

North American Pollutant Releases

and Transfer Register (PRTR) Project

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What is a PRTR?

Pollutant releases to air, water, and land and transfers of toxic substances to disposal, treatment, energy recovery and recycling facilities

> compiled into an annual register



CEC's North American PRTR Project: Objectives

- Increase our understanding of the sources and handling of pollutants of common concern across North America
- Promote public access to information
- Improve the comparability of PRTRs in North America
- Promote the use of PRTR data for priority-setting and decision-making in order to protect shared ecosystems, reduce pollution, and improve the management of toxic substances

North American PRTR Project: Activities

Integrated North American PRTR dataset

- Annual Taking Stock report, with analyses and comparisons of PRTR data from the three countries
- -Enhanced data access via *Taking Stock Online* featuring analytical tools

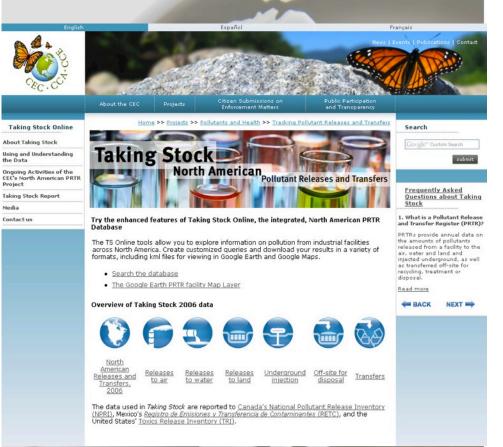
Taking Stock Report and Website

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Taking
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Releases and Transfers

Feature Analysis: Pollutant Releases to Surface Waters

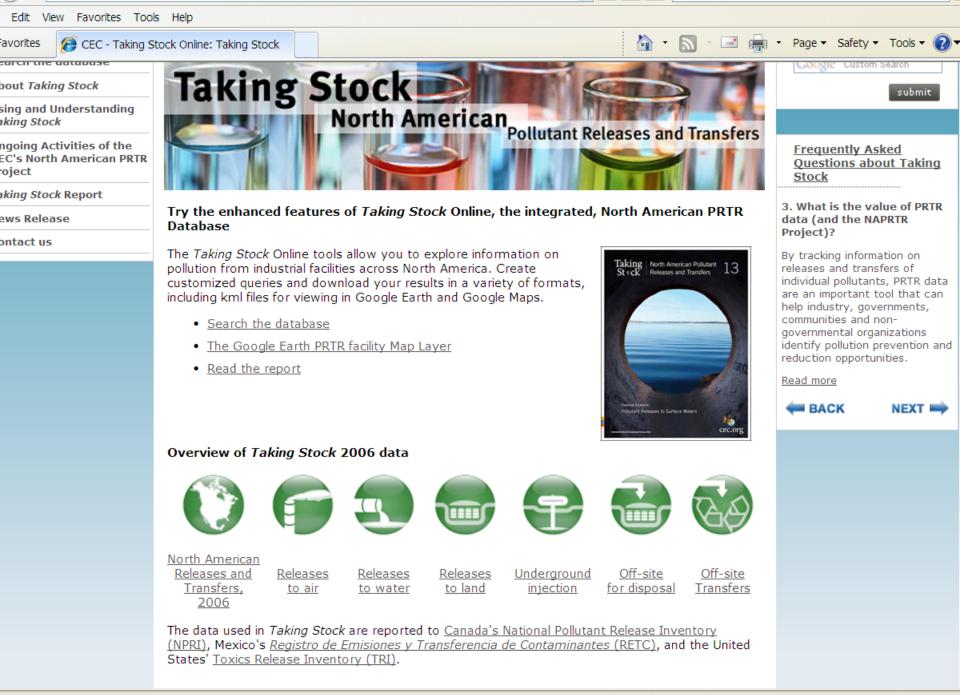
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2006 Pollutant Releases and Transfers Reporting Facilities





Highlights of Taking Stock 2006

28,504 facilities reported a total of 539 pollutants (or groups of pollutants), for a total of 5.7 billion kg.

