Toxics Release Inventory TEACH-IN TRAINERS GUIDE

Developed by the membership and staff of the Clean Air Coalition of Western New York

CLEAN AIR COALITION

A Toxics Release Inventory Teach In

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About Us

The Clean Air Coalition of Western New York is a grassroots environmental health and justice organization based in Buffalo, New York. The organization's mission is to build power by developing grassroots leadership that runs and wins campaigns that advance public health and environmental justice. We envision a world where our environment promotes people's health and where people are actively engaged in decisions that impact their lives. We use direct-action campaigns, grassroots leadership development and participatory research to win tangible improvement that improve the lives of our members. We work to improve democratic participation and reduce exposure to toxic emissions in overburdened neighborhoods including Tonawanda and the lower west side of Buffalo.

We hope you find this guide useful. If you do, please share it with others!

How to use this guide:

This guide is designed to help communities struggling with pollution challenges to learn more about what is being released in their neighborhoods. The guide is best-used when communities are beginning to explore potential sources of environmental exposures. The guide can also adapted and used by health care professionals, public health agencies, urban planners, first responders, and unions. While the guide is designed to be easy to use, developing facilitation skills and mastering the content can take time. When you use this guide, read through the agenda and materials and adapt it based on your group's needs.

Goals:

1. Participants understand the history of the Toxics Release Inventory (TRI)
2. Participants understand who reports to TRI, how, and when
3. Participants understand the limitations of TRI
4. Participants can use the My Right To Know website
5. Participants develop a deeper understanding of how change occurs in Congress and at the US Environmental Protection Agency.

Materials Needed:

- Sign-in sheets
- Snacks and beverages
- Signs for directions to the training room
- Computer
- Projector
- Film about the Bhopal, India disaster loaded: http://www.youtube.com/watch?v=5ehFcv4ywvA&feature=related
- Chart paper
- Images from Appendix
- Slides presentation
- Pens
- Name tags
- Worksheets
- Markers
- Extra tape
- Computer lab

Part 1:
Why do we have TRI and what does it do?

Opening

15 minutes

WHAT:

- Opening Announcements. This is a time to share any community or organizational updates that are not related to the training.
- Introductions: Participants share their names, where they live and the facility they are most interested in learning more about in their community.
- Share learning goals and agenda for the evening

Why do we have TRI?

25 minutes

WHAT: Facilitator leads the group through the following information and reflection exercises:

Bhopal History and Reflection

» When we learn about TRI most folks reference the disaster in Bhopal, India in 1984.

» The Union Carbide pesticide plant in Bhopal had an uncontrolled release that killed nearly 4,000 people and caused 558,125 injuries.

Show film

» We want to hear your feedback and reactions to that film. I'd like you to turn to your partner and share the answers to the following questions with the person next to you. The questions are:

How does seeing that film make you feel?
Why do you think the accident happened?
What would you do to prevent it?

The facilitator should model how to respond. For example, "When I see that film and when I think about the suffering there it makes me really sad, it gives me a sinking feeling in my stomach. And then I feel angry."

» Please turn to the person next to you and take turns sharing your responses to these questions.

Bring group back together to share their thoughts and feelings. Ask just a few participants for their thoughts and feelings. Record the reactions of the group on the chart paper.

Movement building for environmental data

The facilitator should reference the images attached to this document when describing each stage of the process.

- The Toxics Release Inventory is an online database of toxic chemical releases to the air, water and ground from major plants throughout the United States.
- I began our session by sharing that when most folks are taught about TRI it's a quick story that says "there was an accident in Bhopal and then in West Virginia then Congress passed a law! But we know Congress is constantly reacting to pressures from industry, citizens and other stakeholders. We have TRI because there was a movement of impacted communities, environmental groups, and worker-safety organizations that advocated for decades for Congress to implement the law that gives us the Toxics Release Inventory. Now we're going to walk through some of the key historical and political events that led to the creation of the Toxics Release Inventory

- In 1979 the Resource Conservation and Recovery Act was signed by President Ford

- Rep. Jim Florio from New Jersey wanted to strengthen it by passing the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly referred to as Superfund, after the tragedy at Love Canal.

- When Ronald Reagan came to power, he appointed Anne Gorsuch as the EPA Administrator. Anne:
  1. Lifted a ban that limited the number of liquid chemicals in landfills
  2. Cut the EPA's enforcement staff
  3. Hired lawyers who had previously represented industry
- There was a shift away from trying to pass national legislation to working at the state level on grassroots campaigns.

- Lois Gibbs was very involved in educating policymakers. Her organization did technical research and helped grassroots activists. There were local campaigns to pass right-to-know laws in: Philadelphia, California, Connecticut, New York, Wisconsin

- THEN the accident in Bhopal happened

- There was another accident in West Virginia by the same company. The West Virginia facility leaked chemicals used to manufacture the pesticide Temik; six workers were injured, and more than a hundred residents were sent to the hospital. Many people were evacuated from the area.

- THEN CONGRESS acted to pass the EPCRA (Emergency Planning and Community Right to Know Act). It included the frame work that would allow EPA to create the Toxics Release Inventory

For discussion:

- **What strikes you as strange or unusual about what you just learned?**
- **Are there any other thoughts you'd like to share?**

TRI Basics

30 Minutes

Overview of the legislation

- Congress passed the Superfund Amendments Reauthorization Act (SARA Title III) which contains: The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986. (EPCRA) was created to help communities plan for emergencies involving hazardous substances.
- EPCRA establishes requirements for federal, state and local governments, Indian tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. It created the Toxics Release Inventory which required annual information of releases of chemicals due to day to day manufacturing.

