

First Trilateral Picture of Pollutant Releases and Transfers in North America

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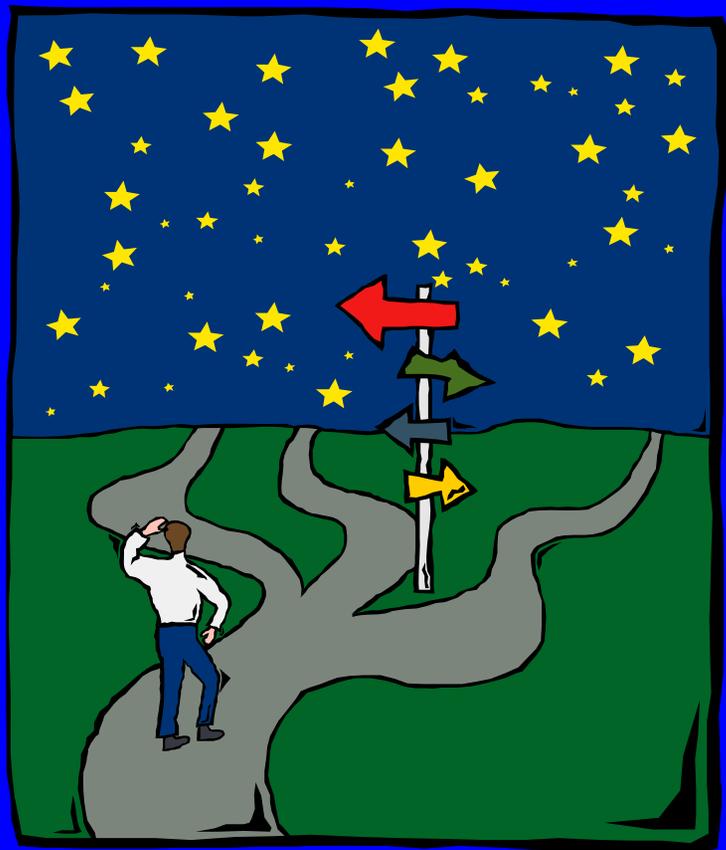
PRTRs in North America

- US- Toxic Release Inventory (TRI)
- Canada- National Pollutant Release Inventory (NPRI)
- Mexico - *Registro de Emisiones y Transferencia de Contaminantes* (RETC)

Taking Stock 2003

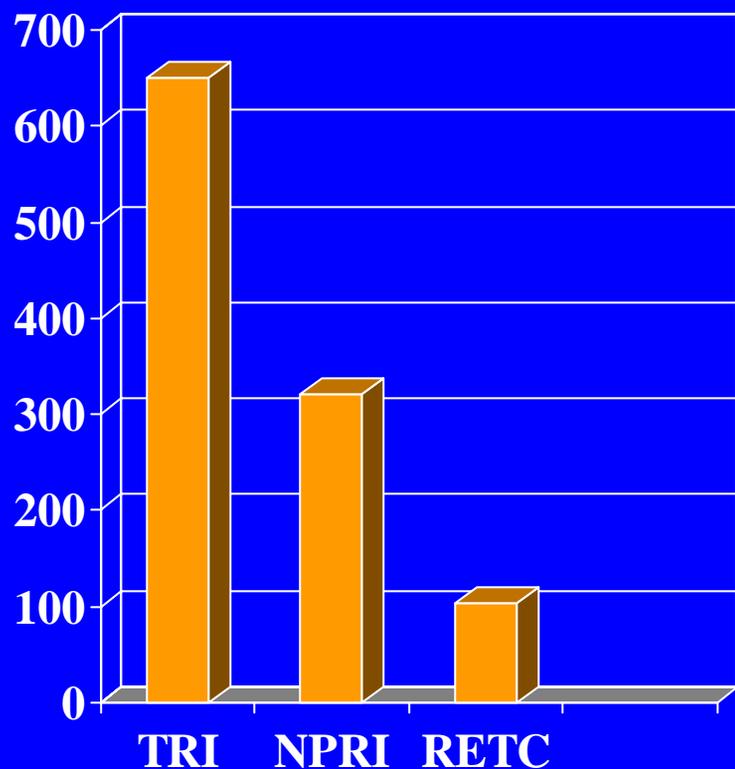
- Matches TRI and NPRI data- 200 chemicals
- Over 25,000 industrial facilities
- Total releases and transfers almost 3 million tonnes
- Nine year trend 1995-2003
- Available at www.cec.org/takingstock

