

# Cross Border Transfers of Toxic Contaminants in North America

Analysis of PRTR Data

Orlando Cabrera-Rivera

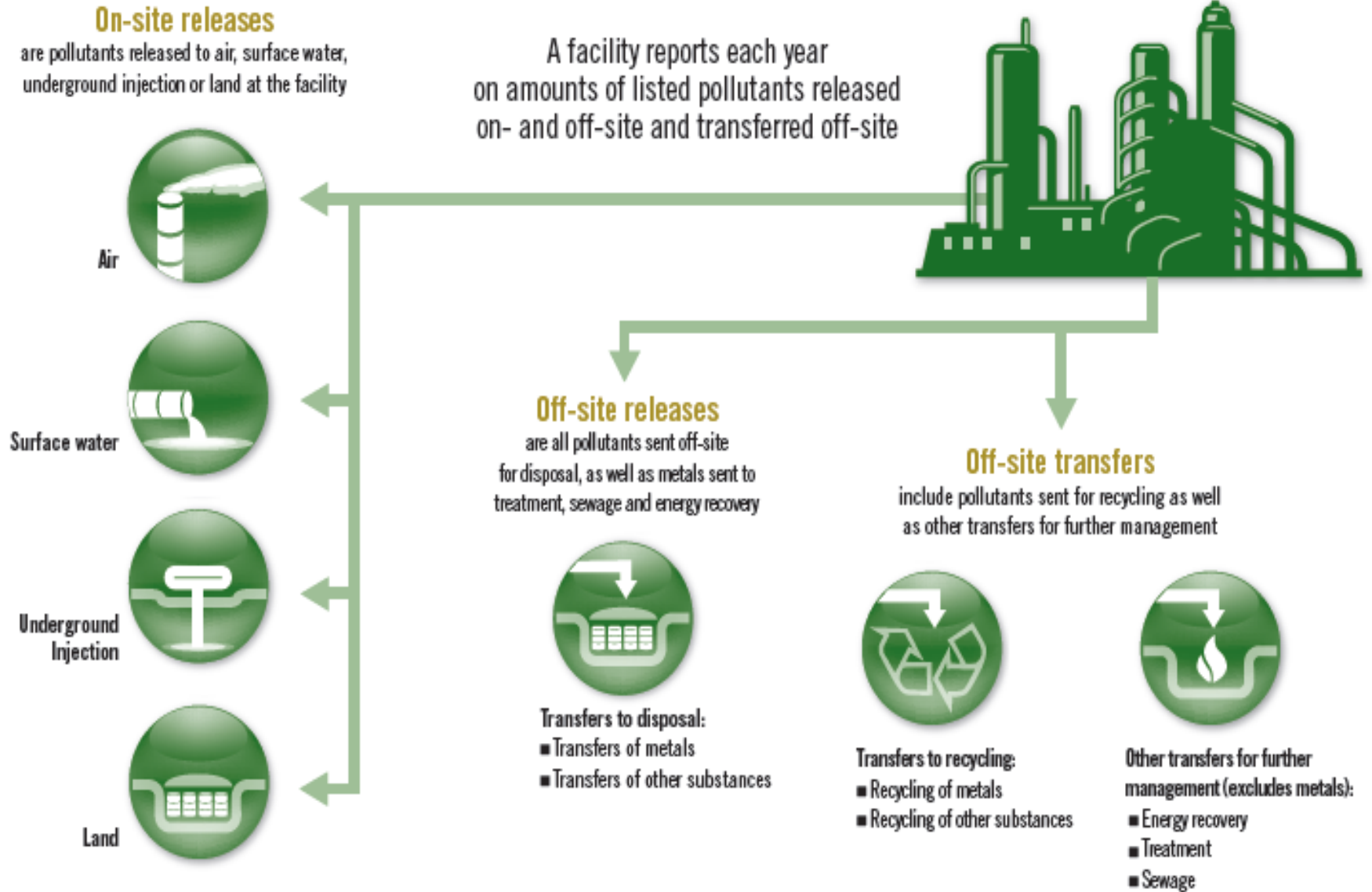
JPAC Meeting  
El Paso, Texas  
November 7, 2011



cec.org



Figure A-1. Pollutant Releases and Transfers in North America

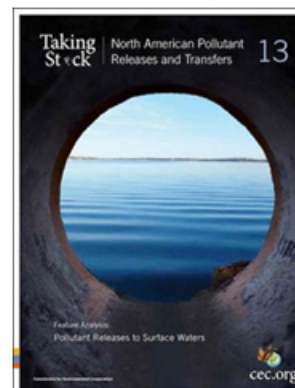




## Try the enhanced features of *Taking Stock Online*, the integrated, North American PRTR Database

The *Taking Stock Online* tools allow you to explore information on pollution from industrial facilities across North America. Create customized queries and download your results in a variety of formats, including kml files for viewing in Google Earth and Google Maps.

