



LEVERAGING AIR QUALITY DATA TO COMBAT POLLUTION

A GUIDE TO FINDING DATA AND USING IT
IN LEGAL ACTIONS



AGENDA

- Introductions
- Summary of data
- Overview of legal actions
- Examples
 - Zoning
 - Clean Air Act citizen suits
- Air Quality Data Directory
- Q&A

DATA ORGANIZATION

- Regulatory Standards
- Air Permit Information
- Facility Emissions
- Violation and Enforcement Data
- Ambient Air Monitoring Data
- Toxicity, Health, and Demographic Data
- Modeling Tools
- Mapping and Visualization Tools



LEGAL
ACTIONS
HIGHLIGHTED

- Standing
- Clean Air Act Citizen Suits
- Clean Air Act Imminent and Substantial Endangerment
- Civil Rights Act, Title VI
- Rulemaking and Policy
- Air Permitting
- Zoning
- Torts

Example: zoning variance or exemption

Are vulnerable populations close by?

- EJScreen
- Census Data

What pollution is/will be emitted?

- State emission inventories
- EPA's Toxic Release Inventory
- Air permits and permit applications

Is the existing source in compliance?

- ECHO
- Louisiana EDMS Incident Reports
- Louisiana and Texas Title V Deviation Reports
- Texas Air Emission Event Report Database

What are the health risks?

- ToxFAQS
- EDF Climate Vulnerability Index
- EDF Chemical Exposure Action Map
- AirToxScreen

Example: Clean Air Act citizen suit

What is the source of the air pollution?

- Emission inventories
- Fenceline monitoring
- AirTox Screen
- EDF AirTracker
- EDF Petrochemical Air Pollution Map

Is the source violating the CAA?

- EPA's ECHO
- Texas Air Emission Event Report Database
- Louisiana EDMS Incident Reports
- Louisiana and Texas Title V Deviation Reports

Has the source faced enforcement action?

- EPA's ECHO
- LDEQ Enforcement Actions & Settlement Agreements
- TCEQ's Enforcement Actions & Reports

Risk Of Cancer From Petrochemical Air Pollution



Health Risk

Cancer

Petrochemical Source

All reported chemicals



Welcome to the Petrochemical Air Pollution Map

This map visualizes the risk of cancer and other health harms from petrochemical facilities releasing toxic chemicals into the air.

- Data comes from EPA's Risk-Screening Environmental Indicators ([RSEI](#)) model from 2018 - 2022.
- Risk is based on toxicity-weighted concentrations—which combine the modeled amount of chemicals in the air with the relative toxicity of the chemicals.
- A supplemental map layer, using [AirToxScreen](#) modeled data from 2017 - 2019, shows how petrochemical pollution contributes to total risk from a broader set of emissions including point sources, mobile sources (like cars), fires, and biogenic sources.

View our [full methodology](#) for more details.

