PRTR MÉXICO
Registro de Emisiones y Transferencia de Contaminantes (RETC)

2020
Environmental policy instrument

- Integrate **public** information of the establishments as emissions and transfers of RETC substances (NOM-SEMARNAT-165-2013)
- Induce **reduction of emissions and transfers** of substances dangerous to health and environment

**What is an emission?**
Release of RETC substances directly into the environment: air, soil and national water bodies

**What is a transfer?** (transfer of responsibility)
Allocation of RETC substances to a physically separate site from where they were used or produced, either in waste and/or water discharges to the sewer system to:

- Reuse
- Recycle
- Co-processing
- Treatment
- Final disposal
**PRTR scope**

- **Mandatory** annual record of data, via Annual Operating Report: COA

- Report of all the activities carried out in **fixed sources** (industrial establishments, services and shops) without exemptions

- Registration of 200 **substances** with **report thresholds on** emissions / transfers of manufacturing processes and other uses; established for each substance (NOM-165-SEMARNAT-2013)

- Data recording by **facility or establishment**

- Coverage to **all media**: emissions in water, air, soil, subsoil and transfers in water and wastes

- **Annual publication** of data by plant/establishment (name and location) and quantity of substances issued or transferred.
PRTR Publication procedure

**Fixed sources:**
1. Federal industry (sectors)*
2. Dangerous residues generator +10 Ton/year
3. Water discharge to water bodies

*Hydrocarbons, power generation, chemicals, glass manufacture, auto makers, cement & lime, metallurgy, paper and cellulose, asbestos, Paints & Inks, Hazardous Wastes treatment
<table>
<thead>
<tr>
<th>Competences on environmental matters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air Sector</strong></td>
</tr>
<tr>
<td>- Federal</td>
</tr>
<tr>
<td>- <strong>Release</strong></td>
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<tr>
<td>- Fixed sources</td>
</tr>
<tr>
<td>- 11 sectors*</td>
</tr>
<tr>
<td><strong>State</strong></td>
</tr>
<tr>
<td>- <strong>Release</strong></td>
</tr>
<tr>
<td>- Fixed sources</td>
</tr>
<tr>
<td>- State sectors</td>
</tr>
<tr>
<td><strong>County / Municipal</strong></td>
</tr>
<tr>
<td>- <strong>Release</strong></td>
</tr>
<tr>
<td>- Commerce and service</td>
</tr>
</tbody>
</table>

| **Water Discharges**                  |
| - **Release**                          |
|   - Water bodies                      |
| **Transfer**                          |
|   - Sewerage**                        |

| **Land Hazardous Wastes**             |
| - **Transfer**                        |
|   - Contaminated ground               |

| **Waste NOM-052-SEMARNAT-2005**       |
| - **Transfer**                        |
|   - Hazardous Waste (grand generator)|
| **Transfer**                          |
|   - Special handling - Micro generator of Hazardous W*** |
| **Transfer**                          |
|   - City solid waste                 |

*Hydrocarbons, power generation, chemicals, glass manufacture, auto makers, cement & lime, metallurgy, paper and cellulose, asbestos, Paints & Inks, Hazardous Waste treatment.

**Some States have sign agreements with Municipalities or Counties to manage the water supply systems.

*** Article 12 LGPGIR (Ley General para la Prevención y Gestión Integral de los Residuos)
## PRTR Reports

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of fixed sources (Regulated establishments)</th>
<th>No. of PRTR substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>1,714</td>
<td>78</td>
</tr>
<tr>
<td>2005</td>
<td>2,452</td>
<td>78</td>
</tr>
<tr>
<td>2006</td>
<td>2,736</td>
<td>75</td>
</tr>
<tr>
<td>2007</td>
<td>2,446</td>
<td>76</td>
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<tr>
<td>2008</td>
<td>2,468</td>
<td>78</td>
</tr>
<tr>
<td>2009</td>
<td>2,342</td>
<td>75</td>
</tr>
<tr>
<td>2010</td>
<td>2,599</td>
<td>80</td>
</tr>
<tr>
<td>2011</td>
<td>2,739</td>
<td>76</td>
</tr>
<tr>
<td>2012</td>
<td>3,157</td>
<td>76</td>
</tr>
<tr>
<td>2013</td>
<td>3,408</td>
<td>72</td>
</tr>
<tr>
<td>2014</td>
<td>2,228</td>
<td>68</td>
</tr>
<tr>
<td>2015</td>
<td>2,518</td>
<td>76</td>
</tr>
<tr>
<td>2016</td>
<td>2,572</td>
<td>74</td>
</tr>
<tr>
<td>2017</td>
<td>2,690</td>
<td>76</td>
</tr>
<tr>
<td>2018</td>
<td>2,852</td>
<td>73</td>
</tr>
</tbody>
</table>