Matching



- CEC takes TRI, NPRI and RETC data and matches for
 - chemical
 - sector
 - reporting requirements

Matching chemicals



- TRI ~ 650 chemicals
- NPRI ~ 320 chemicals
- RETC - 104 chemicals

- ~ 200 Matched TRI-NPRI
- ~ 60 Matched Chemicals TRI-NPRI-RETC

Matching TRI-NPRI-RETC Chemicals

- Metals: chromium, lead, mercury, nickel
- Other: benzene, styrene, formaldehyde, phenol, trichloroethylene, dichloromethane, vinyl chloride, acetaldehyde, acrylonitrile
- Some HCFCs

Industrial Sectors

- Industry Sectors Reporting
 - TRI: manufacturing, electric utilities, metal and coal mining, hazardous waste management
 - NPRI: all sectors
 - RETC: some manufacturing plus oil and gas extraction

Matching TRI-NPRI-RETC Industrial Sectors

- Manufacturing: Chemicals, Petrochemical, Petroleum Refining, Primary metals, Fabricated metals, Transportation equipment, Stone/Clay/Glass/Cement, Electronic/Electrical equipment, Paper products, Plastics products
- Electric Utilities (coal/oil/diesel)
- Petroleum Bulk Terminals
- Hazardous Waste Management

