

# Updates and Improvements Made to the US EPA's WebFIRE Database

Casey Bray Myers and Mike Ciolek

Office of Air Quality Planning and Standards  
Sector Policies and Programs Division

December 7, 2021

# Topics for Discussion

- What is WebFIRE?
- Background
- New Approach Components & Data Flow
- Current Status of WebFIRE
- Draft Factors
- Public Review Process of Emissions Factors
- WebFIRE Walk-through

# What is WebFIRE?

- The Environmental Protection Agency's (EPA) online database that contains emissions factors for criteria and hazardous air pollutants for both industrial and non-industrial processes
- The database also contains reports submitted to EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) in response to regulatory requirements
  - **Air Emissions Report (AER)** - Also known as periodic reports (e.g., semiannual reports, compliance reports).
  - **Performance Test Reports** - Emissions source test data and performance evaluations/relative accuracy test audits (RATA).
  - **Notification reports** - Notifications of compliance status (NOCS) certifying that compliance with an applicable regulation was achieved.

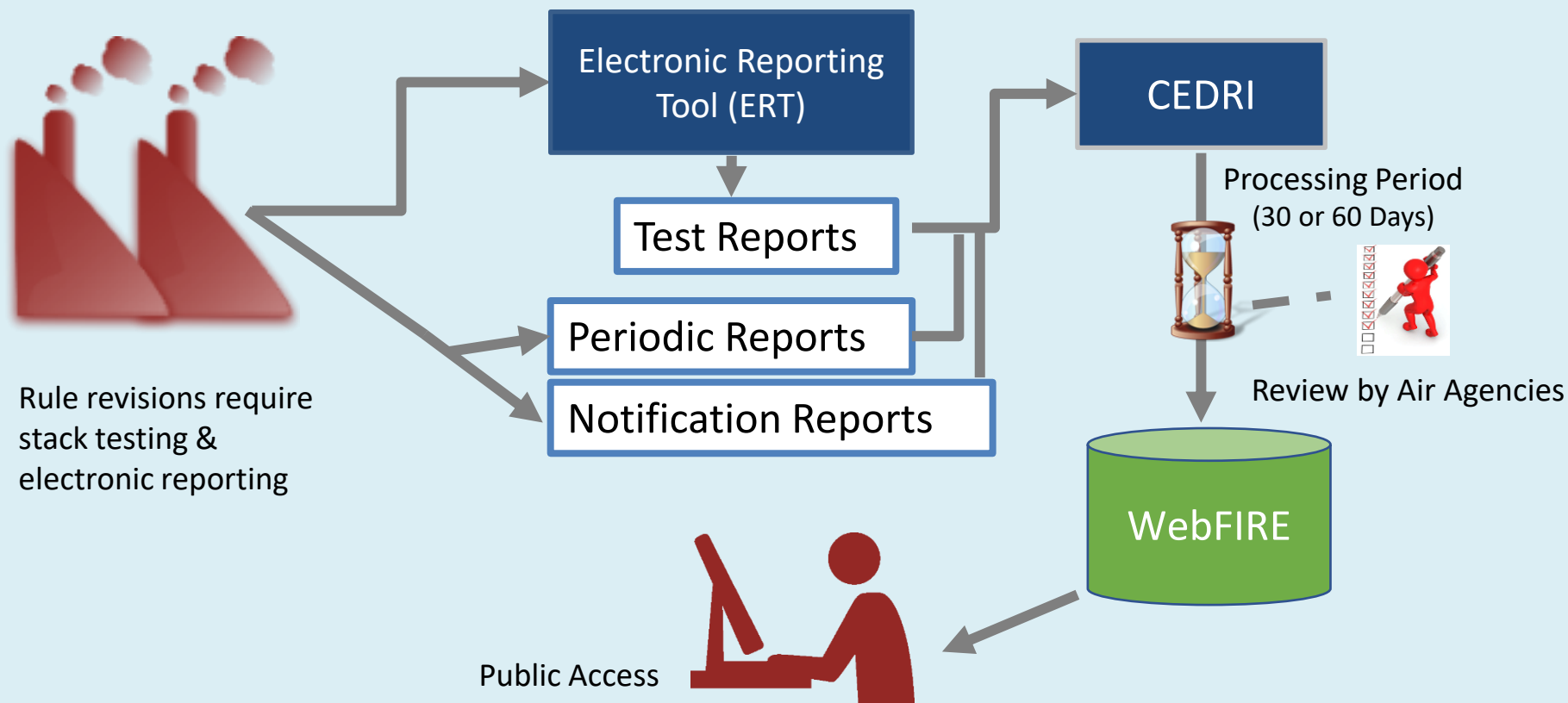
# Background

- WebFIRE contains most of the AP-42 data as well as a lot of other data submitted through CEDRI
  - Is AP-42 going away? **No.**
    - AP-42 contains process information and references for many factors
- New emissions factor development approach relies upon electronic submission of stack test reports
- Data from stack test reports received through CEDRI will then be used to calculate new or revised emissions factors
  - Emissions factor development is faster, more representative, higher quality and more objective than previous approach