Limitations

- The legislation had a positive impact. We want to be real about what the Toxics Release Inventory can and cannot do. These limitations include:

- **Self-reporting.** All companies who report to the TRI are generating their own numbers based often on models, not actual monitoring data. There are very few people at EPA who can check this. For example, there are only 2 EPA staff for all of NY and NJ to check up on companies.

- **There are only a small number of chemicals being tracked.** EPA requires companies to report on 652 chemicals, but there are over 80,000 chemicals out there. So everything that's out there isn't reported.

- **Only for large facilities.** Small facilities with less than 10 employees do not have to report their emissions, and certain types of facilities, like municipal waste incinerators, are not required to report their emissions.

- **Health impacts could be underestimated.** The toxicity levels that EPA determines are based on a large man, not a child or a woman, who are particularly vulnerable to toxic chemicals.

- **The database doesn't account for cumulative impacts.** The database can't really take into account what happened when we mix all of these chemicals together. For example, think about when the doctor tells you not to take some prescription pills together because they have bad side effects when combined.

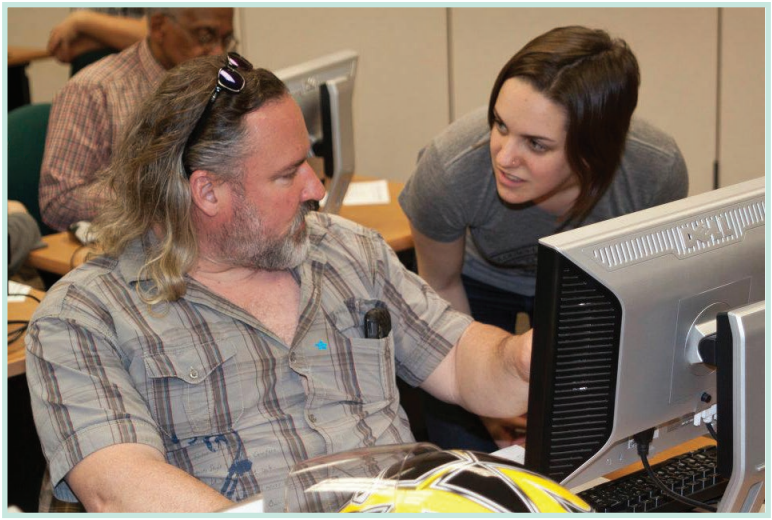
- **The data isn't always current.** The data contained in the TRI online is 1-2 years old.

How it works

» A facility must report if it:

- Employs 10 or more full-time workers AND
- It is in a specific industrial sector or is a federal facility AND
- Manufactures or processes more than 25,000 pounds of a listed chemical or uses more than 10,000 pounds of a listed chemical in a given year (with some exceptions for chemicals that persist at very low levels like mercury and lead)

- The industry sectors covered include
  - Mining: metal mining and coal mining
  - Electricity generation: from oil or coal combustion
  - Manufacturing: food, chemicals, plastics, computers, wood, textiles, printing and publishing
  - Hazardous waste management facilities
- What chemicals are covered?
  - 682 chemicals and chemical categories must be reported
  - Chemicals can be added or deleted over time
- Companies report releases to the air, water, and soil
- Timeframe for companies reporting
- Quality checks



BREAK – 10 minutes. Have snacks and drinks available.

Part 2: Using TRI

Investigating Your Community

35 minutes

MyRTK overview

- **Welcome back, everyone! We are going to use the next hour to learn how to access TRI data and explore what's happening in our neighborhoods.**
- **Slide 1**
- **Slide 2**
- **Slide 3**
- **Slide 4**
- **Slide 5**
- **Slide 6. We'd like you to try to investigate the answers to these questions**
- If folks have questions as you work through the questions, please just raise your hand and I can come over to try to help.
- **After about 20 minutes or when most people seem to have completed the exercise, ask participants to focus their attention back on you to share what they found. Ask:**
- Who are the top 5 polluters in your neighborhood?
- What are the health effects of the top releases in your community?
- What percentage of TRI releases in your county is the largest polluter responsible for?
- How do facilities in your community compare to others in the industry?
- How many violations does _____ company have?
- How many facilities are within 1 mile of your home or school?

Sharing and Action Planning

15 minutes

- I'd like to capture how that exercise made everyone feel.
- What was challenging about that process?
- How did it make you feel?

Take a few answers from participants and capture them on butcher paper.

- I'd like you to turn to your partner and quickly share answers to the following questions:
    - Who else should know about this in my community?
    - Who can I personally share this information with?
    - What action can I take to reduce pollution in my community now that I have this information?

Bring the group back together and ask participants to share their responses with the group

Closing and Next Steps

10 minutes

Thanks everyone for coming tonight. Let's review our goals for the evening.

- *Review the goals and ask participants if they feel they have achieved each goal, one by one.*

I'd like to go around the room and have everyone describe how they feel in one word.

- *Facilitator should start.*

Evaluation

5 minutes

On chart paper capture the results to the following questions:

- What went well about this training? What did you like?
- What would you change or do differently next time?

Thank everyone for coming and talk about the next time folks can engage with your organization

Toxic Release Inventory: practice!