Don't show this next time

Explore! >

AirToxScreen

NAAQS Nonattainment

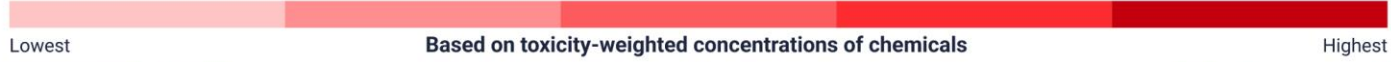
Petrochemical Facilities

Air Quality Monitors

Address Search



Risk Of Cancer From Petrochemical Air Pollution



Health Risk

Cancer



Petrochemical Source

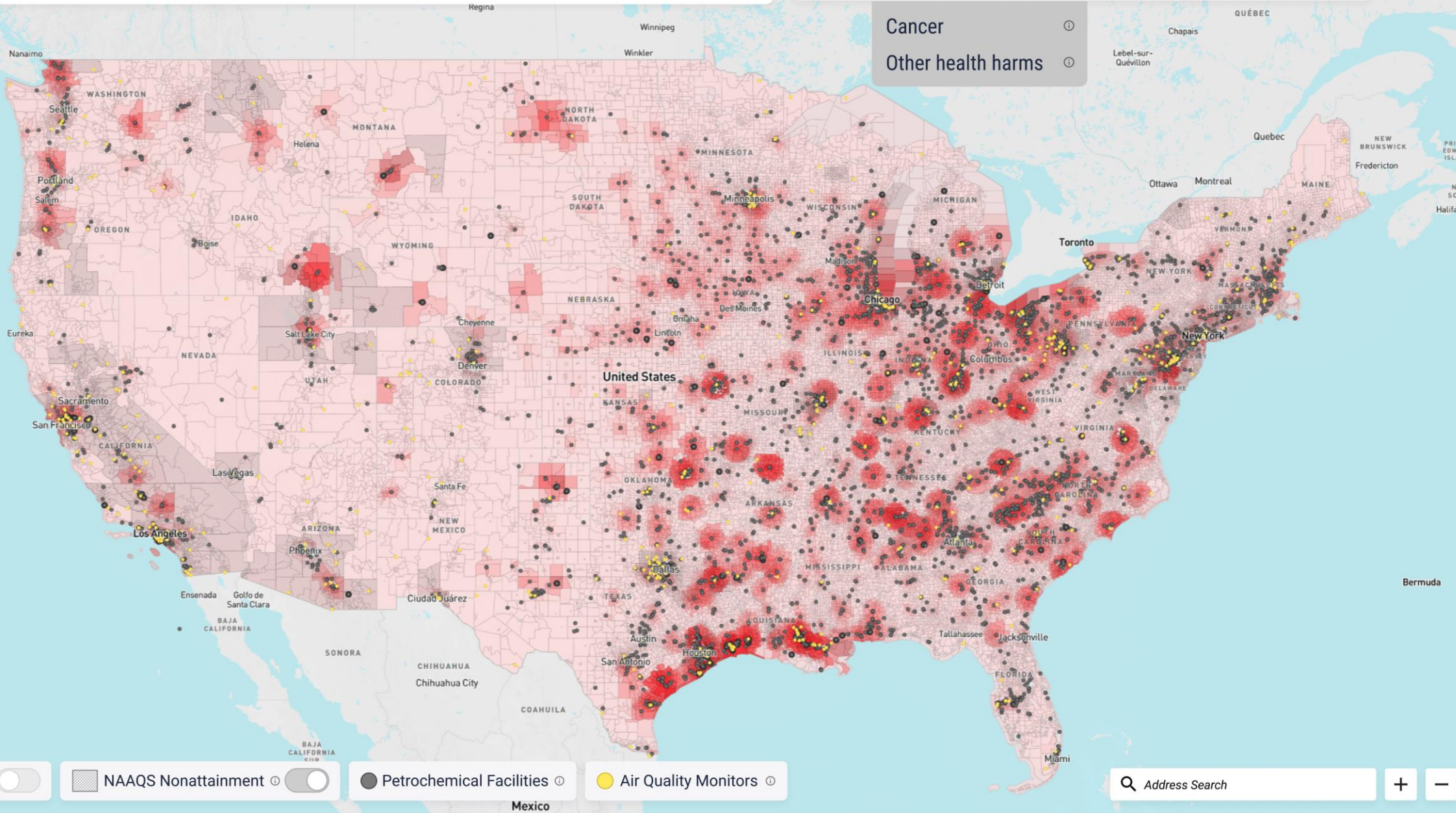
All reported chemicals



Cancer



Other health harms



AirToxScreen

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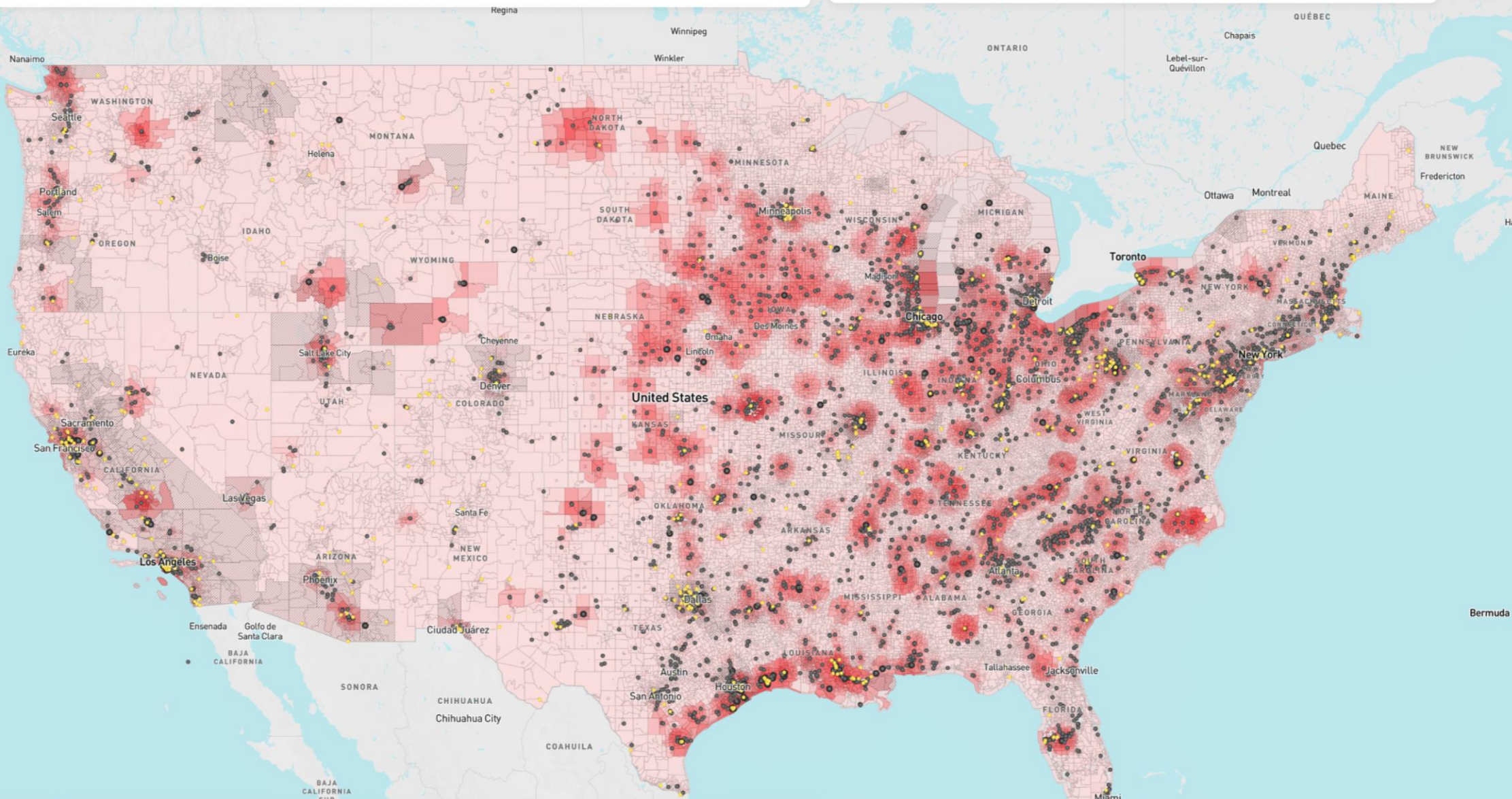
Risk Of Other Health Harms From Petrochemical Air Pollution