PRTR Program	Number of Facilities Reporting	Substances Reported	Total, excluding CAC and GHG (kg)
Canada NPRI	3,192 (total of 8,860, incl. CAC*)	194	2,165,320,683
US TRI	23,449	491	3,518,657,632
Mexico RETC	1,863 (total of 2,736, incl. GHG*)	69	27,969,765
North American Total	28,504 (total of 35,045, incl. CAC and GHG reporting)	539 (44 pollutants common to the three countries)	5,711,948,081

Key Findings: Releases to Water

- Over 228 million kg reported by NA facilities
- <u>Public wastewater treatment plants</u> reported 44% of the total, but most of these data are from Canada
- The public wastewater treatment sector is <u>exempt from US</u> <u>TRI</u> reporting; and <u>few facilities in this sector reported to</u> <u>Mexico' s RETC</u>
- <u>Nitrate compounds and ammonia</u> (90% of Canadian and US releases to water) are exempt from Mexico's RETC. These pollutants play a key role in aquatic "dead zones" found across North America
- Facilities releasing pollutants (e.g., heavy metals) can be found in <u>2 important cross-border river systems</u>: the Rio Grande and Columbia River watersheds

Taking Stock Online Query Results (Example: Metals To Water)

Commission for Environmental Cooperation

Taking Stock: North American Pollutant Releases and Transfers

Query Results [Create new query | Modify existing query]

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Report Type: Facility Year: 2006 Country: All Countries State/Province/Territory (St/Pr/Ter): All States, Provinces, Territories Common Dataset: False Pollutant Type: Metals Pollutants: List of all pollutants queried (18) Units of Measurement: Kilograms (kg) NAICS: 3 Industry: All Industries

- The tool also allows you to 'drill down' to view additional information. For example, click
 on the name of a facility and you will get an overview of that facility's data. Click on the
 name of a state or province to view a summary report. Other clicks will lead you to
 explanations of terms and features.
- Click media type buttons below to show or hide corresponding table columns.



📕 Total Releases and Transfers	📕 Total releases (on-site and off-site)	🗹 NAICS 🔲 All
🗖 On-site Releases Total	🗖 Air emissions 🔽 Surface water discharges 🗖 Underground injection 🗖 Land releases	
🗌 Off-site Releases Total	🔽 To disposal (except metals) 📮 To disposal of metals	
🗖 Recycling Transfers Total	To recycling (except metals) 🗖 To recycling of metals	
🔲 Other Transfers Total	🔽 To treatment (except metals) 🗖 To sewage/POTWs (except metals) 🗖 To energy recov	ery (except metals)

Click on column headers to sort data accordingly

Facility Report

								On-site surface water discharges
#	Facility Name	PRTR ID	City	St/Pr/Ter	Country	Naics Code	Industry	2006 (kg) 🔹
1	DOMTAR INDUSTRIES INC. ASHDOWN MILL	71822NKSPPHIGHW	ASHDOWN	Arkansas	United States	322	Paper Manufacturing	135,555.10
2	Ville de Montréal - Station d'épuration des eaux u	000003571	Montréal	Québec	Canada	221	Utilities	129,901.00
3	TRONOX PIGMENTS (SAVANNAH) INC.	31404KMRNCEASTP	SAVANNAH	Georgia	United States	325	Chemical Manufacturing	118,781.22
4	Comision Federal De Electricidad C. T. Juan De Di	CFEAD2500111	TOPOLOBAMPO	Sinaloa	Mexico	221	Utilities	108,722.10
5	INTERNATIONAL PAPER COURTLAND MILL	35618CHMPNPOBOX	COURTLAND	Alabama	United States	322	Paper Manufacturing	95,270.79

Industrial Facilities Reporting Metal Releases to Surface Water in 2006



North American Watersheds and Facilities Reporting Pollutant Releases to Water, 2006

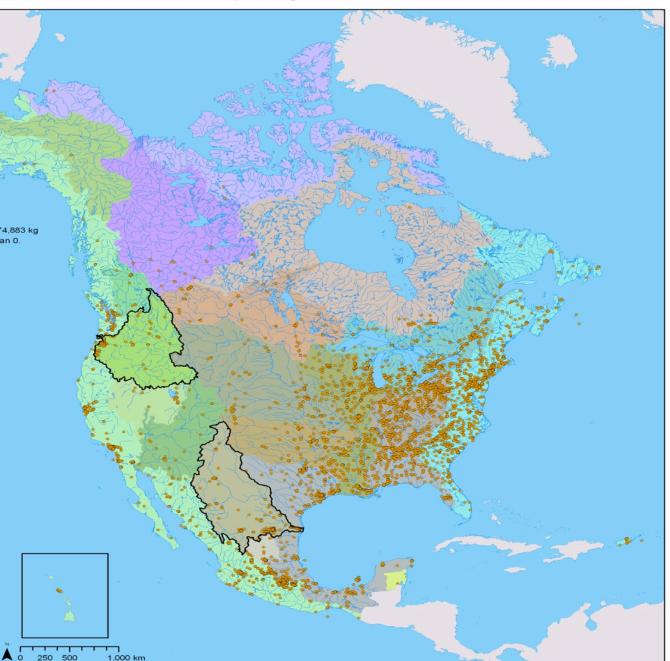
 Facilities Reporting Releases to Surface Water
 Total Number of Facilities Releasing to Water: 4997
 Total Annual On-site Surface Water Releases: 228,474,883 kg
 *Facilities reporting releases and transfers greater than 0.