1. Which companies release the greatest quantity of chemicals in your community?

2. What are the health effects of these chemicals?

3. How does the top emitter compare to others across the country?

4. What percentage of releases is the top emitter responsible for in your neighborhood?

5. How many violations do the top emitters have?

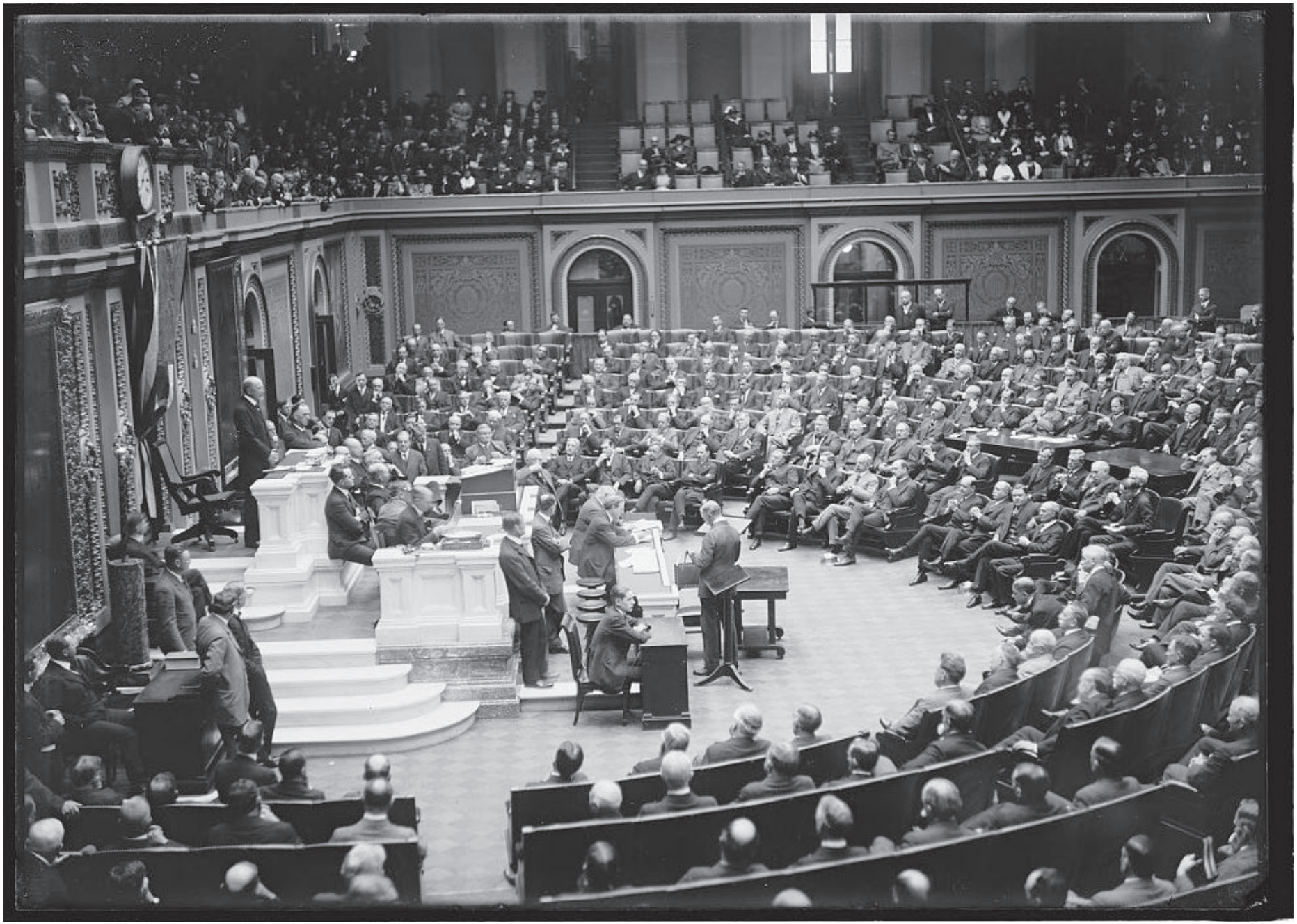
6. Have any companies done pollution prevention projects in your community?

Toxic Release Inventory: Action!

What else should know about this information in my community?

Who can I share this information with this week?

What action can I take to reduce pollution in my community?



http://hdl.loc.gov/loc.pnp/hec.12120

Congress Acts!

President Gerald Ford signs the Resource Conservation and Recovery Act

http://www.usfra.org/forum/topics/statement-from-csb-chairman#.Ueci3VO9zgw

Institute, West Virginia 1985

http://www.nj.com/south-jersey-voices/index.ssf/2013/05/op-ed_jim_florio_haves_have_to.html