# New Approach Components

- Use of Electronic Reporting Tool (ERT) to allow electronic submission of stack test reports
- Use of data submission portal (CEDRI)
- Development of WebFIRE to semi-automatically calculate new or revised emissions factors based on procedures specified in the emissions factors procedures document
- Rule revisions to require electronic reporting of stack test reports

# Electronic Reporting Components & Data Flow



# Current Status

- Over 30,000 stack test reports submitted through CEDRI are available in WebFIRE since 2012
- Emissions factor procedures have been programmed into WebFIRE
- Finalized [emissions factors procedures document](#) (November 2021)
- Search features have been improved
- Added new user defined emissions factor functionality
- Currently working to address identified inaccuracies
  - Updated bulk download has been created and will replace current version soon
- Drafted 3 new factors

# Drafted Factors – 11/12/2021

SCC	Control	Pollutant	Draft Factor	Existing Factor	% Difference	Quality	# Data Points Included (Excluded)
10200902 - External Combustion Boilers; Industrial; Wood/Bark Waste; Wood/Bark-fired Boiler	UNCONTROLLED	CARBON MONOXIDE	7.50E-01 lb/ Million Btus Heat Input	6.00E-01 lb/ Million Btus Heat Input	25.01%	Highly	34 (1)
10200902 – External Combustion Boilers; Industrial; Wood/Bark Waste; Wood/Bark-fired Boiler	ELECTROSTATIC PRECIPITATOR	PM, FILTERABLE	1.25E-02 lb/ Million Btus Heat Input	N/A		Highly	48(7)
30500623 – Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Preheater/Precalciner Kiln	FABRIC FILTER	NITROGEN OXIDES (NOX)	4.10E+00 lb/Tons Clinker Cooler Produced	N/A		Moderately	9(15)



# Public Review Process of Emissions Factors

- Emission factor developments/revisions are driven by the data received from E-Reporting
- Factors not drafted on any specific “timeframe”
- Posted on the Air Emissions Factors and Quantification Drupal site:

<https://www.epa.gov/air-emissions-factors-and-quantification/documentation-supporting-proposed-and-final-emissions>

- Draft AP-42 sections will also be provided with red line strike out

# Public Review Process of Emissions Factors

- Notifications sent out via CHIEF listserv:  
<https://www.epa.gov/chief/chief-listserv>
- 60-day comment period
- EPA reviews public comments and determines if emissions factors should be revised/developed
  - To submit comments on draft factors, send email to [chief\\_info@epa.gov](mailto:chief_info@epa.gov)
- **Comment period for current draft factors ends January 11, 2022**

# Registering with Chief Listserv

- To join the CHIEF Listserv, send an e-mail to **join-chief@lists.epa.gov**
- To unsubscribe from the Listserv, send an e-mail to **leave-chief@lists.epa.gov**

# How to Access WebFIRE

- WebFIRE database: <https://cfpub.epa.gov/webfire/>

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

## Welcome to WebFIRE

WebFIRE is the EPA's online database that contains [emissions factors](#) for criteria and hazardous air pollutants (HAP) for industrial and non-industrial processes and [multiple reports](#) submitted to the EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) in response to regulatory requirements under Parts 60 and 63 of Title 40 of the U.S. Code of Federal Regulations (CFR). WebFIRE also allows you to [register](#) to receive periodic email notifications when reports are submitted to WebFIRE and to prepare [batch downloads](#) of WebFIRE emissions and facility information.

- [Search for emissions factors](#)
- [Search for reports](#)
- [User-defined emissions factors](#)
- [Register for email notifications](#)
- [Download WebFIRE data in bulk](#)

### Emission Factor Functions

WebFIRE contains emissions factors developed by the EPA for criteria pollutants and HAP for industrial and non-industrial processes. For each EPA emissions factor, WebFIRE contains descriptive information such as industry and source category type, control device information, the pollutants emitted, and supporting documentation (e.g., test reports).

### Search and Retrieve EPA Emissions Factors

You can search WebFIRE for EPA emissions factors using either a Simple or Detailed Search. Using the Simple Search, you can retrieve EPA emissions factor records by entering one or more simple terms such as: source category name (e.g., wood combustion), process description (e.g., spreader stoker), EPA's Source Classification Code (SCC), or any other viable search term likely to be found in an emissions factor record. Using the Detailed Search, you can focus the factor retrieval process by entering one or more of the following search criteria:

- SCC (complete code or individual SCC level descriptions)
- Control device type
- Pollutant or pollutant group type
- Specific AP 42 section

[Search for emissions factors](#)

### Develop User-Defined Emissions Factors

You can develop an emissions factor from individual performance test values that you select from the WebFIRE database using the same procedures that the EPA follows to develop new or revise existing emissions factors. Because user-defined emissions factors are not retained in the WebFIRE database after they are created, WebFIRE allows you to prepare and download a report showing the details of an emissions factor that you develop.