- [Search the database](#)
- [The Google Earth PRTR facility Map Layer](#)
- [Read the report](#)



### Overview of *Taking Stock* 2006 data



[North American Releases and Transfers, 2006](#)



[Releases to air](#)



[Releases to water](#)



[Releases to land](#)



[Underground injection](#)



[Off-site for disposal](#)



[Off-site Transfers](#)

The data used in *Taking Stock* are reported to [Canada's National Pollutant Release Inventory \(NPRI\)](#), Mexico's [Registro de Emisiones y Transferencia de Contaminantes \(RETC\)](#), and the United States' [Toxics Release Inventory \(TRI\)](#).

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### Frequently Asked Questions about Taking Stock

#### 3. What is the value of PRTR data (and the NAPRTR Project)?

By tracking information on releases and transfers of individual pollutants, PRTR data are an important tool that can help industry, governments, communities and non-governmental organizations identify pollution prevention and reduction opportunities.

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# Taking Stock Online Cross-Border Transfers

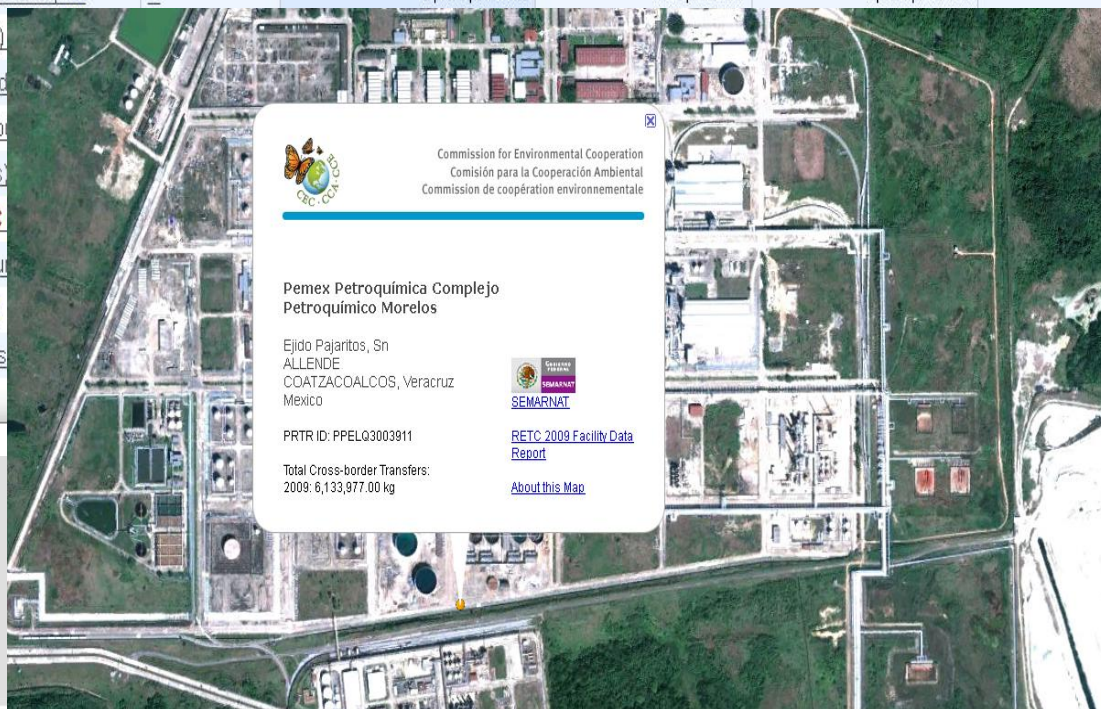
## Cross-border Transfers from United States [Show transfer types](#)

#	Country	Total Cross-border Transfers	Disposal Transfers Total	Recycling Transfers Total
		2009 (kg)	2009 (kg)	2009 (kg)
1	<a href="#">Mexico</a>	25,703,148.92	248,433.33	25,448,129.43
2	<a href="#">Canada</a>	14,787,289.25	480,066.07	10,780,201.54