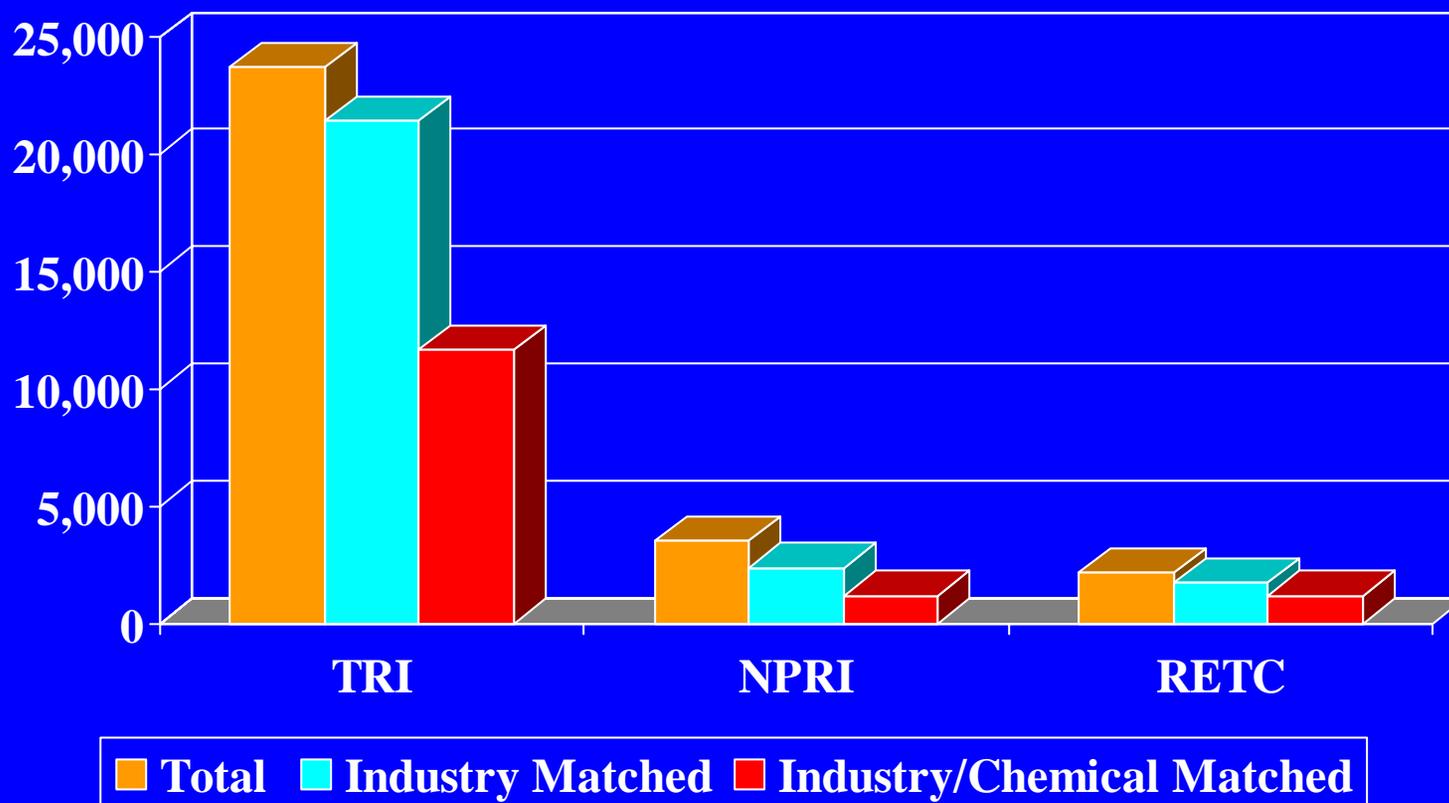
Matching Reporting Requirements

- Reporting requirements affect some chemicals:
 - Different thresholds: Arsenic, cadmium
 - Different definitions: dioxins/furans, PAHs
- Criteria Air Contaminants: NPRI/RETC only
- Greenhouse gases: Canada and RETC only

Data Analyses are Preliminary

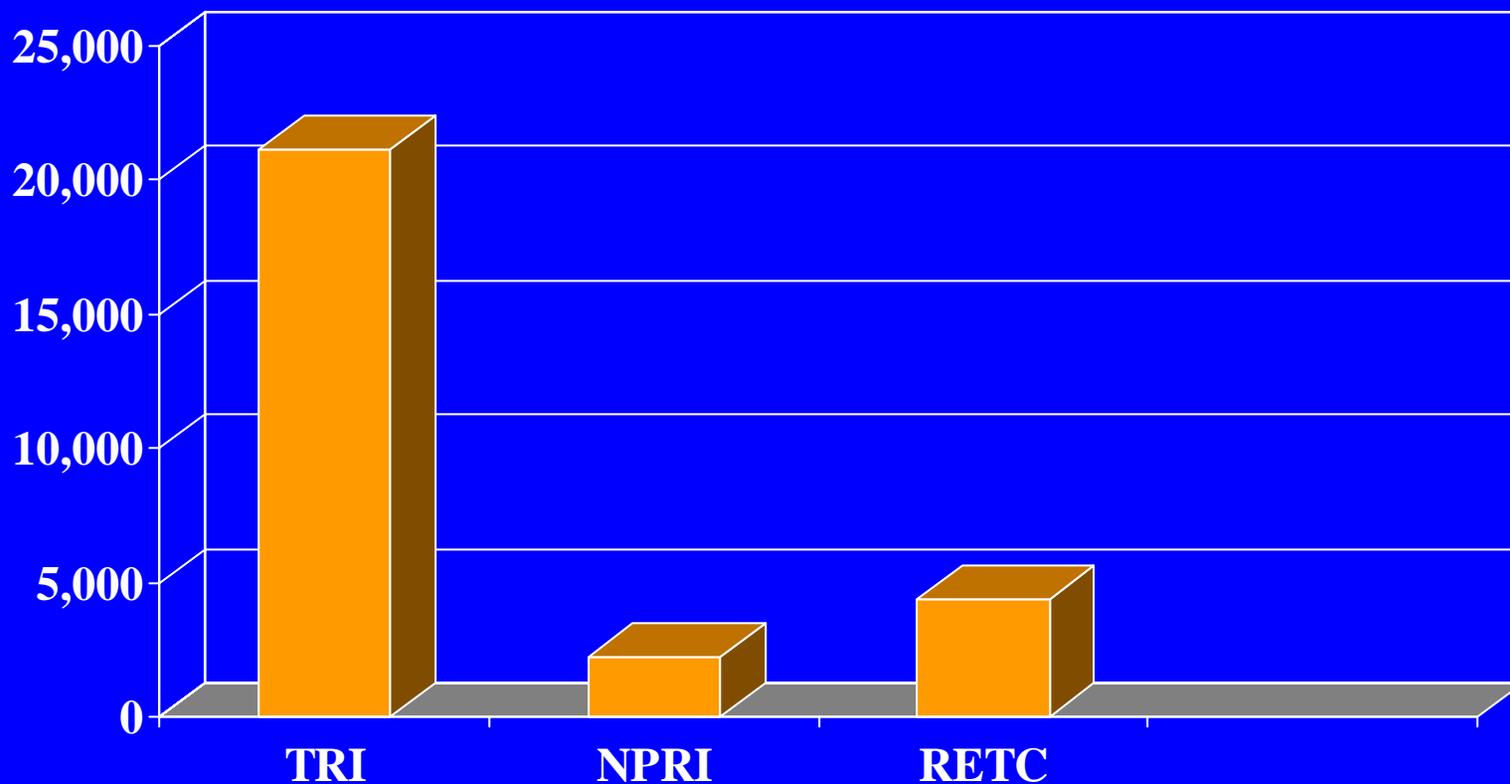
- RETC data just released, 2004 is first reporting year
- RETC data has choice of threshold which may affect results
- Analysis is preliminary