### Number of fixed sources reporting PRTR (RETC)

### Number of PRTR (RETC) substances reported
PRTR
ENVIRONMENTAL POLICY INSTRUMENT & OBJECTIVES

Government with information for development of Policies & Programs to reduce pollutants

Industry with efficient processes, clean technologies and substitution of raw materials

Academia with Information for research

Risk of Pollutants

Informed and participatory society

Reduced impact on Health and the Environment
Emissions to air by sector, RETC 2018

PRTR-RETC 2018
Emissions to air (Kg/year)

- Electric power generation
- Oil and petrochemical
- Automotive
- Metallurgy (includes steel)
- Chemistry
- Paints and inks
- Wood and Products
- Cellulose and paper
- Cement and Lime
- Articles and plastic products

- Hydrogen sulfide
- Benzene
- Biphenyl
- Styrene (phenyl ethylene)
- Phenol
- Formaldehyde
- Nickel (respirable dust, fumes or vapors)
- Butadiene
- Toluene
- Xylene (mixture of isomers)
Emissions to air by sector, RETC 2018

PRTR-RETC 2018
Emissions to air (Kg/year)
Without hydrogen sulfide
(Geothermal facility)
Emissions to air by state, RETC 2018

PRTR-RETC 2018
Emissions to air (kg/year)

- Baja California
- Michoacán
- Puebla
- Tabasco
- Coahuila
- Guanajuato
- Nuevo León
- Veracruz
- México
- Querétaro

Emissions to air by state, RETC 2018.
Emissions to air by state, RETC 2018

PRTR-RETC 2018
Emissions to air (kg/year)
Without hydrogen sulfide generated by geothermal facility
Emissiones to water by sector, RETC 2018

PRTR - RETC 2018
Emissions to water (Kg/year)

- Electric power generation
- Oil and petrochemical
- Others
- Metallurgy (includes steel)
- Food and/or human consumption
- Cellulose and paper
- Chemistry
- Beverages and tobacco
- Automotive
- Textiles, fibers and threads

- Arsenic (compounds)
- Polychlorinated biphenyls
- Cadmium (compounds)
- Hydrogen cyanide
- Inorganic/organic cyanide
- Chromium (compounds)
- Lead (compounds)

*Includes wastewater treatment plants.
Emissiones to water by sector, RETC 2018

PRTR - RETC 2018
Emissions to water (Kg/year)
Does not include the Electric Power Generation sector

*Includes wastewater treatment plants
Includes wastewater treatment plants
Emissions to water by state, RETC 2018

PRTR - RETC 2018
Emissions to water (Kg/year)
Transfers for discharges of wastewater to sewerage by sector, RETC 2018

PRTR-RETC 2018
Transfers to the sewer system by sector (kg/year)

Chemistry
Metallurgy (includes steel)
Automotive
Glass
Beverages and tobacco
Others
Food and / or human consumption
Electronic, electrical and domestic equipment and supplies
Paints and inks
Health and assistance services
Transfers for discharges of wastewater to sewerage by state, RETC 2018

PRTR-RETC 2018

Transfers to the sewer system by State (kg/year)

- Arsenic (compounds)
- Cadmium (compounds)
- Inorganic / organic cyanide
- Chromium (compounds)
- Mercury (compounds)
- Nickel (compounds)
- Lead (compounds)
# Hazardous Wastes Transferences, RETC 2018

<table>
<thead>
<tr>
<th>Type</th>
<th>Ton/ year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reuse</td>
<td>1,763</td>
</tr>
<tr>
<td>Recycling</td>
<td>3,954</td>
</tr>
<tr>
<td>Co-processing</td>
<td>1,156</td>
</tr>
<tr>
<td>Treatment</td>
<td>1,388</td>
</tr>
<tr>
<td>Final disposal</td>
<td>8,729</td>
</tr>
<tr>
<td>Incineration</td>
<td>373</td>
</tr>
<tr>
<td>Others</td>
<td>7,517</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>24,881</strong></td>
</tr>
</tbody>
</table>

**PRTR - RETC 2018**

Hazardous Wastes transferses (%)
Future Actions (2020-2024)

Operating Plan 2020-2024

1. Update of COA Web Review Module with criteria for PRTR
2. Review of NOM-165-SEMARNAT-2013. List of substances (2021-2023)
3. Update of PRTR - RETC webpage (2021-2023):
   - Improve content
   - Development and publication of annual reports
   - Publication of the PRTR database that allows the users to:
     a. Customized and exportable queries to Excel
     b. Generation of graphics
     c. Generation of maps
   - Include page view counter and survey
THANK YOU!

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