### Report Functions

# Search for Emissions Factors

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

## Welcome to WebFIRE

WebFIRE is the EPA's online database that contains [emissions factors](#) for criteria and hazardous air pollutants (HAP) for industrial and non-industrial processes and [multiple reports](#) submitted to the EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) in response to regulatory requirements under Parts 60 and 63 of Title 40 of the U.S. Code of Federal Regulations (CFR). WebFIRE also allows you to [register](#) to receive periodic email notifications when reports are submitted to WebFIRE and to prepare [batch downloads](#) of WebFIRE emissions and facility information.

- [Search for emissions factors](#)
- [Search for reports](#)
- [User-defined emissions factors](#)
- [Register for email notifications](#)
- [Download WebFIRE data in bulk](#)

### Emission Factor Functions

WebFIRE contains emissions factors developed by the EPA for criteria pollutants and HAP for industrial and non-industrial processes. For each EPA emissions factor, WebFIRE contains descriptive information such as industry and source category type, control device information, the pollutants emitted, and supporting documentation (e.g., test reports).

### Search and Retrieve EPA Emissions Factors

You can search WebFIRE for EPA emissions factors using either a Simple or Detailed Search. Using the Simple Search, you can retrieve EPA emissions factor records by entering one or more simple terms such as: source category name (e.g., wood combustion), process description (e.g., spreader stoker), EPA's Source Classification Code (SCC), or any other viable search term likely to be found in an emissions factor record. Using the Detailed Search, you can focus the factor retrieval process by entering one or more of the following search criteria:

- SCC (complete code or individual SCC level descriptions)
- Control device type
- Pollutant or pollutant group type
- Specific AP 42 section

[Search for emissions factors](#)

### Develop User-Defined Emissions Factors

You can develop an emissions factor from individual performance test values that you select from the WebFIRE database using the same procedures that the EPA follows to develop new or revise existing emissions factors. Because user-defined emissions factors are not retained in the WebFIRE database after they are created, WebFIRE allows you to prepare and download a report showing the details of an emissions factor that you develop.

### Report Functions

# Search for Emissions Factors

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

## Emission Factor Search

WebFIRE contains the EPA's emissions factors for criteria and hazardous air pollutants (HAP) for industrial and non-industrial processes. To retrieve emissions factors, select one or more search terms from the dropdown menus below then click on the "Submit Search" button at the bottom of the page.

For the Source Classification Code (SCC), Pollutant, and Control Device categories, clicking the category of interest and then clicking the link to "Select options" opens a dropdown menu of the available search terms for that category. You can choose one or more terms of interest by clicking on the check box to the left of the dropdown menu. The "Select options" link also opens a filter box that allows you to limit the items shown in the dropdown menu to only those that contain your filter box entry somewhere in the description of the term. For example:

- Entering "101001" in the SCC filter box reduces the dropdown menu to only those items that contain "101001" in the SCC description (e.g., 10100101-External Combustion Boilers; Electric Generation; Anthracite Coal; Pulverized; Boiler).
- Entering "10" in the Pollutant filter box reduces the dropdown menu to only those items that contain "10" in the pollutant description (e.g., Polonium 210).
- Entering "ammonia" in the Control Device filter box reduces the dropdown menu to only those items that contain "ammonia" in the control device description (e.g., ammonia injection).

Clicking on the "Choose a section from AP-42" link opens the dropdown menu showing the sections of EPA's AP-42 (*Compilation of Air Pollutant Emissions Factors*) available for refining your search. For example, selecting "Bituminous and Subbituminous Coal Combustion" will retrieve only the emissions factors corresponding to AP-42 Chapter 1 (External Combustion Sources), Section 1.1 (Bituminous and Subbituminous Coal Combustion). You can select multiple AP-42 sections by holding down the "Ctrl" button on your keyboard.

▸ Source Classification Code

▸ Pollutant

▸ Control Device

▸ Choose a section from AP-42

▸ Choose to include Revoked Factors

Submit Search

Reset

[Expand all](#) [Collapse all](#)

# Search Results

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

## Emission Factor Results

10 factors found.

