

Great Lakes Binational Toxics Strategy Stakeholder Forum

**December 4, 2008
Hyatt Regency O'Hare
Rosemont, Illinois**

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

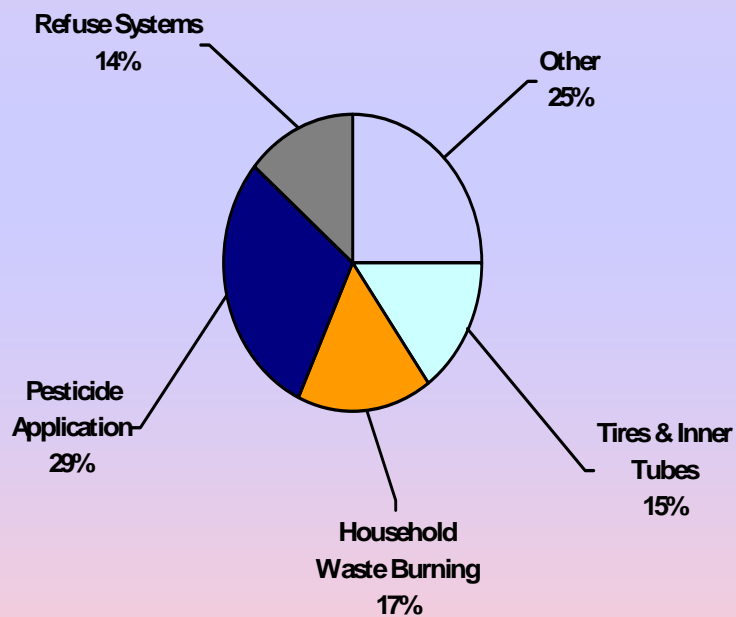
- Seek **reductions in releases** that are within, or have the potential to enter, the Great Lakes Basin
- By 2006

Progress Toward the Challenge Goals

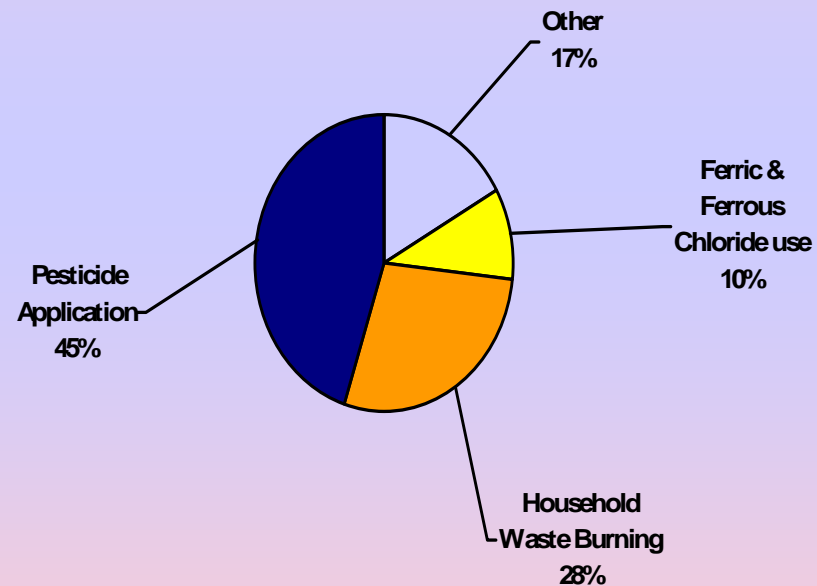
- The U.S. has met its commitments
 - ◆ B(a)P emissions in Great Lakes states **reduced by ~77%** from 1996 to 2001
 - ◆ HCB emissions **reduced** from 1990 to 1999, and further by 2002 (28% reduction from 1999-2002)
- It is unlikely Canada will be able to meet the 90% reduction target by 2009
 - ◆ B(a)P releases **reduced by ~52%**, relative to 1988
 - ◆ HCB releases **reduced by ~74%**, relative to 1988