Jim Florio, New Jersey

http://www.heinzawards.net/pub/recipients/photos/high/Lois_Gibbs.jpg

Lois Gibbs brings the fight to the states

DECEMBER 17, 1984

TIME

TERROR ON THE TARMAC
A Murderous Skyjacking

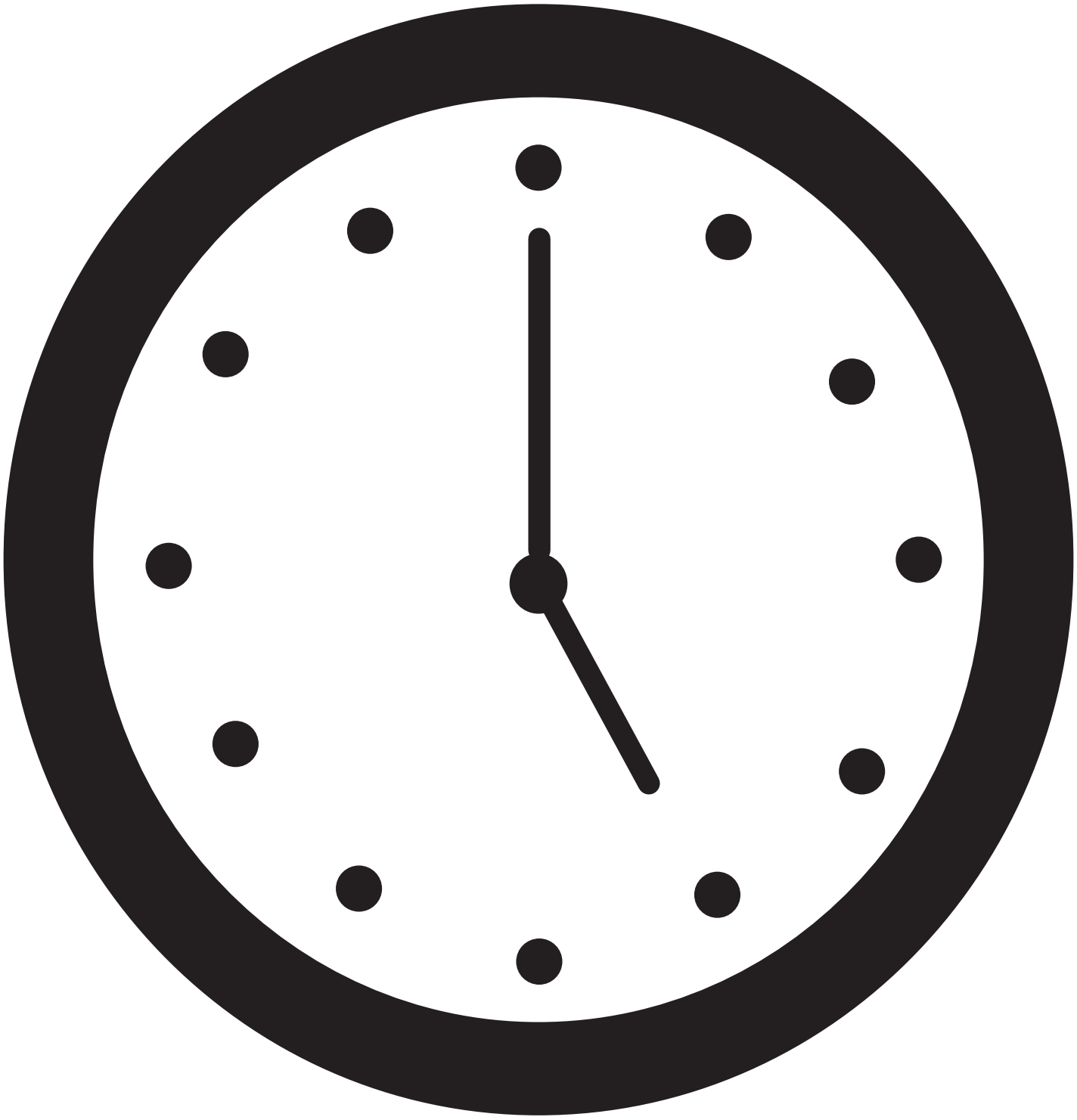
INDIA'S DISASTER

THE NIGHT OF DEATH

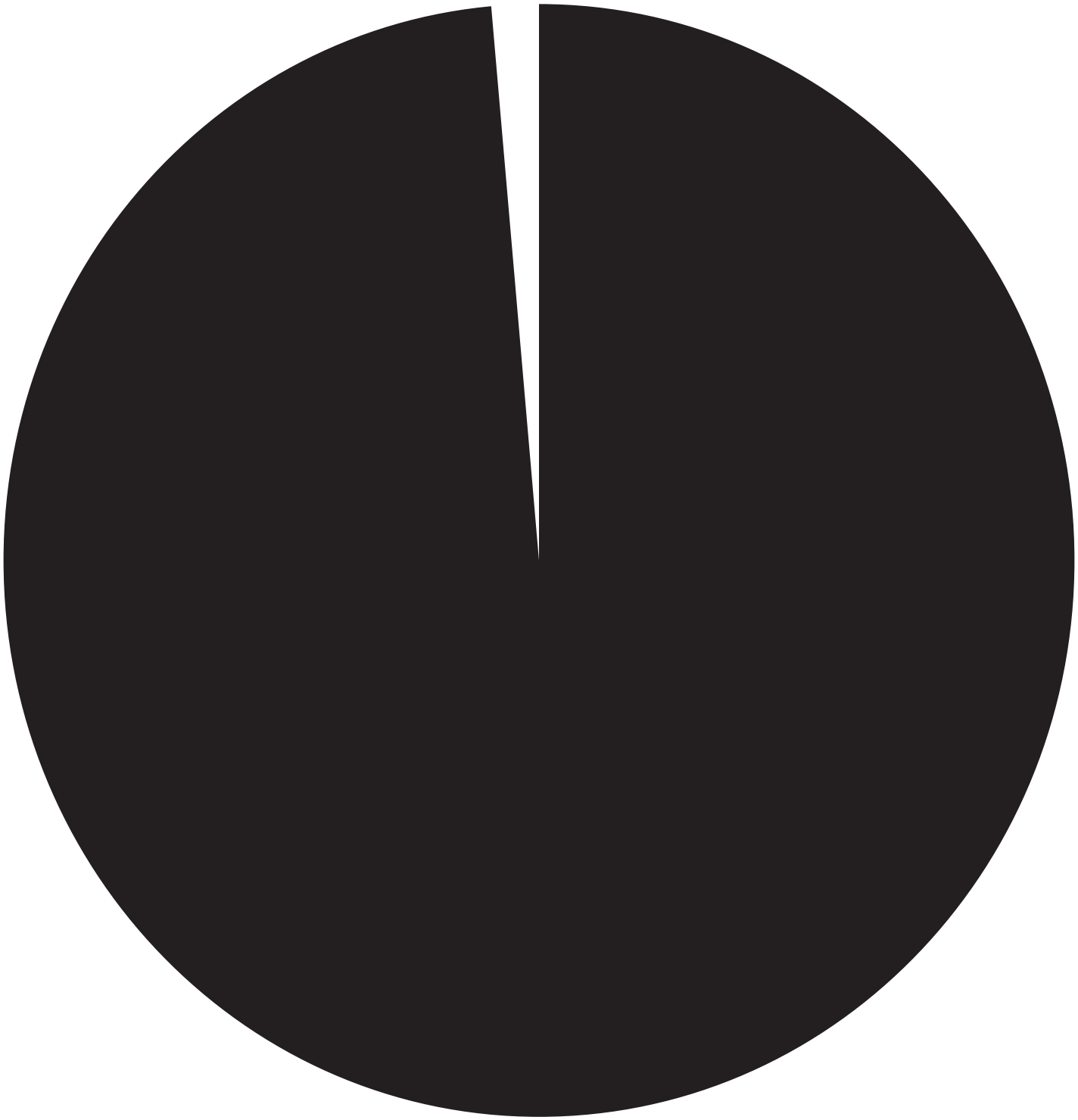
A GLOBAL WORRY

