Getting Fenceline Benzene Data from WebFire

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Since 2018, US oil refineries have been required to monitor levels of benzene at their fencelines. Their measurements are available to the public through an EPA database called [WebFire](#). This note explains how to download benzene data from any U.S. refinery.

Background

WebFire is an online database created by the Environmental Protection Agency. Since January 2012, corporations have been required to utilize WebFire's Electronic Reporting Tool to submit monitoring data and other information required by the EPA. WebFire gives members of the public access to this data, enabling them to find out crucial information about reports and compliance. While you could use WebFire to access a variety of data, we have been using it to access benzene concentration data from oil refineries.

Fenceline Benzene Monitoring is a result of a lawsuit filed by the Environmental Integrity Project and Earth Justice in 2012 over the EPA's failure to update the air pollution standards for refineries for over a decade. One issue that the lawsuit raised was the lack of public data about air quality at refinery fencelines. As a result of this lawsuit, a new regulation promulgated in 2015 and implemented starting 2018 required fenceline monitoring of benzene levels. Refineries are required to place samplers around the entirety of their perimeter to measure the average benzene concentration over two-week sampling periods. The rule also specifies an action level of 9 micrograms/cubic meter. If the refinery's contribution to local benzene levels exceeds the action level, they are required to conduct a root cause analysis and begin corrective actions within 45 days.

The EPA created this regulation with the purpose of monitoring changes in refinery emissions that might point to equipment issues, not as a health or risk assessment. The action level in particular was determined as a measurement for properly functioning equipment not as a health standard. So it is important to keep in mind when accessing the data that a refinery's air quality being below the action level does not necessarily mean there is no risk to a community.

If you would like to find benzene levels from refineries across the country, or in your neighborhood, follow the instructions below and the [Webfire Tutorial Video](#).

Instructions

1. Go to https://cfpub.epa.gov/webfire/ to view monitoring data for corporations around the United States, and select search for reports. Air emissions are impacted by factors like distance, unit weight, and volume that influence the release of toxins.

2. Select Air Emissions Reports beneath report type.
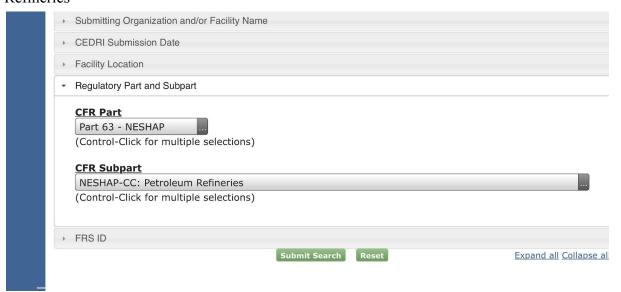

WebFIRE Report Search and Retrieval
WebFIRE contains the following types of reports that are submitted to the EPA's Compliance and Emissions Data Reporting Interface (CEDRI):

- Air Emissions Reports – Air emissions reports (AERs) for an applicable regulation (e.g., compliance summary and excess emissions reports).
- Performance Test Reports – Emissions source test data and performance evaluations/relative accuracy test audits (RATA) submitted by facilities.
- Notification of reports – Notifications of compliance status (NOCS) submitted by facilities certifying that initial compliance with an applicable regulation was achieved.

To begin your search, specify the report type(s) of interest below:

Report Type
Air Emissions Reports   ...
(Control-Click for multiple selections)

Submit Search   Reset

EPA Home

3. Insert Submission date (ex: 1/1/2016-6/17/2020)
4. Select Facility location
5. Select Regulatory Part as **NESHAP** (National emissions standards for hazardous air pollutants)
6. Select **CFR Subpart** (Code of Federal Regulations) as **NESHAP CC** - Petroleum Refineries

▸ Submitting Organization and/or Facility Name
▸ CEDRI Submission Date
▸ Facility Location
▾ Regulatory Part and Subpart

CFR Part
Part 63 - NESHAP   ...
(Control-Click for multiple selections)

CFR Subpart
NESHAP-CC: Petroleum Refineries   ...
(Control-Click for multiple selections)

▸ FRS ID

Submit Search   Reset   Expand all Collapse all

7. Select Submit Search

8. Click on the document icon to download a report