<input checked="" type="checkbox"/>	<b>SCC</b> ⓘ	10100101		
	External Combustion Boilers ; Electric Generation ; Anthracite Coal ; Pulverized Coal			
	<b>POLLUTANT</b> ⓘ	Ammonia	NEI NH3 ⓘ	CAS 7664-41-7 ⓘ
	<b>Control(s):</b> ⓘ UNCONTROLLED			
	<b>Emission Factor</b> ⓘ -- 5.65E-01 Lb per 1000 Tons Anthracite Burned;			<a href="#">Details</a>
	<b>Quality</b> ⓘ -- E <a href="#">Emissions Factors Applicability</a>			
<input checked="" type="checkbox"/>	<b>SCC</b> ⓘ	10100101		
	External Combustion Boilers ; Electric Generation ; Anthracite Coal ; Pulverized Coal			
	<b>POLLUTANT</b> ⓘ	Ammonia	NEI NH3 ⓘ	CAS 7664-41-7 ⓘ
	<b>Control(s):</b> ⓘ SELECTIVE NONCATALYTIC REDUCTION FOR NOX			
	<b>Emission Factor</b> ⓘ -- 6.30E-01 Lb per Tons Anthracite Burned;			<a href="#">Details</a>
	<b>Quality</b> ⓘ -- C <a href="#">Emissions Factors Applicability</a>			
<input checked="" type="checkbox"/>	<b>SCC</b> ⓘ	10100101		
	External Combustion Boilers ; Electric Generation ; Anthracite Coal ; Pulverized Coal			
	<b>POLLUTANT</b> ⓘ	Ammonia	NEI NH3 ⓘ	CAS 7664-41-7 ⓘ
	<b>Control(s):</b> ⓘ SCR (SELECTIVE CATALYTIC REDUCTION)			
	<b>Emission Factor</b> ⓘ -- 3.10E-01 Lb per Tons Anthracite Burned;			<a href="#">Details</a>
	<b>Quality</b> ⓘ -- C <a href="#">Emissions Factors Applicability</a>			

# Detail Page

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

## Emission Factor Details

<b>SCC</b> ⓘ	10100101	
<b>Level 1</b> ⓘ	External Combustion Boilers	
<b>Level 2</b> ⓘ	Electric Generation	
<b>Level 3</b> ⓘ	Anthracite Coal	
<b>Level 4</b> ⓘ	Pulverized Coal	
<b>POLLUTANT</b> ⓘ	Ammonia	NEI NH3 ⓘ CAS 7664-41-7 ⓘ
<b>Control(s)</b> ⓘ	UNCONTROLLED	
<b>Emission Factor</b> ⓘ	5.65E-01 Lb per 1000 Tons Anthracite Burned	
<b>Quality</b> ⓘ	E <a href="#">Emissions Factors Applicability</a>	
<b>References</b>	Development and Selection of Ammonia Emission Factors - Final Report. R. Battye, W. Battye, C. Overcash, and S. Fudge; EC/R Incorporated; Durham, NC. Report prepared for USEPA Office of Research and Development; August, 1994.	
AP 42 Section		
Formula		
Notes		



# Search for Reports

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

## Welcome to WebFIRE

WebFIRE is the EPA's online database that contains [emissions factors](#) for criteria and hazardous air pollutants (HAP) for industrial and non-industrial processes and [multiple reports](#) submitted to the EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) in response to regulatory requirements under Parts 60 and 63 of Title 40 of the U.S. Code of Federal Regulations (CFR). WebFIRE also allows you to [register](#) to receive periodic email notifications when reports are submitted to WebFIRE and to prepare [batch downloads](#) of WebFIRE emissions and facility information.

- [Search for emissions factors](#)
- [Search for reports](#)
- [User-defined emissions factors](#)
- [Register for email notifications](#)
- [Download WebFIRE data in bulk](#)

### Emission Factor Functions

WebFIRE contains emissions factors developed by the EPA for criteria pollutants and HAP for industrial and non-industrial processes. For each EPA emissions factor, WebFIRE contains descriptive information such as industry and source category type, control device information, the pollutants emitted, and supporting documentation (e.g., test reports).

### Search and Retrieve EPA Emissions Factors

You can search WebFIRE for EPA emissions factors using either a Simple or Detailed Search. Using the Simple Search, you can retrieve EPA emissions factor records by entering one or more simple terms such as: source category name (e.g., wood combustion), process description (e.g., spreader stoker), EPA's Source Classification Code (SCC), or any other viable search term likely to be found in an emissions factor record. Using the Detailed Search, you can focus the factor retrieval process by entering one or more of the following search criteria:

- SCC (complete code or individual SCC level descriptions)
- Control device type
- Pollutant or pollutant group type
- Specific AP 42 section

[Search for emissions factors](#)

### Develop User-Defined Emissions Factors

You can develop an emissions factor from individual performance test values that you select from the WebFIRE database using the same procedures that the EPA follows to develop new or revise existing emissions factors. Because user-defined emissions factors are not retained in the WebFIRE database after they are created, WebFIRE allows you to prepare and download a report showing the details of an emissions factor that you develop.

