Tulane Environmental Law Clinic's Community Engagement Program: ERLI Update Out of State Resident Resources

Pollution and Atmospheric/Water Data:

- Atmospheric Composition Analysis Group PM2.5 Data: Provides annual datasets of ground-level fine particulate matter (PM2.5) mass concentrations for North America, China, Europe, and other regions.
 - o Link here.
- Benzene Pollution at Petroleum Refinery Fencelines: This story map is a source for regularly updated benzene monitoring data organized around for main issues: EPA Action Level, Long-Term Public Health Threat, Short-term Public Health Threat, and Actual vs Adjusted Benzene Concentrations.
 - o https://storymaps.arcgis.com/stories/9cc8aa37cb34444dbb053a097c22ba07
- Environmental Protection Agency (EPA)
 - Benefits of Reducing PM2.5 Precursors: This Technical Support Document provides new estimates of the benefit per ton (BPT) values of reducing PM2.5 precursors from 17 sectors.
 - https://www.epa.gov/sites/default/files/2018-02/documents/sourceapportionmentbpttsd_2018.pdf
 - Environmental Quality Index (EQI): This tool provides county level data for air, water, land, built, and socioeconomic environments to give an overview of environmental quality across the U.S.
 - https://www.epa.gov/healthresearch/environmental-quality-index-eqi
 - Facility Level Information on Greenhouse Gases Tool (FLIGHT): Provides
 user with information about greenhouse gas emissions from facilities across the
 U.S. that are required to report their annual emissions to the EPA.
 - https://ghgdata.epa.gov/ghgp/main.do
 - State Inventory and Projection Tool: Provides a helpful, interactive spreadsheet model to assist state legislators in developing greenhouse gas (GHG) inventories. The spreadsheet model includes information such as data and emission factors that can potentially shorten the time spent on developing an inventory.
 - https://www.epa.gov/statelocalenergy/state-inventory-and-projection-tool
- NOAA Air Resources Laboratory, HYSPLIT: A tool used to create models that simulate local and global dispersion and trajectory of various atmospheric substances.
 - o https://www.arl.noaa.gov/hysplit/

- **Oil and Gas Watch:** A public inventory that tracks the expansion of oil, gas, and petrochemical infrastructure throughout the nation by compiling information from sources like government records, news articles, and corporate filings.
 - o https://oilandgaswatch.org/
- **PERI (Political Economy Research Institute) Air Toxics at School:** Provides national air toxics data surrounding K-12 and higher schools. The user can select a school of interest and is provided with information such as top five surrounding polluting facilities, air toxics rankings and percentiles, and top five surrounding pollutants.
 - https://www.peri.umass.edu/air-toxics-at-school
- Pushing Back: A Guide for Frontline Communities Challenging Petrochemical Expansion: This toolkit provides users with information about petrochemicals and the risks and impacts of their production/use.
 - https://www.pushbackagainstpetrochemicals.org/
- Refinery Air Watch: A site that collects fence line air monitoring data from oil refineries and enables you to download the results. This site offers two-week sampling data from all U.S. oil refineries and continuous monitoring data from California refineries.
 - o https://www.refineryairwatch.org/
- River Runner: This tool uses data from the USGS' (U.S. Geological Survey) NLDI (Hydro Network-Linked Data Index) API and NHD (National Hydrography Dataset) to show continuous downstream paths from any point waterbody in the U.S.
 - o https://river-runner.samlearner.com/
- Sanitary Surveys for Recreational Waters: Provides EPA data collected at the edge of recreational waterbodies and the surrounding watersheds such as weather conditions, number of birds, dogs, and people, amount of algae, land use, location of stormwater outfalls, and surface water quality.
 - o https://www.epa.gov/beach-tech/sanitary-surveys-recreational-waters#marine

Wind Data:

- National Oceanic and Atmospheric Administration (NOAA) Data Access:
 Provides user with National Centers for Environmental Information (NCEI)
 weather and climate data such as land-based, marine, radar, and satellite datasets.
 - https://www.ncei.noaa.gov/products
- Windfinder: Provides the user with global real time wind data such as forecasts, wind speed, live weather, and wind maps.
 - https://www.windfinder.com/?utm_source=windfinder.com&utm_medium= web&utm_campaign=redirect#3/39.5040/-98.4375

Health Risk, Social Vulnerability, and Historical Data:

- Agency for Toxic Substances and Disease Registry: A federal public health agency
 of the U.S. Department of Health and Human Services. ATSDR responds to
 environmental health emergencies, investigates emerging environmental health threats,
 conducts research on the health impacts of hazardous waste sites, and provides
 guidance to state and local health partners.
 - o https://www.atsdr.cdc.gov/
- Center for Disease Control Cancer (CDC) Data and Statistics: Provides the user with national cancer statistics and data visualization tools from United States Cancer Statistics (USCS). These sources provide information such as new cancer cases, cancer deaths, survival, sex, age, race, ethnicity, and state/county.
 - https://www.cdc.gov/cancer/dcpc/data/index.htm
- EASIUR Online Tool: The EASIUR (Estimating Air Pollution Social Impact Using Regression) online tool acts a model to estimate the public health cost (social cost) of pollution emissions in the United States.
 - o https://barney.ce.cmu.edu/~jinhyok/easiur/
- Environmental Justice Index (EJI): A tool that uses data from the U.S. Census
 Bureau, the EPA, the U.S. Mine Safety and Health Administration, and U.S. CDC to rank
 the cumulative impacts of environmental injustice on health for every census tract in the
 U.S.
 - https://www.atsdr.cdc.gov/placeandhealth/eji/index.html
- **EJ Screen:** A tool for screening and environmental justice mapping that provides updated demographic, health, and environmental information from the National Air Toxics Assessment (NATA), a growing review of air toxics in the United States developed by the Environmental Protection Agency (EPA).
 - o https://www.epa.gov/ejscreen
- Environmental Protection Agency (EPA)
 - Guidance on Proper Sampling Protocols: Provides guidance on how to choose a sampling design for environmental data collection that can be used in a research study's Quality Assurance Project Plan (QAPP).
 - https://www.epa.gov/sites/production/files/2015-06/documents/g5sfinal.pdf
 - State Planning Electronic Collaboration System (SPECS) tools: Provide information about nonattainment and maintenance areas for the National Ambient Air Quality Standards (NAQQS). https://www.epa.gov/air-quality-implementation-plans/tools-state-implementation-plan-sip-status
 - Nonattainment and Maintenance Population Tool: Displays the number of people living in designated nonattainment and maintenance areas for current and revoked NAAQS, based on 2019 population. It also

- displays the individual counties in nonattainment and maintenance areas on an interactive map.
- Nonattainment and Maintenance Area Dashboard: Provides information about nonattainment and maintenance areas for current and revoked NAAQS. Information in the dashboard can be filtered by state, NAAQS, area name, area status, area classification, and other fields. When viewing information about a specific area, the history of EPA actions on the area is displayed at the bottom of the page.
- Required State Implementation Plan (SIP) Elements Dashboard: Provides details about individual states' Clean Air Act and regulatory planning requirements associated with implementing, attaining, and maintaining the NAAQS through SIPs. Information in the dashboard can be filtered by state, plan category, NAAQS, area, and specific SIP element.
- National Cancer Institute SEER Program Cancer Statistics: Provides user with annual reports on cancer statistics, rates, and trends. Here, the user can also find interactive tools, maps, and graphs such as SEER Explorer in which provides information on cancer incidence, survival, U.S. mortality and U.S. lifetime risks statistics.
 - https://seer.cancer.gov/statistics/
- Pediatric Environmental Health Specialty Units: A national network of experts in the
 prevention, diagnosis, management, and treatment of health issues that arise from
 environmental exposures from preconception through adolescence.
 - o https://www.pehsu.net/
- Planet Tracker: A non-profit financial dashboard that aligns capital markets with
 planetary boundaries. With several research topics available, Planet Tracker also
 includes a Plastics Programme in which toxic emissions from plastic production are
 highlighted in addition to the carbon footprint, physical pollution on land and sea,
 microplastics, and more.
 - https://planet-tracker.org/
- **ProPublica ToxMap:** This tool uses EPA RSEI toxic air pollution data to allow users to see the toxics-related health risks across the U.S. By pinpointing industrial facilities whose pollution is reported to the EPA, the tool provides a detailed map of the facilities, pollution hotspots, and associated cancer risk from the specific pollutants being emitted.
 - https://projects.propublica.org/toxmap/
- Richmond University's Social Vulnerability and Redlining Maps: Shows 1930's Federal Home Owners' Loan Corporation (HOLC) maps along with area descriptions, in comparison with contemporary health disparities. This tool demonstrates the history and consequences of *redlining*: "the practice of denying fair access to credit, particularly mortgages, based on the race of the residents of a neighborhood." These HOLC maps

are combined with the Center for Disease Control's Social Vulnerability Index (SVI) scores for census tracts today that assess a community's ability to prepare for, respond to, and recover from natural and human disasters.