http://www.epa.gov/history/administrators/gorsuch.html

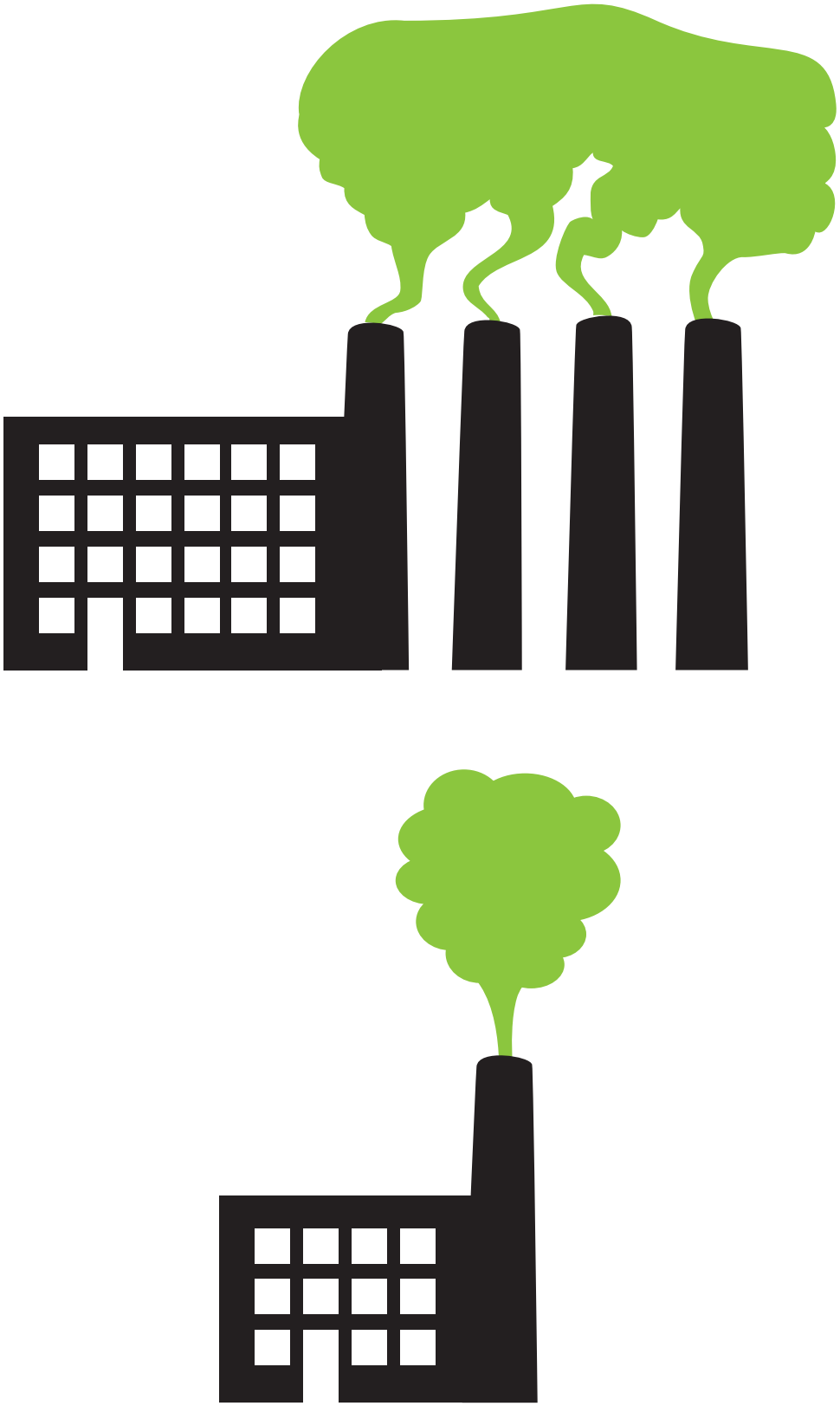
Anne Gorsuch, US EPA Administrator



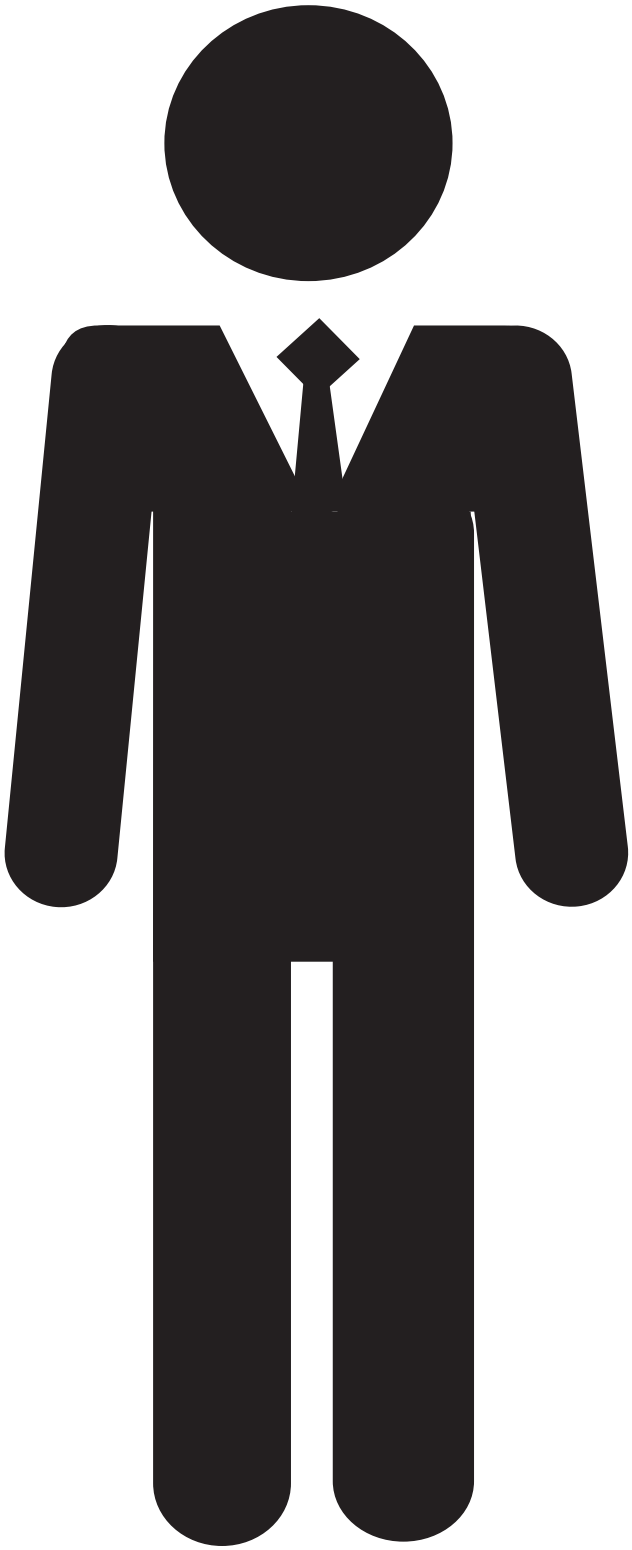
Data is not "real-time"