### Report Functions

# Search for Reports

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

## WebFIRE

### 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

(Control-Click for multiple selections)

**Submit Search**

**Reset**

# Search for Reports

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

## WebFIRE

### WebFIRE Report Search and Retrieval Criteria

You can select one or more of the following search criteria to refine your search for selected report types from the previous page. To enter your search criteria, click on arrow to open or close the criteria menu. After you have selected the search criteria of interest, click on the Submit button to retrieve the relevant reports from WebFIRE.

#### Search Criteria for All Reports

▾ Submitting Organization and/or Facility Name

**Submitting Organization**

**Facility Name**

▸ CEDRI Submission Date

▸ Facility Location

▸ Regulatory Part and Subpart

▸ FRS ID

▸ SCC (for performance tests only)

▸ Pollutant (for performance tests only)

▸ Pollutant Test Method (for performance tests only)

▸ Control Device (for performance tests only)

[Submit Search](#)

[Reset](#)

[Expand all](#) [Collapse all](#)


# Search Results

[About EPA](#)  
 You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

[Contact Us](#) [Share](#) [Share](#)

## WebFIRE Report Search Results and Viewing Instructions

The Report Search Results table below shows the **159** records in WebFIRE that match your search criteria. **These records and any related attachments may or may not have been reviewed by the state, local, or tribal air pollution agency or delegated authority.**

The Report Search Results table below shows the records and any related attachments (indicated by the  icon in the search results table). Click [REVISE CURRENT SEARCH](#) to return to your search criteria. Click [NEW SEARCH](#) to start a new search.

▶ Viewing Instructions










▶ Downloading Reports

### Report Search Results

Counts: 159

Show  entries

Search Page:

Organization ▲	Facility ⚡	City ⚡	State ⚡	County ⚡	Submission Date ⚡	Report Type ⚡	Report Sub Type ⚡	Pollutants ⚡	Control Devices ⚡	Document ⚡	Related Attachment(s) ⚡	Include Report in Bulk Download ⚡	Include Data in CSV File <input type="checkbox"/> Select All
Belews Creek	Belews Creek	Belews Creek	NC	STOKES COUNTY	2015-06-12 18:47:56.879	NOCS	MATS_NOCS				No Attachments	<input type="checkbox"/>	N/A
Belews Creek	Belews Creek	Belews Creek	NC	STOKES COUNTY	2015-07-14 14:45:30.517	NOCS	MATS_NOCS				No Attachments	<input type="checkbox"/>	N/A
Belews Creek	Belews Creek	Belews Creek	NC	STOKES COUNTY	2015-07-27 08:45:48.823	AER	MATS_CR				No Attachments	<input type="checkbox"/>	N/A
Belews Creek	Belews Creek	Belews Creek	NC	STOKES COUNTY	2015-07-27 08:46:09.488	AER	MATS_CR				No Attachments	<input type="checkbox"/>	N/A
Belews Creek	Belews Creek	Belews Creek	NC	STOKES COUNTY	2015-07-27 08:46:29.342	AER	MATS_CR				No Attachments	<input type="checkbox"/>	N/A
Belews Creek	Belews Creek	Belews Creek	NC	STOKES COUNTY	2015-07-27 08:46:49.18	AER	MATS_CR				No Attachments	<input type="checkbox"/>	N/A
Belews Creek	Belews Creek	Belews Creek	NC	STOKES COUNTY	2015-07-30 20:45:44.476	AER	MATS_TDR				No Attachments	<input type="checkbox"/>	N/A
Belews Creek	Belews Creek	Belews Creek	NC	STOKES COUNTY	2015-07-30 20:46:05.641	AER	MATS_TDR				No Attachments	<input type="checkbox"/>	N/A
Belews Creek	Belews Creek	Belews Creek	NC	STOKES COUNTY	2015-10-28 11:26:14.079	AER	MATS_TDR				No Attachments	<input type="checkbox"/>	N/A

# User Defined Emissions Factors

- Added functionality to allow users to develop own emissions factors from performance test data using EPA procedures
- Users can select which records they want to include in factor
  - Dataset must contain at least 3 values for data outlier test
  - **NOTE – WebFIRE does not retain or endorse factors created with the user defined emissions factor functionality**

# User Defined Emissions Factors

## Welcome to WebFIRE

WebFIRE is the EPA's online database that contains [emissions factors](#) for criteria and hazardous air pollutants (HAP) for industrial and non-industrial processes and [multiple reports](#) submitted to the EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) in response to regulatory requirements under Parts 60 and 63 of Title 40 of the U.S. Code of Federal Regulations (CFR). WebFIRE also allows you to [register](#) to receive periodic email notifications when reports are submitted to WebFIRE and to prepare [batch downloads](#) of WebFIRE emissions and facility information.

