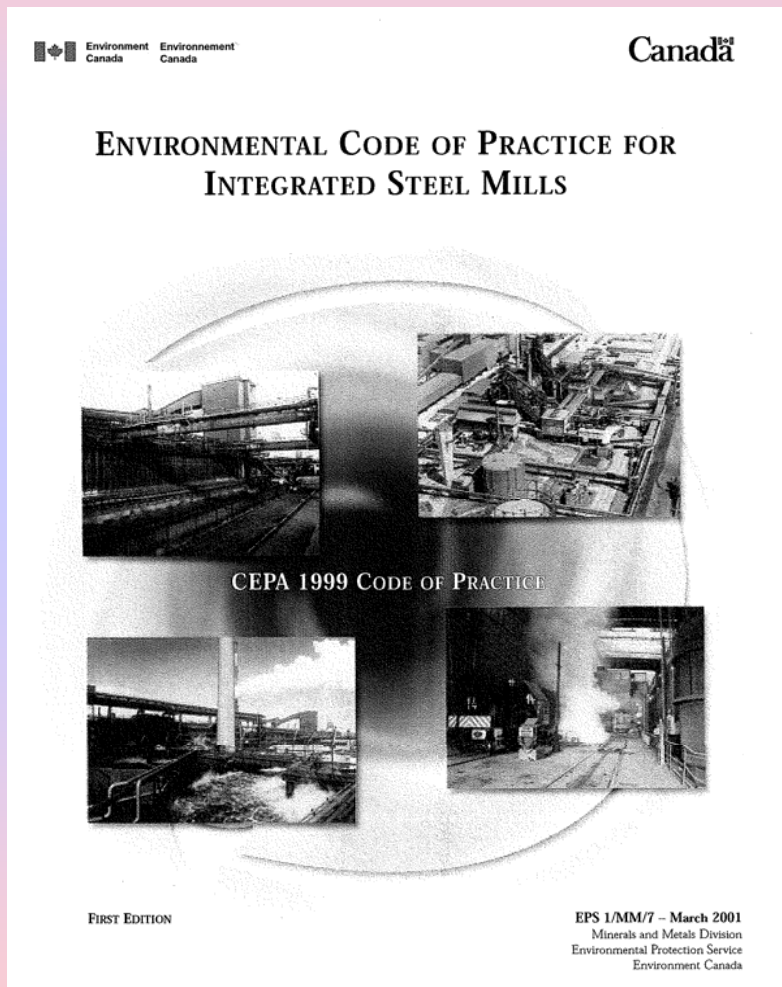
Significant B(a)P Activities



National Clean Diesel Campaign