Number of facilities in “Matched” Industries, 2004



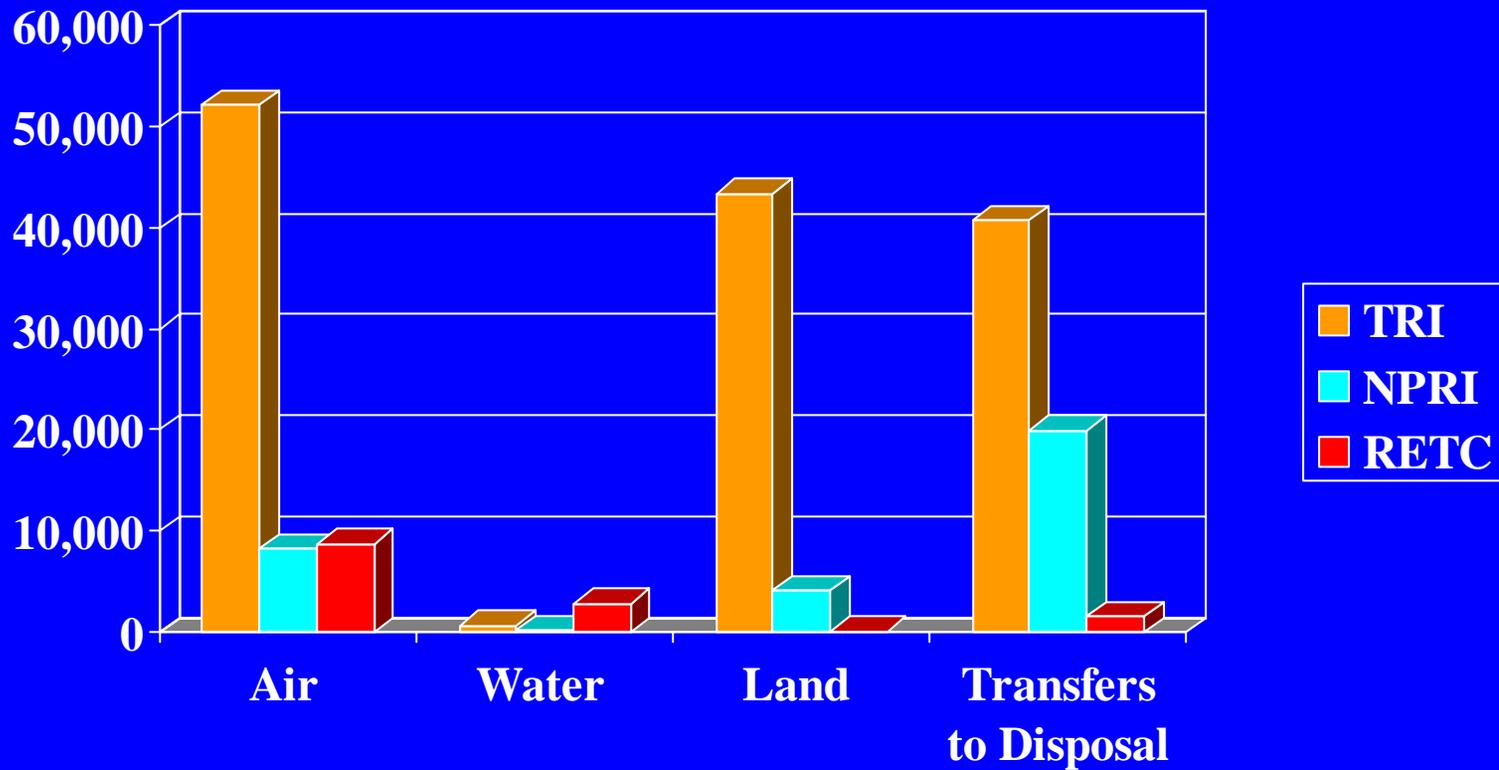
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Number of Matched Chemical Reports, 2004