- [Search for emissions factors](#)
- [Search for reports](#)
- [User-defined emissions factors](#)
- [Register for email notifications](#)
- [Download WebFIRE data in bulk](#)

### Emission Factor Functions

WebFIRE contains emissions factors developed by the EPA for criteria pollutants and HAP for industrial and non-industrial processes. For each EPA emissions factor, WebFIRE contains descriptive information such as industry and source category type, control device information, the pollutants emitted, and supporting documentation (e.g., test reports).

### Search and Retrieve EPA Emissions Factors

You can search WebFIRE for EPA emissions factors using either a Simple or Detailed Search. Using the Simple Search, you can retrieve EPA emissions factor records by entering one or more simple terms such as: source category name (e.g., wood combustion), process description (e.g., spreader stoker), EPA's Source Classification Code (SCC), or any other viable search term likely to be found in an emissions factor record. Using the Detailed Search, you can focus the factor retrieval process by entering one or more of the following search criteria:

- SCC (complete code or individual SCC level descriptions)
- Control device type
- Pollutant or pollutant group type
- Specific AP 42 section

[Search for emissions factors](#)

# User Defined Emissions Factors

## WebFIRE

### Develop User-defined Emission Factors

You can develop an emissions factor from individual performance test values that you select from the WebFIRE database using the same procedures that EPA follows to develop new or revise existing factors. To begin, retrieve the test data values of interest by entering each of the search criteria below in sequence and clicking on the "Submit Search" button. As you select each search criteria, the drop-down menu for the next criteria shows the available selections based on the entries you provided for the previous criteria. You must specify a selection for each search criteria field.

The data outlier test in the WebFIRE emissions factor calculation procedures requires that the data set you select include at least three data values. [This CSV table](#) lists the data sets (grouped by Source Classification Code (SCC), pollutant, control device configuration, and activity) for which the WebFIRE database contains at least three data values.

#### Available SCCs

#### Available Pollutants

#### Available Control Device

#### Available Units

#### Available Activity

# User Defined Emissions Factors

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » [Users Defined Factors](#)

## WebFIRE

### Results of Candidate Data Search

WebFIRE contains 16 records that match your criteria. To calculate an emissions factor, select at least 3 records from the table below and click the "Calculate Emission Factor" button.

 Search: 

Retain in Data Set	SCC	Control Device	Pollutant	Factor Value	Test Method	Test Data Units	Test Data Activity	Test Rating	Detection Flag	Test Year	Facility Name	Test City	Test State	Project Data Set
<input type="checkbox"/> Select All / <input type="checkbox"/> Deselect All	10100204	UNCONTROLLED	PM, filterable	1.54E-02	Method 5	LB	MILLION BTUS HEAT INPUT	67	ADL	2019	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
<input type="checkbox"/>	10100204	UNCONTROLLED	PM, filterable	4.18E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
<input type="checkbox"/>	10100204	UNCONTROLLED	PM, filterable	2.75E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
<input type="checkbox"/>	10100204	UNCONTROLLED	PM, filterable	3.00E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
<input type="checkbox"/>	10100204	UNCONTROLLED	PM, filterable	1.98E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
<input type="checkbox"/>	10100204	UNCONTROLLED	PM, filterable	2.20E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
<input type="checkbox"/>	10100204	UNCONTROLLED	PM, filterable	9.40E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
<input type="checkbox"/>	10100204	UNCONTROLLED	PM, filterable	3.15E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2019	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
<input type="checkbox"/>	10100204	UNCONTROLLED	PM, filterable	4.76E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>



# User Defined Emissions Factors

Table 1. Results of emissions factor data set


 

Key Parameters	Results
SCC	10100204
Does the SCC contain more than 15 sources?	Yes
Pollutant	PM, FILTERABLE
Units	LB
Activity	MILLION BTUS HEAT INPUT
Factor Quality Rating	Moderate
Number of individual test data values used to calculate the emissions factor	7
Number of individual test data values excluded from the calculation	0
Composite Test Rating	68.7
Control Device Configuration	UNCONTROLLED
User-defined Emission Factor	3.58E-02

# User Defined Emissions Factors

Table 2. The data set values that WebFIRE included in the emissions factor calculations

[Download CSV Data](#)

Individual Test Data Value	Individual Test Method	Individual Test Data Units	Individual Test Data Activity	Individual Test Rating	Detection Limit Flag 	Year of Test	Facility Name	Test City	Test State	ERT Project Data Set
9.40E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
4.18E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
3.00E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
2.75E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
2.20E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
1.98E-02	Method 5	LB	MILLION BTUS HEAT INPUT	69	ADL	2018	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>
1.54E-02	Method 5	LB	MILLION BTUS HEAT INPUT	67	ADL	2019	Eastman Chemical Company	Kingsport	TN	<a href="#">PDS</a>

# Download Data in Bulk

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

## Welcome to WebFIRE

WebFIRE is the EPA's online database that contains [emissions factors](#) for criteria and hazardous air pollutants (HAP) for industrial and non-industrial processes and [multiple reports](#) submitted to the EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) in response to regulatory requirements under Parts 60 and 63 of Title 40 of the U.S. Code of Federal Regulations (CFR). WebFIRE also allows you to [register](#) to receive periodic email notifications when reports are submitted to WebFIRE and to prepare [batch downloads](#) of WebFIRE emissions and facility information.

