

Instructions for Submitting Data Corrections

Introduction

EPA seeks comments on hazardous air pollutant (HAP) emissions and other model input data that we used to assess risks from selected industrial major source categories, as required by section 112(f) of the Clean Air Act. The source of this information is the most recent version of EPA's National Emissions Inventory (NEI) data, updated with data collected by EPA's Office of Air Quality Planning and Standards.

The Microsoft Access file will enable you to review and suggest revisions to HAP emissions and other descriptive information associated with all facilities in a single regulatory category.

Instructions for using this file to review the data, revise the data, and submit revisions to EPA are outlined below. [Section 6](#)¹ lists specific steps for submitting your final changes to the EPA.

[Section 7](#) of this document defines important terms (e.g., Regulatory Code, NAICS, SCC, etc.) and all data elements found in this file. The complete outline for this document is listed below:

1. [Application Overview](#)
2. [View Summary Data](#)
 - a. [Options](#)
 - i. Regulatory HAP Emissions
 - ii. State County Regulatory Emissions
 - iii. Facility Regulatory HAP Emissions
 - iv. All Data
 - b. [Filter Data](#)
3. [Revise Data](#)
 - a. [Revise Emission Fields](#)
 - b. [Revise Stack Fields](#)
 - c. [Revise Process Fields](#)
 - d. [Revise Emission Unit Fields](#)

¹ Underlined text in this document indicates hyperlinks to text both inside and outside the document.

- e. [Revise Facility Information](#)
- f. [Add Data to an Existing Facility](#)
- 4. [Add a Facility](#)
- 5. [Review Revisions](#)
- 6. [Submit Revisions](#)
- 7. [Term Definitions](#)

The review file contains emissions of HAPs modeled as part of RTR.

1. **Application Overview**

When this Microsoft Access file opens, you are presented with a “Main Page” containing five buttons:

- 1. [View Summary Data](#)
- 2. [Revise Data](#)
- 3. [Review Revisions](#)
- 4. [Submit Revisions](#)
- 5. [Exit Database](#)

After reading these instructions, you should select the “View Summary Data” button to view summary data before making revisions or adding any facilities to this file. After reviewing the current data for your regulatory category, you can proceed to the “Revise Data” forms. After making corrections to this file, you should review your corrections and then submit your revisions to EPA as outlined on the “Submit Revisions” form. Please note revisions made to the data on EPA’s website will not be saved. In order to make revisions that will be saved, you will need to download the zipped file to your hard drive and extract the Access file to your hard drive.

2. **View Summary Data**

After selecting and clicking the “View Summary Data” button, the form displays national level summary data for all pollutants associated with the regulatory category of interest. You can sort the columns in ascending or descending order if you wish to see the highest or lowest emissions and/or if you want to sort by pollutant name alphabetically. This form also provides buttons that

allow you to change the aggregation level (“Options”) of the data and/or filter by pollutant (“Filter Data”).

- a. **Options** – These buttons allow you to view summary data at varying levels of detail. When you click these buttons, new forms open with data level and filter buttons appropriate to the dataset displayed. These buttons and their accompanying forms are as follows:

- i. **Regulatory HAP Emissions (View National Data Form)** – As discussed above, this form displays national level summary data for all pollutants associated with the regulatory category of interest. This is the default form that opens when you select “View Summary Data” on the “Main Page.”
- ii. **State County Regulatory Emissions (View State, County, Regulatory, HAP, and Emissions Data Form)** – All emissions for the regulatory category are shown at the county – pollutant level. This form would allow you, for example, to find your county and view total emissions by pollutant from the regulatory category. After viewing emissions at the county level, you might want to view all facilities in the county to determine where high (or low) emissions values for a given pollutant are originating. To do this, proceed to the Facility Regulatory HAP Emissions data level.
- iii. **Facility Regulatory HAP Emissions (View Facility, Regulatory, HAP, and Emissions Data Form)** – Total emissions by pollutant for the regulatory category at all facilities assigned to this regulatory category. These are shown to provide a complete dataset for the regulatory category, to help you identify additional HAPs which should be assigned to the regulatory category, and/or to help you identify HAPs that should not be assigned to the regulatory category.

After viewing emissions at the facility level, you should view all data associated with that facility to make sure that all regulated processes and emissions are included correctly, and that latitude/longitudes, stack parameters, Source Classification Codes (SCC), North American Industry Classification System (NAICS) codes, and other descriptive information are correct. To view this information, select the “All Data” button.

