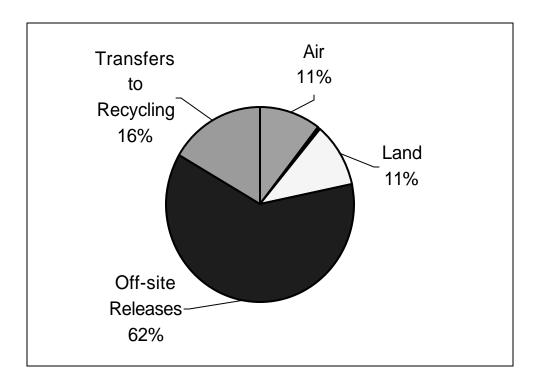
North American PRTR Data

- Releases
 - On-site: air, water, land and underground injection
 - Off-site: transfers to disposal
- Transfers off-site for further management
- Analyses by:
 - Facility
 - Chemical
 - Industry sector
 - Geographic region
- Analyses over time: Canada and US data 1995-2000, Mexico data voluntary

PRTR Data: Matched Canada and US

- Releases
 - On-site: air, water, land and underground injection
 - Off-site: transfers to disposal
- Transfers to treatment and sewage; recycling and energy recovery (available 1998-2000)
- Analyses by:
 - Facility (10 or more employees)
 - Chemical (over 200 substances)
 - Industry sector (manufacturing; electric utilities, hazardous waste management (1998-2000))
 - Geographic region (states and provinces)
- Analyses over time: 1995-2000

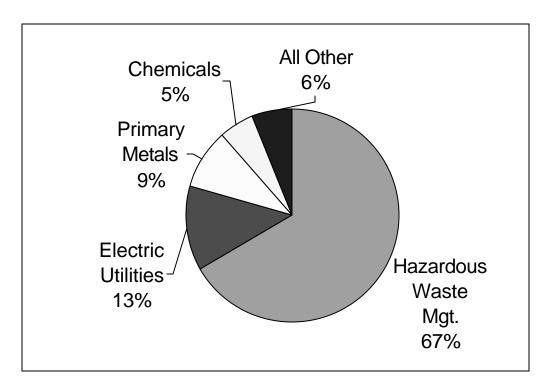
Summary of Releases and Transfers, North America, 2000



Total Releases and Transfers: 698,356 kg

On-site releases to surface water and underground injection 0.3%

Summary by Industry Sector, 2000



Total Releases and Transfers: 698,356 kg

Summary by Geographic Region, 2000

		Total Reported Amounts			
North		of Release	of Releases and		
American		Transf	Transfers		
Rank	State/Province	(kg)	% of Total		
	US				
	03				
1	Texas	278,833	40		
2	Massachusetts	45,666	7		
3	Illinois	39,210	6		
4	Pennsylvania	36,471	5		
	Canada				
5	Quebec	26,542	4		
6	Ontario	24,778	4		
	Total	698,356			

Other Data: Industries not in matched dataset

_	Canadian NPRI		US TRI	
	Number of Facilities	Total Releases and Transfers (tonnes)	Number of Facilities	Total Releases and Transfers (tonnes)
Matched Industries - 2000 Other Industries - 2000	150	64	1,495	634
Metal Mining	7	74	52	1,418 *
Sewerage and Refuse Systems	32	1,444	NR	
Oil and Gas Extraction	2	871	NR	

NR - Does not report to PRTR.

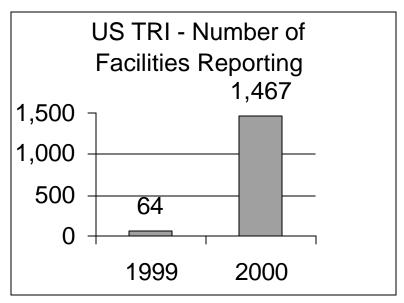
^{*} Metal mining sector is required to report mercury in waste rock in TRI, but not in NPRI.

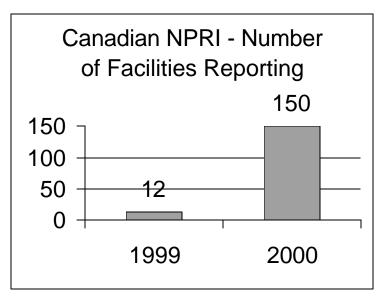
Other Data: Pollution Prevention Activity Reporting

Pollution Prevention Activity	US TRI Number of Forms	Canadian NPRI Number of Forms
Materials or Feedstock Substitution	17	10
Product Redesign or Reformulation	4	2
Equipment or Process Modifications	40	18
Spill and Leak Prevention	15	32
Inventory Management or Purchasing Techniques	8	17
Number of Forms with Pollution Prevention Activity Reported	104	55

Note: Each form can have more than one pollution prevention activity indicated. Includes all industries in NPRI and in TRI.