Health Risk: Other health harms ▼

Petrochemical Source: All reported chemicals ▼

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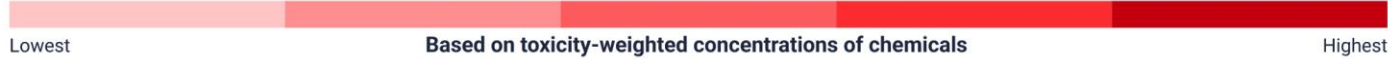
AirToxScreen ⊕

NAAQS Nonattainment ⊕

Petrochemical Facilities ⊕

Air Quality Monitors ⊕

Risk Of Cancer From Petrochemical Air Pollution



Health Risk

Cancer

Petrochemical Source

All reported chemicals



Natrona County, WY

Block Group #560250018021

Cancer Risk from Petrochemical Facilities: **23rd percentile**

Top drivers:

%	Chemical	Source Facility
30%	Diaminotoluene	Ⓧ FUTURE PIPE INDUSTRIES
22%	Ethylene oxide	Ⓧ EQUSTAR CHEMICALS BAYPORT CHEMICALS PLANT
9%	Diaminotoluene	Ⓧ NOURYON SURFACE CHEMISTRY LLC
7%	Ethylene oxide	Ⓧ EQUSTAR CHEMICALS BAYPORT CHEMICALS PLANT