- [Search for emissions factors](#)
- [Search for reports](#)
- [User-defined emissions factors](#)
- [Register for email notifications](#)
- [Download WebFIRE data in bulk](#)

### Emission Factor Functions

WebFIRE contains emissions factors developed by the EPA for criteria pollutants and HAP for industrial and non-industrial processes. For each EPA emissions factor, WebFIRE contains descriptive information such as industry and source category type, control device information, the pollutants emitted, and supporting documentation (e.g., test reports).

### Search and Retrieve EPA Emissions Factors

You can search WebFIRE for EPA emissions factors using either a Simple or Detailed Search. Using the Simple Search, you can retrieve EPA emissions factor records by entering one or more simple terms such as: source category name (e.g., wood combustion), process description (e.g., spreader stoker), EPA's Source Classification Code (SCC), or any other viable search term likely to be found in an emissions factor record. Using the Detailed Search, you can focus the factor retrieval process by entering one or more of the following search criteria:

- SCC (complete code or individual SCC level descriptions)
- Control device type
- Pollutant or pollutant group type
- Specific AP 42 section

[Search for emissions factors](#)

### Develop User-Defined Emissions Factors

You can develop an emissions factor from individual performance test values that you select from the WebFIRE database using the same procedures that the EPA follows to develop new or revise existing emissions factors. Because user-defined emissions factors are not retained in the WebFIRE database after they are created, WebFIRE allows you to prepare and download a report showing the details of an emissions factor that you develop.


### Report Functions

You can search WebFIRE for reports submitted in response to regulatory requirements under 40 CFR Parts 60 and 63. The links below describe the types of reports contained in WebFIRE:

# Download Data in Bulk

You are here: [EPA Home](#) » [Clearinghouse for Inventories & Emissions Factors](#) » [Emissions Factors & AP 42](#) » [WebFIRE](#) » [Search WebFIRE](#) » Search Emission Factors

## Download WebFIRE Data in Bulk

The complete WebFIRE data set is available as [Comma-separated values](#)  [Exit EPA Disclaimer](#). The CSV file format is a very simple data file format that is supported by almost all spreadsheet software such as Microsoft Excel, as well as Microsoft Access.

[All WebFIRE Factors](#) in a CSV format spreadsheet (compressed in a zip file).

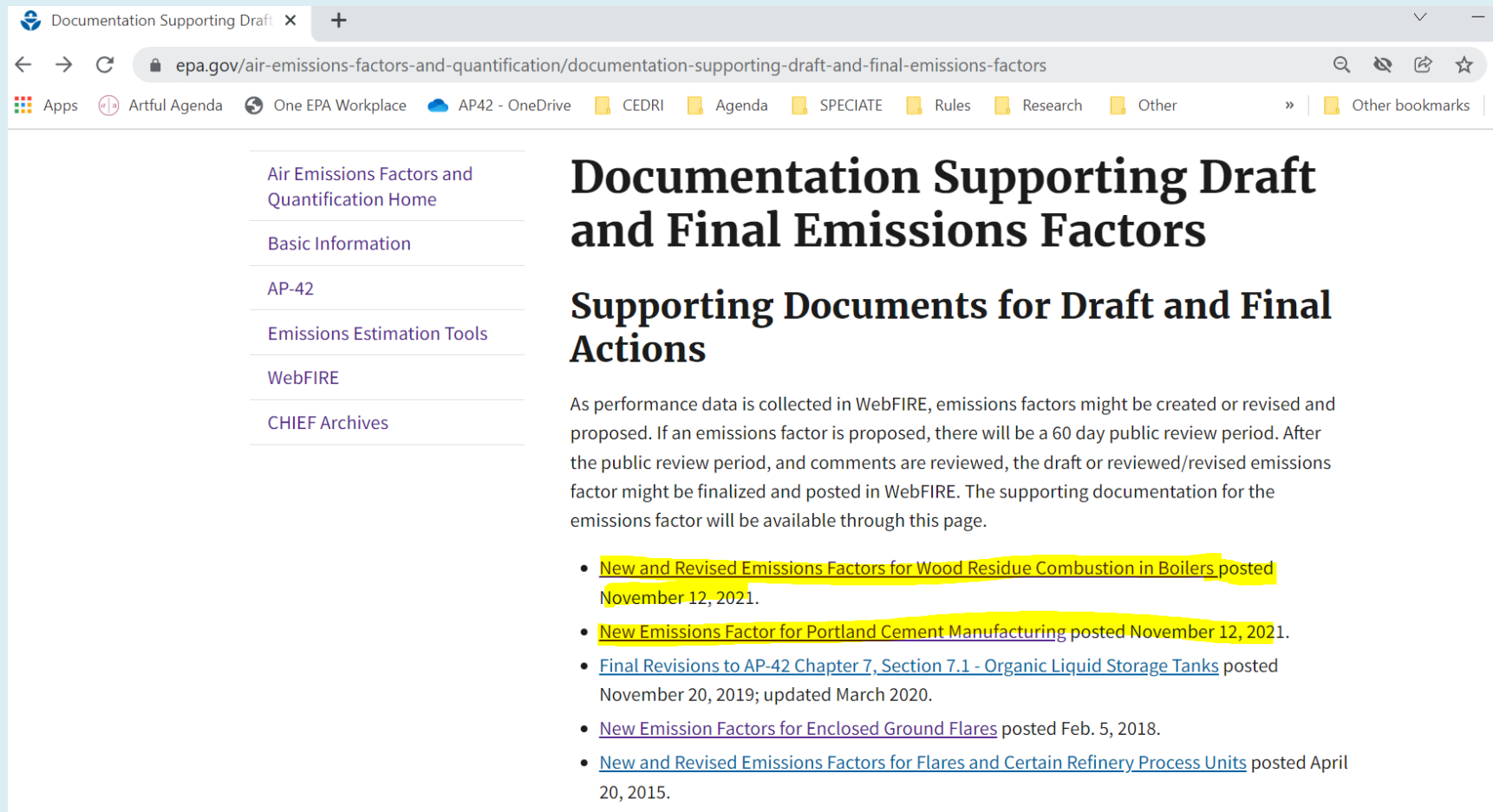
Discover:  
Accessibility  
EPA Administrator  
Budget & Performance  
Contracting  
Grants  
No FEAR Act Data  
Privacy and Security