- https://dsl.richmond.edu/socialvulnerability/
- RSEI (Risk-Screening Environmental Indicators) Model: A model providing data and
 information about toxic substance emissions from industrial facilities. Data from the EPA
 Toxic Release Inventory (TRI) is used in combination with information such as potential
 human exposure and a chemical's relative toxicity to provide RSEI scores. These
 scores can be used for analyzing industrial pollution impacts on communities when
 combined with other demographic data.
 - EasyRSEI: Provides user with a dashboard of EPA RSEI model results through maps, tables, and charts. Data can be organized by geographic location, facilities, years, and types of chemicals and can be exported from the database.
 - https://edap.epa.gov/public/extensions/EasyRSEI/EasyRSEI.html
 - RSEI Microdata: Provides the user with a smaller and more manageable data set containing values for each release and each potentially impacted geographic grid cell. This allows for the user to sum up potential impacts over the affected grid cells, allowing for a more realistic picture of the affects a small geographic area may be facing from TRI releases. These potential impacts presented in the grid cells can also be traced back to the facilities that released the corresponding chemicals.
 - https://www.epa.gov/rsei/rsei-geographic-microdata-rsei-gm
- Safeguarding Science in State Agencies: This report by the Brennan Center at NYU
 Law School and The Union of Concerned Scientists highlights political interference in
 science at state and local agencies across the country and shows the urgent need to
 protect science and prevent misuse.
 - https://www.brennancenter.org/our-work/policy-solutions/safeguarding-sciencestate-agencies
- Silent Springs Institute: Cancer & Environment Forum 2022: A multi-session forum
 designed to teach participants about what science is available on the influence of
 environmental chemicals on cancer and lessons on cancer from public health and
 environmental medicine.
 - o https://www.youtube.com/watch?v=Uc6AxRPZJXI
- **Superfund Redevelopment Mapper:** An EPA tool developed to assist communities affected by Superfund sites reclaim and redevelop land to safe and beneficial use. This tool provides the user with possible opportunities for the reuse of these sites.
 - https://www.epa.gov/superfund-redevelopment/superfund-redevelopmentmapper

- U.S. Climate Resilience Map: This map acts as a tool to explain the intersection of climate risk and social vulnerabilities in communities using census tract level data, while sharing resilience efforts from ten cities across the U.S.
 - https://mappingresilience.onebillionresilient.org/explore?indicator=31
- United States Geological Survey (USGS) Historical Topographic Map Explorer: This tool allows the user to overlay historic maps on an area. It can be useful for understanding the potential impacts of industrial developments to historic places.
 - https://livingatlas.arcgis.com/topoexplorer/index.html
- **Violation Tracker:** A tool used to keep track of all governmental violations committed by companies and corporations throughout the United States. Search criteria includes parent companies, type of offense, federal agencies, state, etc.
 - https://www.goodjobsfirst.org/violation-tracker

Industry News: These sites can provide early notification of proposed industrial projects.

- Chemistry and Engineering News: Through a subscription, the user has access to chemistry and engineering news articles published on the site. This includes articles for users seeking information about topics such as business, education, environment, policy, etc.
 - o https://cen.acs.org/index.html
- Hydrocarbon Engineering: Provides free access to the most recent articles related to
 elements of the hydrocarbon industry such as refining, gas processing, petrochemicals,
 clean fuels, and the environment.
 - o https://www.hydrocarbonengineering.com/
- Manufacturing.net: Provides recent news articles related to aerospace, automotive, and energy industries and manufacturing.
 - o https://www.manufacturing.net/

Public Notices, Permits and Other Regulatory Documents:

Public notices are drafts of proposed project permits in which the public is provided information about potential emissions and comment deadlines. After public notices are released, there is a time period (around 30 days or less in some cases) known as the "public comment period" in which the public can submit comments on the proposed permits. As only major source facilities are included in these notices, minor source facilities do not have public comment periods. Despite the limited public comment period after a *notice* is released, the public is allowed to submit comments at any time after a *permit application* is submitted.

• Advocate's Guide to Effective Participation in Environmental Permit Proceedings: This guide is intended assist environmental advocates with navigating permitting processes regarding not only petrochemical sources, but other large industrial sources.

The guide includes information regarding air and water permitting, NEPA, land use, public trust, and underground injection control.

- https://labucketbrigade.org/wp-content/uploads/2023/09/FINAL-Petrochemical-Guide-8_30_2023.pdf
- **Air Alliance Houston's AirMail:** This tool is intended to help environmental advocates track and participate in the permitting process for air polluters in the Houston area.
 - https://aah-airmail.org/app/notices
- Army Corps of Engineers RSS Feeds: Provides automatic updates about U.S. Army
 Corps news through RSS feeds. These various feeds can be subscribed to through
 Outlook or Gmail and with an RSS reader, the user will be updated with the latest
 USACE news without having to manually check the USACE website. Some examples of
 feeds that can be subscribed to are "environmental", "permitting", and "public comment."
 - o https://www.usace.army.mil/Contact/RSS/
- Environmental Integrity Project (EIP), Advocate's Guide for Challenging LNG
 Projects: A guide for environmental advocates that provides detailed information
 regarding effective participation in environmental LNG permit proceedings.
 - https://environmentalintegrity.org/advocates-guide-for-challenging-lng-projects/
- Environmental Justice State by State: An organization that aims to amplify efforts and support the advancement of environmental justice law and policy by providing a law library for community advocates, attorneys, scholars, and policymakers and highlighting emerging issues and strategies.
 - o https://ejstatebystate.org/
- EPA Enforcement and Compliance History Online (ECHO): A searchable EPA
 database that compiles compliance and environmental regulatory information on
 facilities throughout the nation.
 - https://echo.epa.gov/
- **Federal Register:** Acts as a tool used for searching the Federal Register Database for public inspection documents, notices, rules, and proposed rules from government agencies such as the Federal Energy Regulatory Commission.
 - https://www.federalregister.gov/documents/search