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Releases On- and Off-site in 2004 (tonnes)



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Matched Chemicals Released to Air in the Largest Amounts in 2004

TRI

Styrene

Acetaldehyde

Formaldehyde

HCFC-142b

Benzene

NPRI

Styrene

Acetaldehyde

HCFC-142b

Trichloroethylene

Chlorine dioxide

RETC

Formaldehyde

Dichloromethane

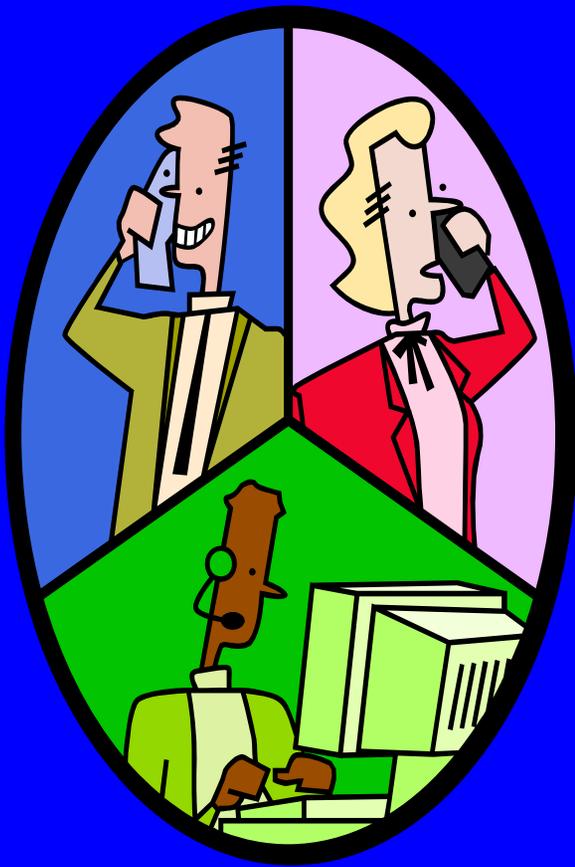
Vinyl chloride

1,4 Dichlorobenzene

Lead (and its
compounds)

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Conclusions



- Some similar areas
- Some differences point to need to make thresholds and chemical lists more comparable among countries- CEC Action Plan
- Next further analysis