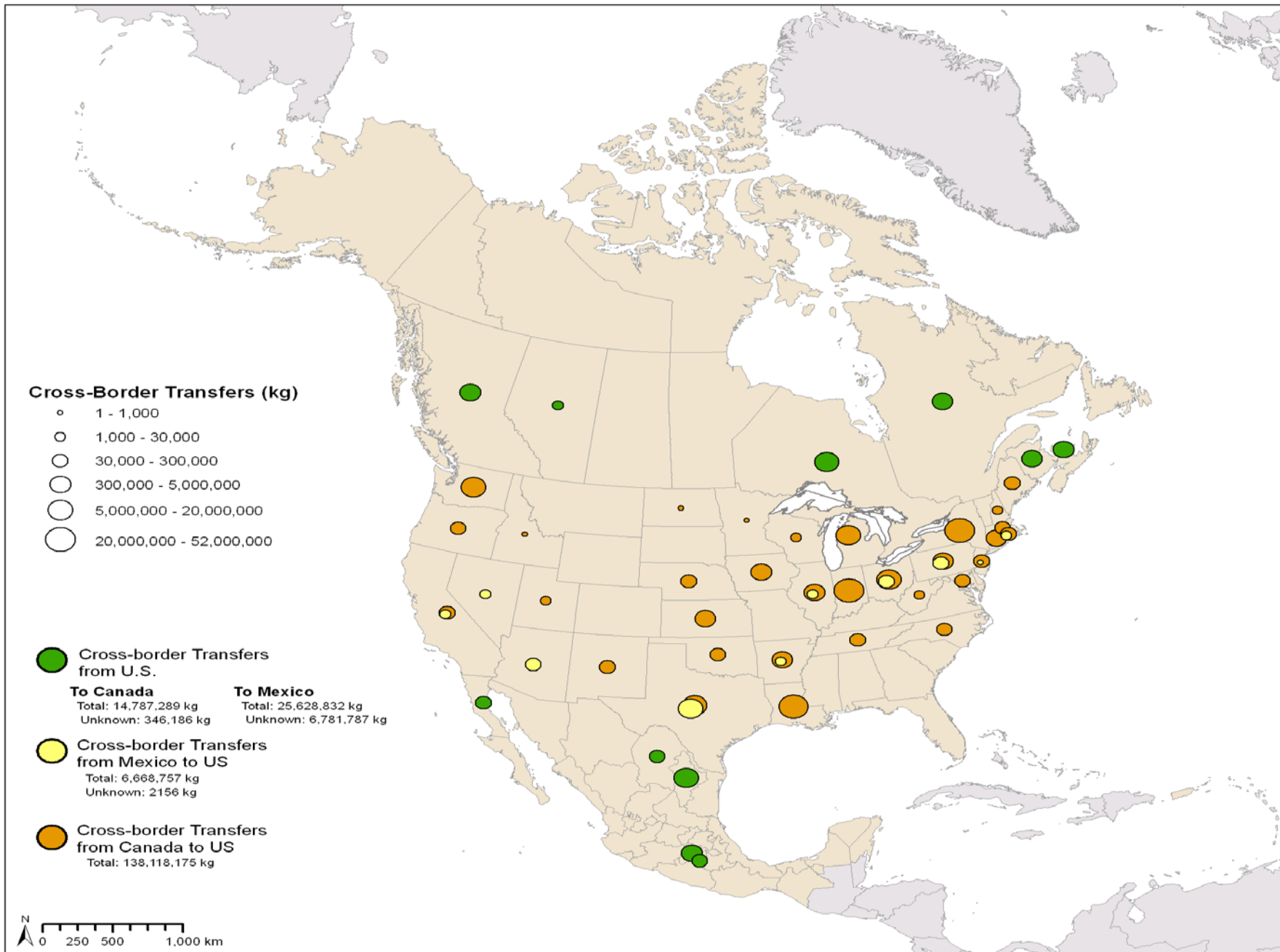
## Pollutant [Show transfer types](#) [Toggle non-media columns](#)