652/18,000 chemicals have to be reported

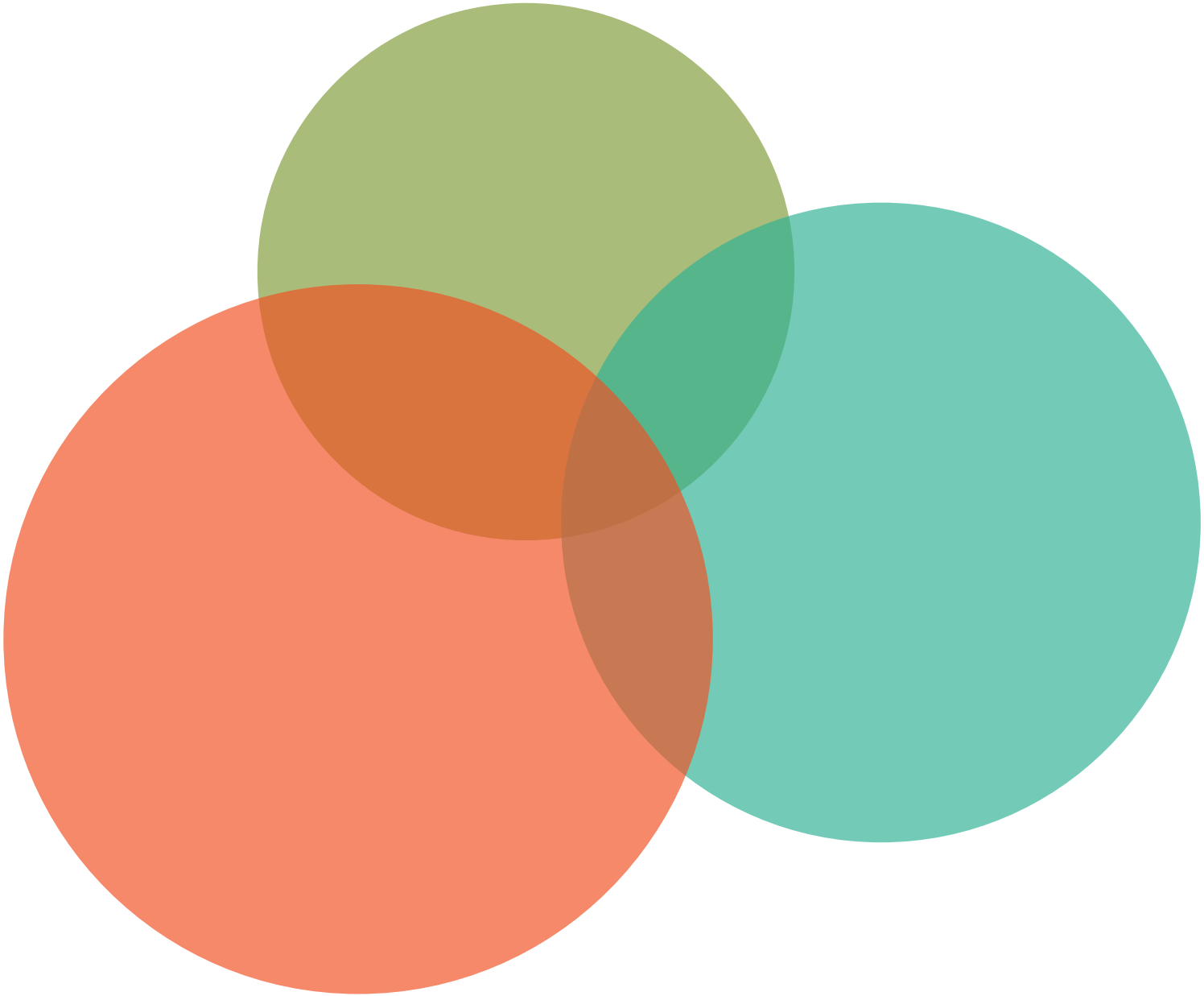


Not all companies report



Toxicity levels based on grown men (not women or children)

Self reporting



Cumulative impacts

MyRTK

- Facility reports provide summaries of chemical/ pollutant releases, chemical effects, and compliance history from numerous data systems.
- For any location or address, MyRTK maps nearby facilities that report to TRI
- Internet link that you can access from mobile phone or your home computer

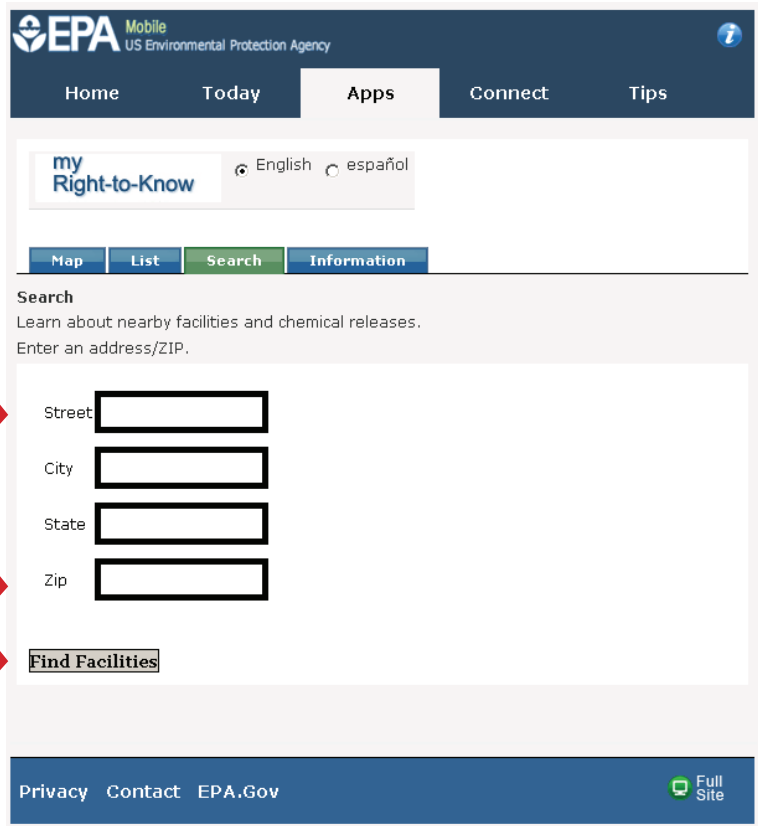
MyRTK: What toxics are in your neighborhood?

If you have a computer or can use one at your library:

1. Go to:
   http://myrtk.epa.gov/info

2. Enter your location

3. Click “Find Facilities”



MyRTK: What toxics are in your neighborhood?

The map shows you TRI facilities in your area.

To see more detailed information about a facility, click on the name.

You can learn more about a facility by clicking on it.

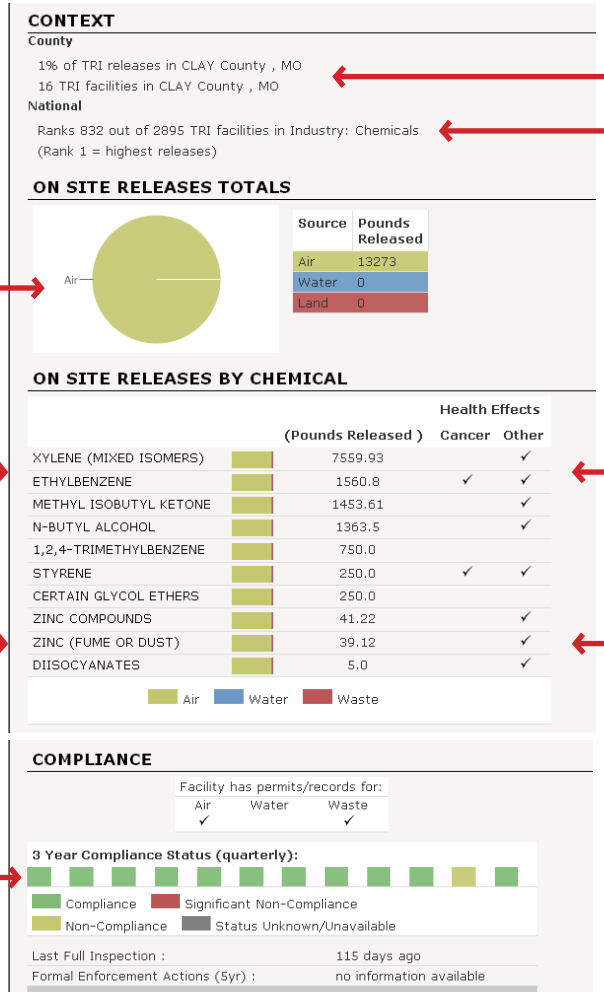
MyRTK: What toxics are in your neighborhood?