- iv. **All Data (View All Data Form)** – Detailed records are shown for all facilities included in this regulatory category. This detail includes process level HAP emissions, SCCs, emission process group, stack parameters, latitude/longitudes, and NAICS codes.
- b. **Filter Data** – These buttons allow you to filter the current dataset by different attributes. The available filters change depending upon the detail level of the displayed data (e.g., the county level filter is *not* available on the national level summary form, but is available at the State County Regulatory level). You can choose one filter after another to progressively narrow down the data to records of interest. For example, on the State County Regulatory Emissions level, you can filter by state and then by pollutant. The filters available on each data level are:
 - National Data – Pollutant filter.
 - State County Regulatory Emissions – Pollutant, state, and county filters.
 - Facility Regulatory HAP Emissions – Facility, pollutant, state, county, and regulatory code filters.
 - All Data – Facility, pollutant, state, county, and regulatory code filters.

Filters can be removed by clicking the “Remove Filter(s)” Button. Clicking “Remove Filter(s)” removes all filters applied and returns the dataset to its original form.

After viewing emissions at the facility level, proceed to “Revise Data” on the “Main Page” if there any omissions or errors that need correction.

3. **Revise Data**

When you select “Revise Data” the “Reviewer Information” form first opens. You must complete this form before continuing. This form collects contact information on the reviewer:

- Name
- Organization
- Phone Number
- Email Address

Please note: If you suggest changes to or add emissions values you will need to provide additional documentation for these emission revisions to the docket. (See Section 6 for more information.)

The “Reviewer Information” form will appear every time you return to the revised data forms; however, your contact information will be saved in the drop down list and you can readily select your email address from the list. The “Facility Selection” form opens and allows the user to select a facility for revision. The name of the facility and address information are shown in the selection list as multiple facilities may have similar names. At this point, you can select one of five actions: “Revise Data for Selected Facility,” “Add a Facility,” “Add Data to an Existing Facility,” “Export Facility Data to an Excel File,” or “Back to Main.” The “Add a Facility” button is discussed in Section 4; the rest are described below.

Revise Data for Selected Facility – Selecting this button opens a form which allows you to select the specific data attributes to be revised. These attributes are:

- a. **Revise Emissions Fields** – Selecting this option brings up data fields relevant to the emissions value. Fields that can be revised here are: start date, end date, pollutant code, actual emissions (tons per year), allowable emissions (tons per year), acute emissions (tons per year), control status, and control measure

codes. If an emissions value is changed, the start date, end date, control measure information, and emissions calculation method code must be updated as well. For EPA to better understand current control measures that are in operation, reviewers can indicate the type of control measure associated with each process. You can indicate if the process is controlled in the Control Status field, select up to five control measures from the drop-down lists, and provide additional information in the comment field. If the control measure information is not provided, the emission process will be considered uncontrolled. You can also indicate that the HAP emissions value should be deleted, and provide a reason for this deletion. Please note that you can only enter data into the revision fields. The remaining fields are locked. When you are finished making your changes, select “Save Records” at the bottom of the form to save your revisions and move to another form.

Please note: If you suggest changes to or add emissions values, you will need to provide additional documentation for these emission revisions. (See Section 6 for more information.)

- b. **Revise Stack Fields** – Selecting this option brings up data fields relevant to the emissions release point. Fields that can be revised here are stack height, exit gas temperature, stack diameter, exit gas velocity, exit gas flow rate, the emission release point type (stack vs. fugitive), fugitive length, fugitive width, fugitive angle, latitude and longitude, fugitive 2D endpoint coordinates, and North American Datum. You can also enter a general comment on the revision. Please note that you can only enter data into the revision fields. The remaining fields are locked. When you are finished making your changes, select “Save Records.” See Appendix A for additional information regarding fugitive releases.
- c. **Revise Process Fields** – Selecting this option brings up data fields relevant to the process. Fields that can be revised here are regulatory code, SCC, days per

week, hours per day, hours per year, and weeks per year. You can also enter a general comment on the revision. You only enter data into the revision fields. The remaining fields are locked. When you are finished making your changes, select “Save Records.”

- d. **Revise Emission Unit Fields** – Selecting this option brings up data fields relevant to the emission unit. Fields that can be revised here are emission unit description and emission unit shutdown date. You can also enter a general comment on the revision. You only enter data into the revision fields. The remaining fields are locked. When you are finished making your changes, select “Save Records.”
- e. **Revise Facility Information** – Selecting this option brings up data fields that describe the facility. Fields that can be revised here are: tribal code, county name, facility registry identifier, facility category code (major or area), facility name, location address, city, state, and zip code. You can also enter a general comment on the revision, indicate the facility should be removed from the regulatory category, and indicate a year closed if the facility is permanently closed. Please note that you can only enter data into the revision fields. The remaining fields are locked. When you are finished making your changes, select “Save Records.”
- f. **No Revisions** – Select this button to indicate you have reviewed the facility data and have no revisions. You cannot select this button if you have made revisions to the facility. After you make this selection, you will not be able to make revisions to the facility data.