Connect:  
Data.gov  
Inspector General  
Jobs  
Newsroom  
Open Government  
Regulations.gov  
Subscribe  
USA.gov  
White House

Ask:  
Contact Us  
Hotlines  
FOIA Requests  
Frequent Questions  
Follow:  
• [Facebook](#)  
• [Twitter](#) {LAST UPDATED DATE}  
• [YouTube](#)  
• [Flickr](#)  
• [Instagram](#)



# Accessing Draft Factors



The screenshot shows a web browser window with the URL [epa.gov/air-emissions-factors-and-quantification/documentation-supporting-draft-and-final-emissions-factors](https://epa.gov/air-emissions-factors-and-quantification/documentation-supporting-draft-and-final-emissions-factors). The page title is "Documentation Supporting Draft and Final Emissions Factors". The main heading is "Documentation Supporting Draft and Final Emissions Factors". Below this is a sub-heading "Supporting Documents for Draft and Final Actions". A paragraph explains that as performance data is collected in WebFIRE, emissions factors might be created or revised and proposed. It states that if an emissions factor is proposed, there will be a 60-day public review period. After the public review period, and comments are reviewed, the draft or reviewed/revised emissions factor might be finalized and posted in WebFIRE. The supporting documentation for the emissions factor will be available through this page.

As performance data is collected in WebFIRE, emissions factors might be created or revised and proposed. If an emissions factor is proposed, there will be a 60 day public review period. After the public review period, and comments are reviewed, the draft or reviewed/revised emissions factor might be finalized and posted in WebFIRE. The supporting documentation for the emissions factor will be available through this page.

- [New and Revised Emissions Factors for Wood Residue Combustion in Boilers](#) posted November 12, 2021.
- [New Emissions Factor for Portland Cement Manufacturing](#) posted November 12, 2021.
- [Final Revisions to AP-42 Chapter 7, Section 7.1 - Organic Liquid Storage Tanks](#) posted November 20, 2019; updated March 2020.
- [New Emission Factors for Enclosed Ground Flares](#) posted Feb. 5, 2018.
- [New and Revised Emissions Factors for Flares and Certain Refinery Process Units](#) posted April 20, 2015.

# WebFIRE Useful Links

- WebFIRE Database: <https://cfpub.epa.gov/webfire/>
- Emissions Factors Procedures Document: <https://www.epa.gov/air-emissions-factors-and-quantification/procedures-development-emissions-factors-stationary-sources>
- AP-42: <https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-Compilation-air-emissions-factors>
- ERT: <https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>
- AP-42 References: <https://gaftp.epa.gov/ap42/>
- Notifications sent out via CHIEF listserv:
- <https://www.epa.gov/chief/chief-listserv>

# Questions?

Contact:

Info Chief – [chief\\_info@epa.gov](mailto:chief_info@epa.gov)