Rivers

Lakes and large rivers

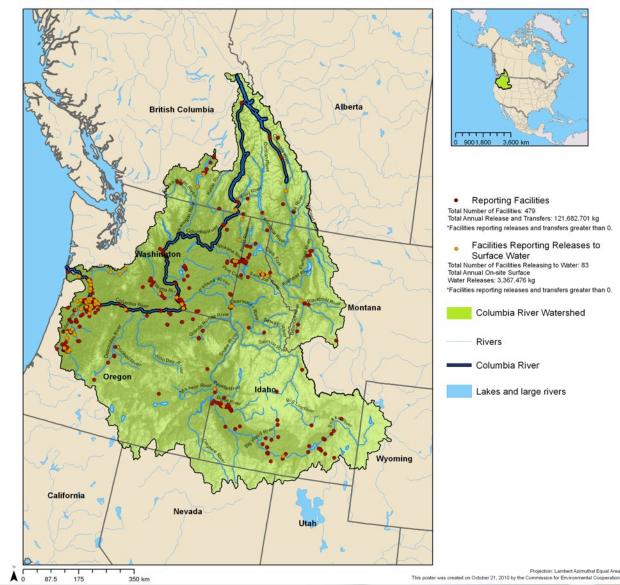
Level II and Level III Watersheds

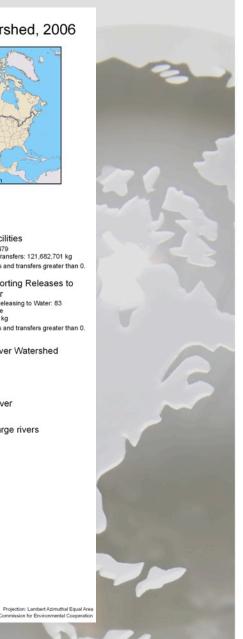
Arctic Ocean: Seaboard Arctic Ocean: Mackenzie River Atlantic Ocean: Seaboard Atlantic Ocean: St. Lawrence River Gulf of Mexico: Seaboard Gulf of Mexico: Mississippi River Gulf of Mexico: Missouri River Gulf of Mexico: Ohio River Gulf of Mexico: Arkansas/Red River Gulf of Mexico: Rio Grande Gulf of Mexico: El Salado Hudson Bay: Seaboard Hudson Bay: Nelson River Pacific Ocean: Seaboard Pacific Ocean: Yukon River Pacific Ocean: Fraser River Pacific Ocean: Columbia River Pacific Ocean: Colorado River Pacific Ocean: Great Basin Caribbean Sea: Seaboard



Projection: Lambert Azimuthal Equal Area his poster was created on October 21, 2010 by the Commission for Environmental Cooperation

Facilities Reporting Pollutant Releases and Transfers in the Columbia River Watershed, 2006





Pollutant Transfers within North America

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To Canada Total: 19,603,198 kg To Mexico Total: 45.524.791 kg O

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Cross-border Transfers from Mexico to US Total: 367,037 kg

Cross-border Transfers from Canada to US Total: 168,636,403 kg

250 500 1,000 km

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king Stock: North American Pollutant Releases and Transfers

ss-border Transfer Query Results [Create new query | Modify existing query] Share

eport Type: Cross-border Transfer ear: 2006 burce: United States estination: All Countries except United States bllutant Type: All Pollutant Types bllutants: Mercury (and/or its compounds) D C M P nits of Measurement: Kilograms (kg) AICS: 4 dustry: All Industries

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Click on column headers to sort data accordingly

cross-border Transfers from United States Show transfer types

		Total Cross-border Transfers	Off-site to disposal of metals	Transfers to recycling of metals	
#	Country 🔺	2006 (kg)	2006 (kg)	2006 (kg)	
1	Canada	7,736.49	7,730.09	6.40	
2	Mexico	2,535.48	11.26	2,524.23	
3	Switzerland	1.36	1.36	0	
	Total for this page	10,273.33	7,742.71	2,530.63	

records returned

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Examples of Mercury Transfers for Disposal and Recycling from the US to Mexico and Canada



Data SIO, NOAA, U.S. Navy, NGA, GEBCO Image IBCAO Image © 2011 TerraMetrics





CEC North American PRTR Project

For more information

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Three countries. One environment.