#	Country	Pollutant	CAS Number	Total Cross-border Transfers	Disposal Transfers Total	Recycling Transfers Total	Other Transfers Total
				2009 (kg)	2009 (kg)	2009 (kg)	2009 (kg)
1	<a href="#">Mexico</a>	<a href="#">Zinc (and/or its compounds)</a> <b>M P</b>	--	21,118,612.92	--	21,118,612.92	--
2	<a href="#">Canada</a>	<a href="#">Manganese (and/or its compounds)</a> <b>M</b>	--	2,169,674.82	145,656.22	2,024,018.60	--
3	<a href="#">South Korea</a>	<a href="#">Lead (and/or its compounds)</a>					--
4	<a href="#">China</a>	<a href="#">Copper (and/or its compounds)</a>					--
5	<a href="#">Germany</a>	<a href="#">Chromium (and/or its compounds)</a>					--
6	<a href="#">Japan</a>	<a href="#">Silver (and/or its compounds)</a>					--
7	<a href="#">Belgium</a>	<a href="#">Di(2-Ethylhexyl) Phthalate</a> <b>C</b>					--
8	<a href="#">United Kingdom</a>	<a href="#">Selenium (and/or its compounds)</a>					--
9	<a href="#">Argentina</a>	<a href="#">Aluminum (fume or dust)</a> <b>M</b>					--
10	<a href="#">Italy</a>	<a href="#">Nickel (and/or its compounds)</a>					--
Total for this page							0.00

21 records returned



# North America Total Cross-Border Transfers, 2009



## Summary of Cross-Border Transfers, 2009

- Over 181 million kg transferred across NA borders (just over 10% of all off-site disposal or other transfers)
- 119 pollutants transferred (mainly to recycling) by 24 industrial sectors
- Top 10 pollutants (by amount) = 170,508,844 kg (94% of total)

# Top 10 Substances - Cross-Border Transfers

<b>Pollutants *</b>	<b>Reported Amount (Kg)</b>
Sulfuric Acid	107,759,113
Zinc (and/or its compounds)	30,145,574
Copper (and/or its compounds)	8,562,357
Lead (and/or its compounds)	7,323,606
1,2-Dichloroethane	5,297,093
Manganese (and/or its compounds)	4,278,961
Nickel (and/or its compounds)	2,012,778
Sodium Nitrite	1,953,476
Hydrochloric Acid	1,644,340
Aluminum Oxide (Fibrous Forms)	1,531,546

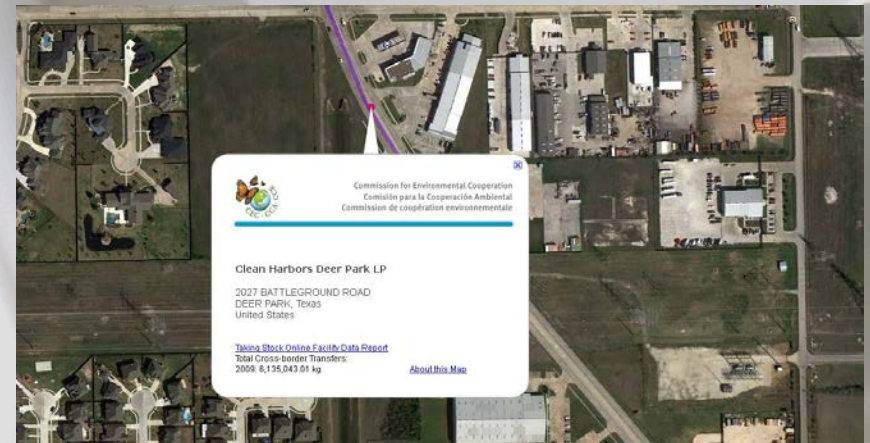
\* May be subject to different PRTR reporting requirements

# North American Cross-border Transfers, 2009

Cross-border Transfers	Top pollutants (% of total)	Top sending sector(s)	Top recipient locations	Pollutant(s) destined for
<b>Total Canada-US Transfers:</b> 134,265,351 kg	sulfuric acid (76%)	petroleum and coal products mfg	Indiana, Louisiana & New York	recycling
<b>Total Mexico-US Transfers:</b> 6,668,757 kg	1,2-Dichloroethane (79%)	petrochemical mfg	Texas	disposal (incineration)
<b>Total US-Canada Transfers:</b> 14,787,289 kg	lead, copper and manganese compounds (63%)	primary metals mfg, transportation equip't mfg	Ontario, New Brunswick, Québec	recycling
	sodium nitrite (13%)	chemical mfg	Ontario, New Brunswick, Québec	treatment
<b>Total US-Mexico Transfers:</b> 25,703,149 kg	zinc compounds (82%), lead and manganese compounds	primary metals mfg	Nuevo Leon	recycling



# Transfers to Disposal (1,2-DCE) Mexico-US



# Considerations

- **Use of PRTR data for assisting in tracking cross-border transfers**
  - Reporting requirements
  - Information gaps
- **Waste Management Methods**
  - Recycling, Disposal, Treatment
- **Effect on Receiving Communities**
  - Health and Environmental Effects
  - Reporting and regulatory standards

# CEC North American PRTR Project

For more information

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