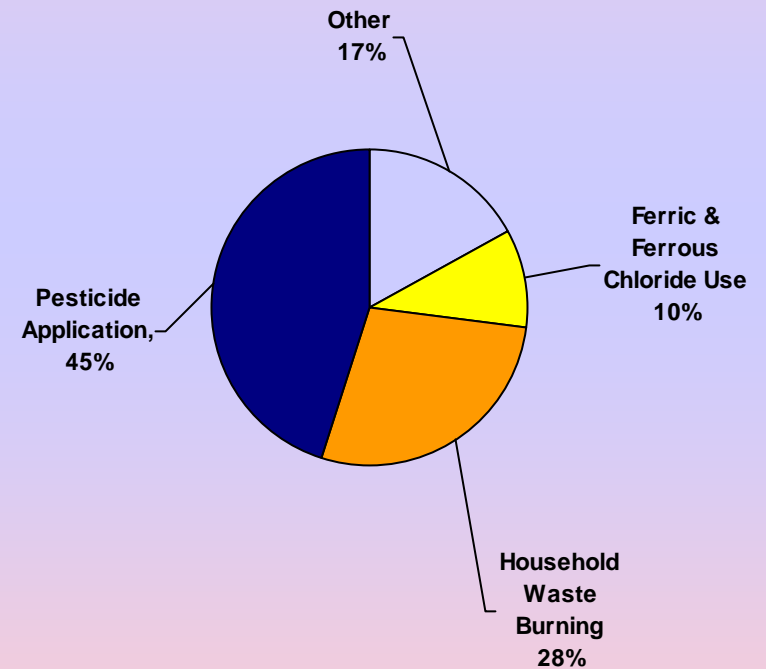
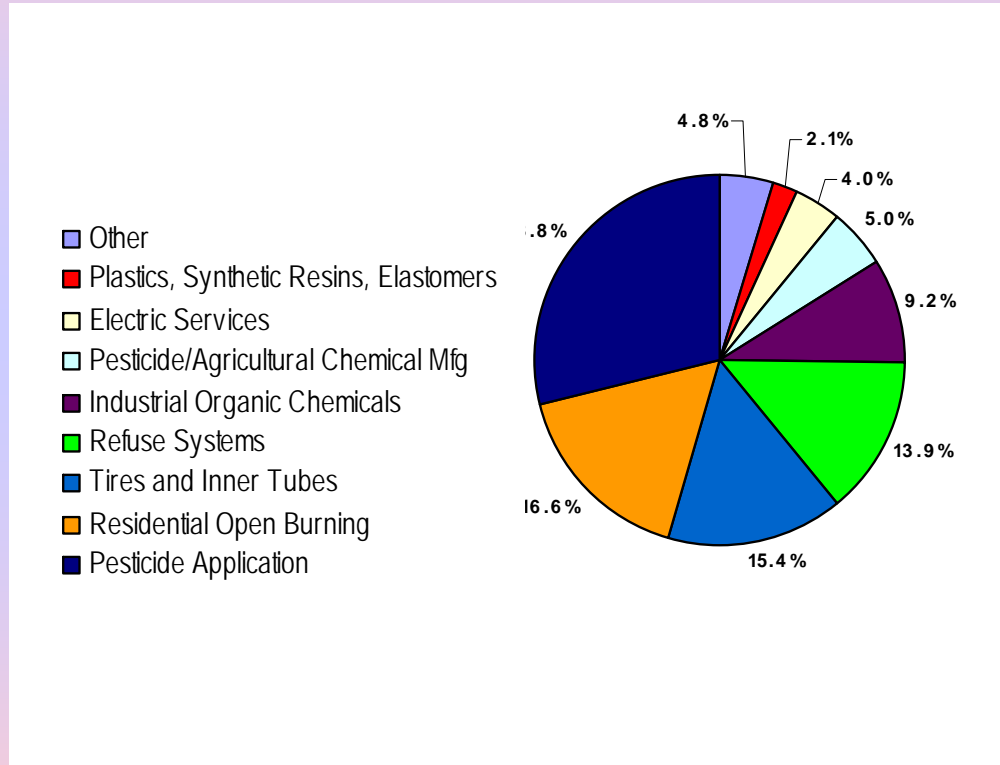
Significant B(a)P Activities (continued)