Change in Reporting in Year 2000:

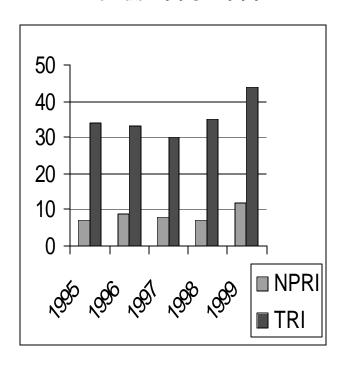




NPRI Reporting Threshold changed from 10 tonnes to 5 kg TRI Reporting Threshold changed from 11 tonnes to 4.5 kg Based on amount manufactured, processed or otherwise used.

TRI amounts are 25,000 pounds (11 tonnes) manufactured or processed and 10,000 pounds (4.5 tonnes) otherwise used.

Trends 1995-1999



150,000

100,000

50,000

1995 1996 1997 1998 1999

Number of Facilities

Kg of Mercury and its compounds

Dioxins/Furans and Hexachlorobenzene

What is reported?

- Dioxins/Furans (17 congeners)
 - US TRI reporting based on weight (grams) and 0.1 gram threshold
 - also reports distribution of congeners
 - future proposal to report TEQ in addition
 - Canadian NPRI reporting based on TEQ (grams of toxic equivalents) and no threshold
 - Mexican RETC reporting based on weight (grams) and threshold of zero grams released on-site

Hexachlorobenzene

- US TRI reports pounds and threshold of 4.5 kg (10 pounds)
- Canadian NPRI reports grams and no threshold
- Mexican RETC reports kilograms and threshold of 1,000 kg released on-site

Dioxins/Furans and Hexachlorobenzene

Who has to report?

US TRI - Specific Sectors

Manufacturing

Electric Utilities

Hazardous Waste Management

Petroleum Bulk Terminals

Chemicals Wholesalers

Metal Mining

Coal Mining

Canadian NPRI - Specific Activities

Base metals smelting (copper, lead, nickel, zinc)

Smelting of secondary lead or secondary aluminum

Iron sintering processes

Electric arc furnace in steel processes

Production of magnesium

Manufacture of portland cement

Production of chlorinated organic solvents

Combust of fossil fuel to produce electricity

Combust of salt-laden logs in pulp & paper sector

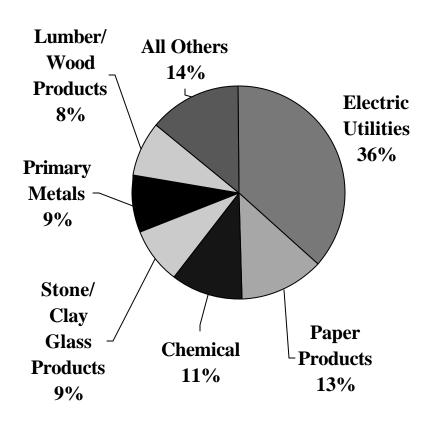
Combust of fuel in kraft liquor boilers in pulp & paper sector

Wood preservation using pentachlorophenol

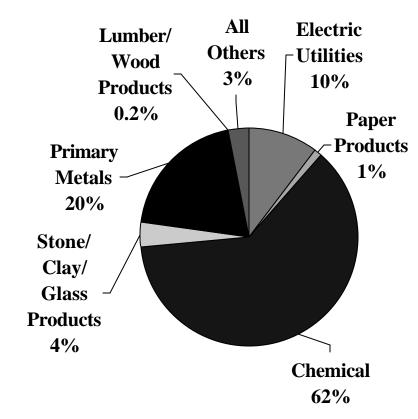
Incineration

Reporting on Dioxins/Furans

What was reported in 2000?



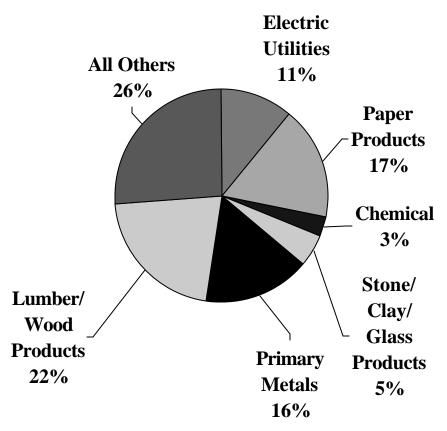
TRI – Facilities Reporting

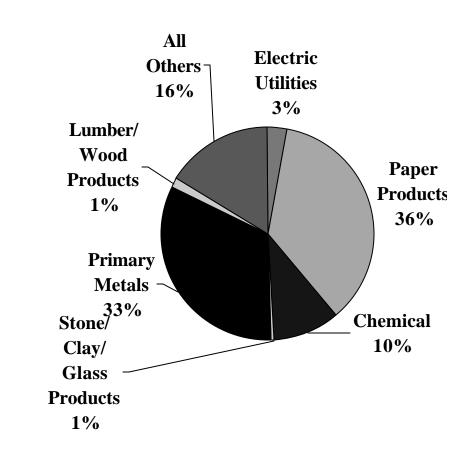


TRI – Total Releases (grams-TEQ)

Reporting on Dioxins/Furans

What was reported in 2000?





NPRI – Facilities Reporting

NPRI – Total Releases (grams-TEQ)