3%	Diaminotoluene	Ⓧ NOURYON SURFACE CHEMISTRY LLC

Cancer Risk from All Pollution Sources: **84th percentile**

Top drivers:

Industrial	Road Transportation	Shipping / Rail / Airports	Indirect & Biogenic	Other
30%	22%	9%	7%	3%

AirToxScreen

NAAQS Nonattainment

Petrochemical Facilities

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🔍 Address Search



Risk Of Cancer From Petrochemical Air Pollution

Lowest Highest

Based on toxicity-weighted concentrations of chemicals



Health Risk

Cancer

Petrochemical Source

All reported chemicals



Natrona County, WY

Block Group #560250018021

Cancer Risk from Petrochemical Facilities: **23rd percentile**

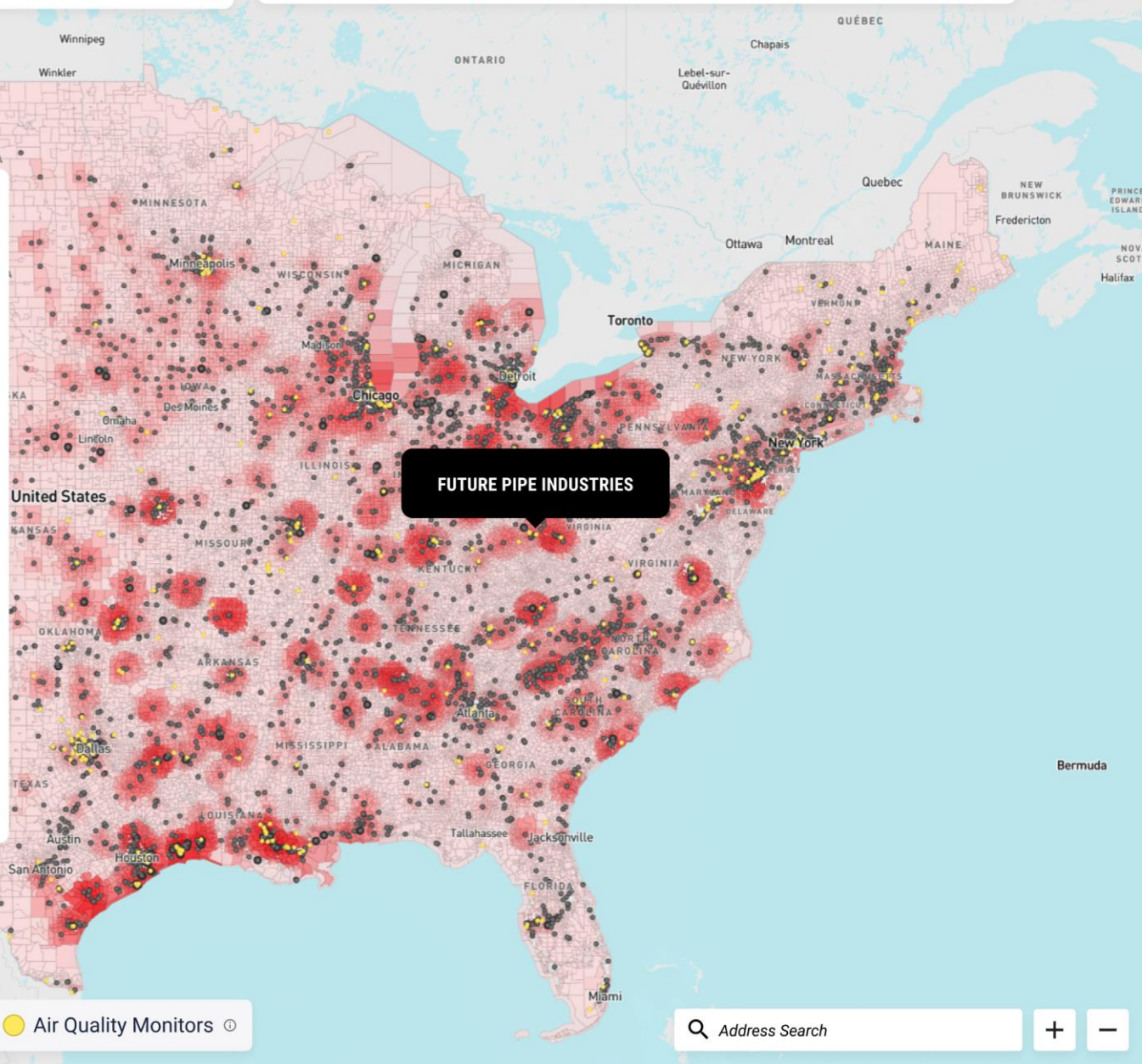
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AirToxScreen