HCB Sources – Great Lakes Region

2002 US HCB Sources
~950 kg (2,100 lbs)

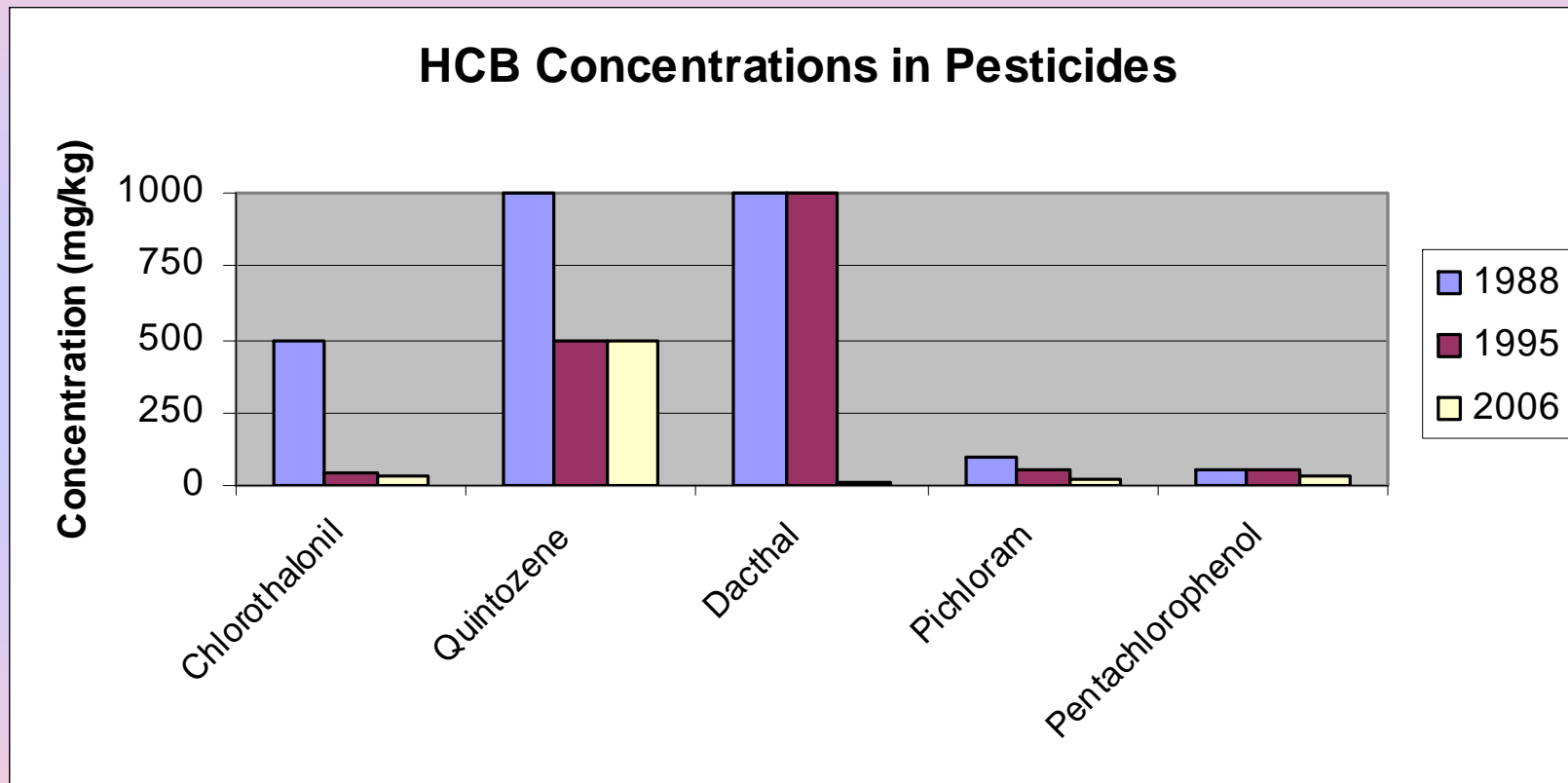
2005 Ontario HCB Sources
13.5 kg (29.7 lbs)



Source: 2002 National Emissions Inventory

Significant HCB Activities

Reducing Emissions from Pesticide Applications



Driveway and Parking Lot Sealcoat

Problems with Coal Tar Sealants

- Coal tars and coal tar pitches are a “*known human carcinogen*” according to the U.S. Dept. of Health and Human Services
- Are a source of PAHs in storm water runoff
- Parking lot CTS dominate PAHs loadings to watersheds
- PAH “hot spots” are commonly found in streams adjacent to parking lots with CTS

Options: Restrictions on CTS

- Restrict Sale of CTS
- Restrict Use of CTS

Outlook – United States

- **US meeting its commitments for B(a)P and HCB**

- **Planned HCB activities:**
 - ◆ **Continue analysis of pesticide emissions**
 - ◆ **Continue soliciting voluntary chemical company reductions**
 - ◆ **Continue Burn Barrel Outreach**

- **Planned B(a)P activities:**
 - ◆ **Follow-up on implementation of EPA's scrap tire guidance**
 - ◆ **Future wood stove changeouts planned**
 - ◆ **Additional Tribal burning workshops scheduled**
 - ◆ **Implementation of voluntary wood-fired boiler agreements**
 - ◆ **Follow-up on newly identified source categories in Great Lakes B(a)P inventory**
 - ◆ **Will perform extensive coal tar sealant outreach**

Outlook - Canada

Future B(a)P Activities:

- ◆ Iron & Steel: **Verify pollutant release reporting to the National Pollutant Release Inventory**
- ◆ Creosote Treated Wood: **Update information from creosote survey; Evaluate release information and need for further actions**
- ◆ Residential Wood Combustion: **Focus efforts on regulation development and municipal bylaws**

Future HCB Activities:

- ◆ Pesticides: **Seek support for reductions from agencies/partners**
- ◆ Household Waste Burning: **Combine efforts with residential wood combustion and Model Municipal By-law updates**
- ◆ Ferric/Ferrous Chloride: **Update information on HCB in sewage sludge to modify release information**