HCB Sources

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

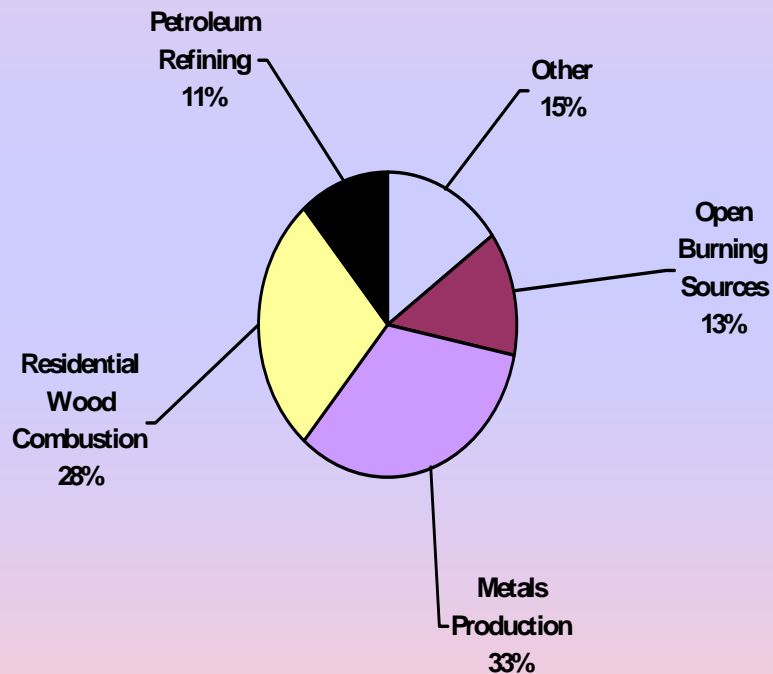


2006 Ontario HCB Sources
13 kg (29 lbs)

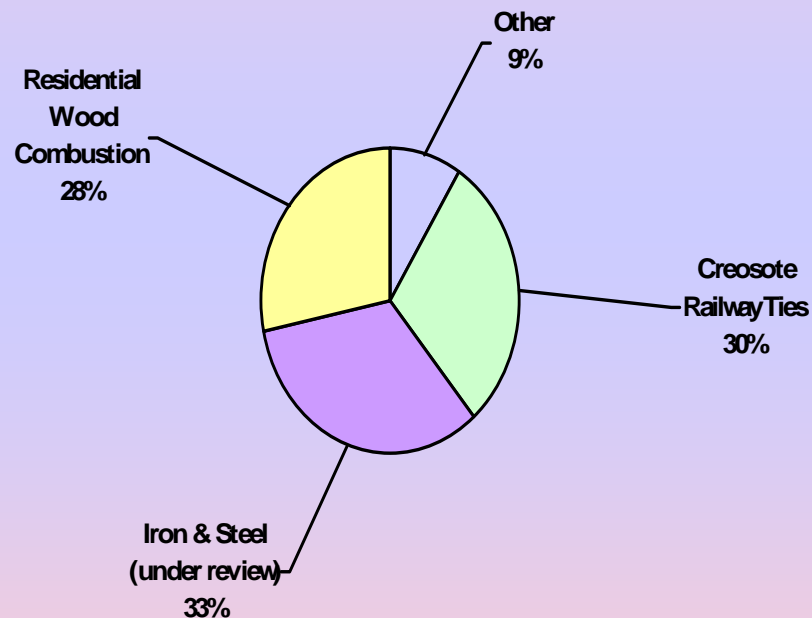


B(a)P Sources

2002 US Great Lakes & Ontario B(a)P Sources
26,858 kg (59,087 lbs)



2006 Ontario B(a)P Sources
8,340 kg (18,348 lbs)



Workgroup Activities - Canada

- **HCB modelling project completed**
- **Seven municipal workshops completed on Model Municipal By-law for wood burning appliances**
- **EPA/CSA-certified wood stove testing being initiated to evaluate emission factors**
- **PAH Source Apportionment Modeling project progressing**
- **Toronto Air Study in planning phase**

Workgroup Activities – United States

- **The Great Michigan Wood Stove Change-out Campaign changed out 500 old wood stoves**
- **Phase 2 of EPA's outdoor wood boiler program, which will result in about 90% control, has been announced**
- **The number of stockpiled tires has been reduced from 188 million to 140-150 million from 2005-2007**
- **Several industrial reductions of HCB releases reported in TRI**
- **Midwest Clean Diesel Initiative has impacted (and reduced emissions from) over 500,000 diesel engines**

Path Forward

■ Future B(a)P Activities:

- ◆ **Residential Wood Combustion:** Additional woodstove changeout programs; EPA-certified wood stoves emissions study; Provide outreach on improved outdoor wood-fired boilers
- ◆ **Coal Tar Sealers:** Monitor additional studies and perform appropriate outreach
- ◆ **Metals Production:** Verify emissions and evaluate need for further actions
- ◆ **Other Sources:** Continue Household Waste Burning Subgroup efforts

■ Future HCB Activities:

- ◆ **Pesticides:** Evaluate need for further actions
- ◆ **Open Burning of Garbage:** Continue Household Waste Burning Subgroup efforts; Update residential waste generation data
- ◆ **Ferric/Ferrous Chloride:** Update information on HCB in sewage sludge to modify release information