NAAQS Nonattainment

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DEER PARK REFINING LP

Owner: DEER PARK REFINING LP

Industry: 324110: Petroleum Refineries

Average annual chemicals released:

Chemical	Pounds released
Sulfuric acid	90000
Ammonia	27564
Ethylene	20478
Hydrogen sulfide	15260
Benzene	13314
Toluene	13292
Propylene	13288
1,3-Butadiene	12446



LUBRIZOL CORP DEER PARK FACILITY

Owner: BERKSHIRE HATHAWAY INC

Industry: 325199: All Other Basic Organic Chemical Manufacturing

Clean Air Act status

[Link to report](#)

⚠ HIGH PRIORITY VIOLATOR

Formal enforcement actions (2019 - 2024): 2

Quarters with non-compliance (2021 - 2024): 10

Average annual chemicals released:

Chemical	Pounds released
Methanol	15546
Propylene oxide	6142
Ethylbenzene	2887



OXY VINYL LP PASADENA PVC PLANT

Owner: OCCIDENTAL PETROLEUM CORP

Industry: 325211: Plastics Material and Resin Manufacturing

Clean Air Act status

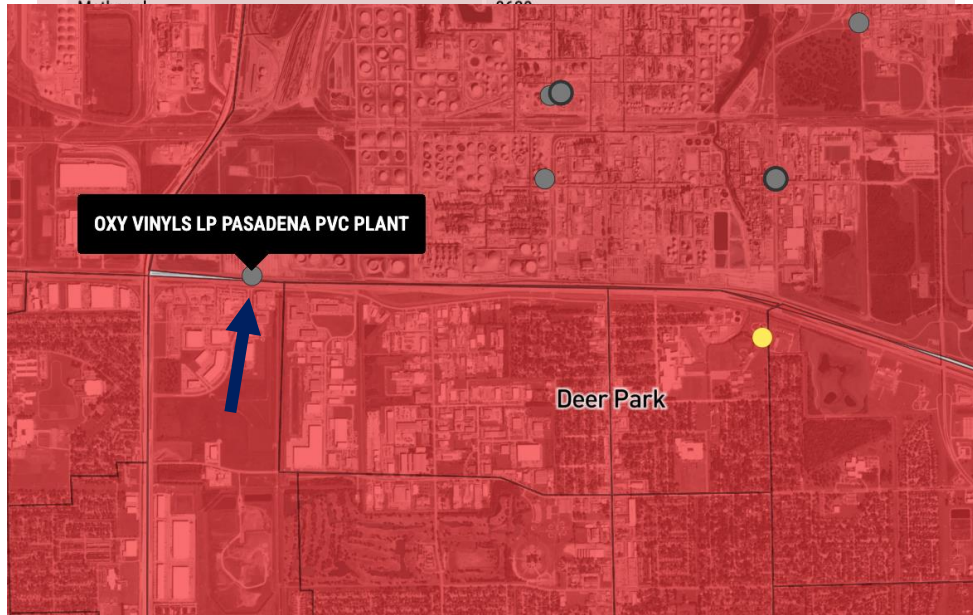
[Link to report](#)

Formal enforcement actions (2019 - 2024): 2

Quarters with non-compliance (2021 - 2024): 1

Average annual chemicals released:

Chemical	Pounds released
Acetophenone	18226
Vinyl chloride	16294
Acetaldehyde	8368
Cumene	7199
Methanol	6600



LUBRIZOL CORP DEER PARK FACILITY

Owner: BERKSHIRE HATHAWAY INC

Industry: 325199: All Other Basic Organic Chemical Manufacturing

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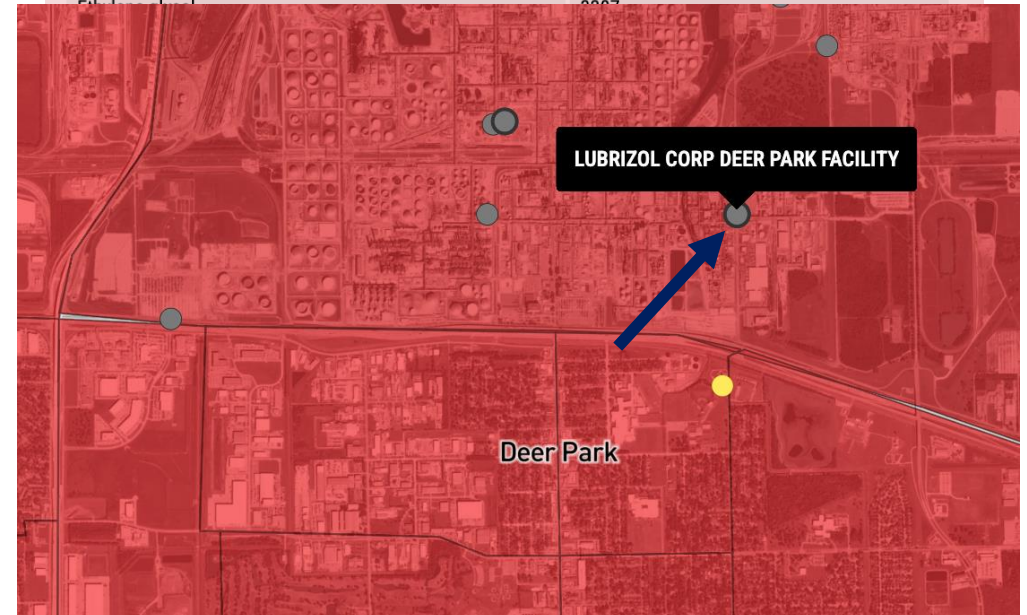
⚠ HIGH PRIORITY VIOLATOR

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Methanol	15546
Propylene oxide	6142
Ethylbenzene	5887



AIR QUALITY DATA DIRECTORY





Q&A