Click on the facility name, and you'll see:

The amount of toxic chemicals the facility released to air, water, and land.

The amount of releases in the most recent reporting year, organized by chemical.

If the facility has violated certain environmental laws.



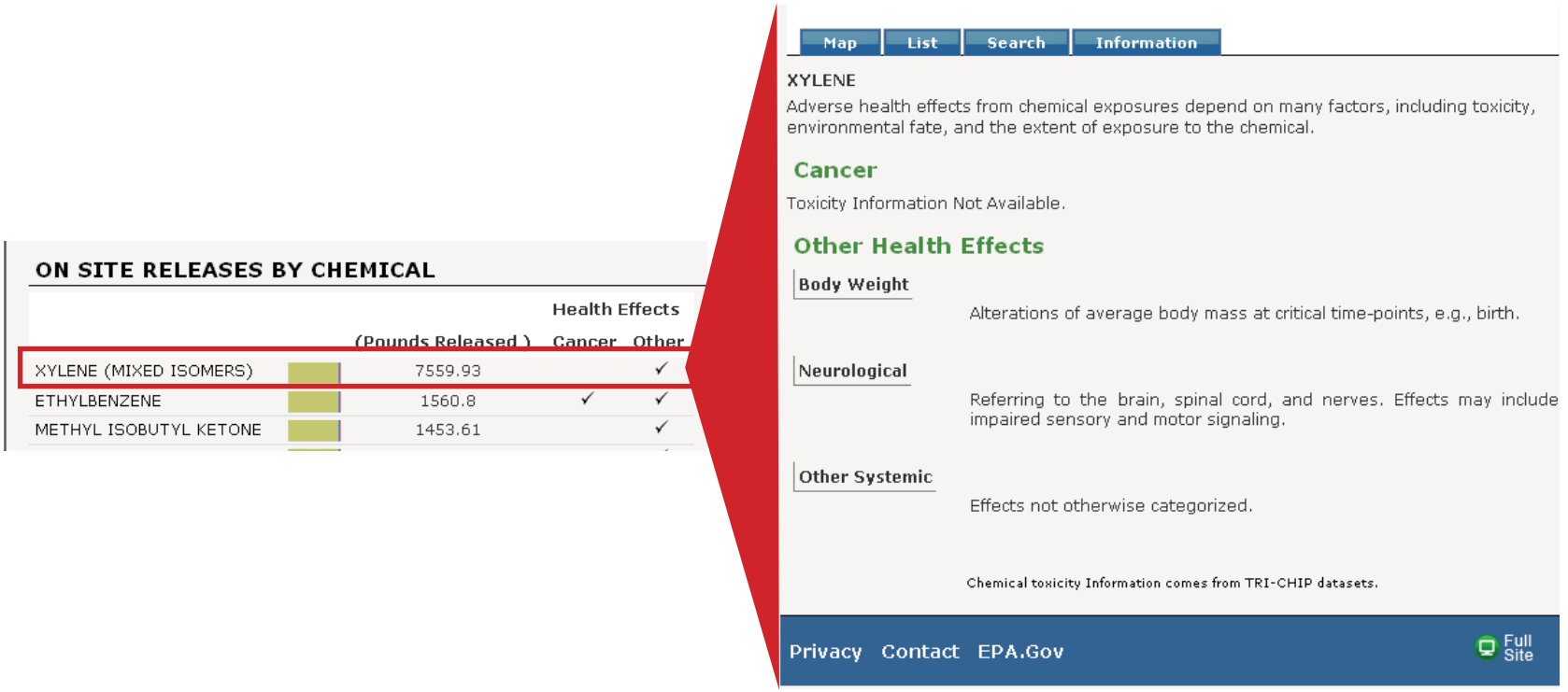
How much the facility contributed to total TRI releases in its county.

How the facility's releases compare to others in its industry.

Whether the chemicals released are likely to cause cancer or other health effects.

Potential Health Effects

Click on any of the chemicals to see information about their potential health effects.



ON SITE RELEASES BY CHEMICAL

		Health Effects	
	(Pounds Released)	Cancer	Other
XYLENE (MIXED ISOMERS)	7559.93		✓
ETHYLBENZENE	1560.8	✓	✓
METHYL ISOBUTYL KETONE	1453.61		✓

Map | List | Search | Information

XYLENE

Adverse health effects from chemical exposures depend on many factors, including toxicity, environmental fate, and the extent of exposure to the chemical.

Cancer

Toxicity Information Not Available.

Other Health Effects

Body Weight

Alterations of average body mass at critical time-points, e.g., birth.

Neurological

Referring to the brain, spinal cord, and nerves. Effects may include impaired sensory and motor signaling.

Other Systemic

Effects not otherwise categorized.

Chemical toxicity Information comes from TRI-CHIP datasets.

Privacy Contact EPA.Gov Full Site

Who are the top 5 polluters in your neighborhood?

What are the health effects of the top releases in your community?

What percentage of TRI releases in your county is the largest polluter responsible for?

How do facilities in your community compare to others in the industry?

How many violations does _____ company have?

How many facilities are within 1 mile of your home or school?