Add Data to an Existing Facility – Selecting the “Add Data to an Existing Facility” button opens a form that shows all the current HAP emissions for the selected facility. You should scroll to the last row to enter any missing pollutant data. All data fields should be filled in. When you are finished making your changes, select “Save Records.”

Export Facility Data to an Excel File – Selecting this option allows you to export the facility data to an Excel file if it facilitates your review of the original RTR facility and emissions data. After clicking this button, you will be asked to which local directory² you would like to save the file. If you select this option after making revisions, your revised records will be included.

Other Options – You also have the option of selecting a different facility, returning to the Main Page, reviewing your changes, or preparing the file to submit your changes to EPA.

4. **Add a Facility**

When you select “Add a Facility” on the “Revise Data” form, a new form opens with a single blank record. You can add a facility to this regulatory category and enter the HAP emissions and associated descriptive facility and emission release point information. This information includes: tribal code; county name; facility category code (major or area); facility name; location address, city, state, and zip code; NAICS code; SCC; regulatory code; pollutant; actual emissions values; allowable emissions values; acute emissions values; stack parameters; latitude/longitude; and control information. The reviewer should also enter one set of appropriate identifiers: facility registry identifier, facility identifier, unit ID, process ID, and emission release point ID. Required fields are noted. If you add emissions for a process that is not associated with the regulatory category, please select the appropriate regulatory code (from the drop-down list) or select “NONE” from the drop-down list. When you are finished making your changes, select “Save Records.” To create additional emission unit, process, and HAP emissions records, now select “Add Data to an Existing Facility” and continue with your data entry.

5. **Review Revisions**

When you open the “Review Revisions” form, you can export your suggested revisions to Microsoft Excel so that you can print and review them. This form contains five buttons:

1. View Emissions Revisions;

² Please note: this directory should already exist on your PC. The program will not create new subdirectories.

2. View Facility Revisions;
3. Export Revisions to Excel File;
4. Submit Revisions File; and
5. Back to Main

After selecting option 1 or 2, the corresponding form will open which will display the selected revisions. The Emissions Revisions form contains all additions and revisions entered under the [Revise Emissions Fields](#), [Revise Process Fields](#), [Revise Emission Unit Fields](#), and [Revise Stack Fields](#) forms as described above. The Facility Revisions form contains all additions and revisions entered under “[Revise Facility Information](#)” form. You can export these revisions by clicking the “Export Revisions to Excel File” button. After clicking this button, you will be asked to which local directory³ you would like to save the file. The selected revisions will then be exported to a Microsoft Excel spreadsheet.

To make corrections, return to the appropriate revision form (as described under [Revise Data](#)). Any previously revised data will appear in the revise data forms.

6. **Submit Revisions**

Upon completion of all additions and corrections, or acceptance of the data with no revisions, you need to submit your corrections to EPA. Before you submit any corrections, please verify that the proposed rule has been published in the *Federal Register*, which means the review period for the rule has opened and the docket is available for comments.

First, create a new file containing just the changes. To do so, select the “Submit Revisions” button found on the “Main Page” and on the revision and review summary data forms. Clicking the “Create Revisions File” button will open a form with a button “Create Final File...”. Clicking this button will create a spreadsheet file that contains the reviewer’s changes. The file will be assigned a name using the following convention: revisions_XXXX_LastName.xls, where XXXX = regulatory code and LastName = reviewer’s last name. You will be prompted to save the new file to a local directory of your choice. Please note, when you export the final file version to a

³ Please note: this directory should already exist on your PC. The program will not create new subdirectories.

Microsoft Excel spreadsheet, this version will write over the review revisions version of the spreadsheet if you save them to the same folder on your hard drive. In addition to submitting the spreadsheet file to the docket, if you corrected or added emissions values, you should prepare supporting documentation. This can include source test reports, permit information and/or computational information such as emission factors and activity data (throughput). The spreadsheet and supporting documentation must be submitted manually to one of the addresses listed in the next paragraph.

Submit your revision database, identified by Docket ID No. EPA-HQ-OAR-2019-0313, by one of the following methods:

- <http://www.regulations.gov>: Follow the on-line instructions for submitting comments.
- Email: A-and-R-docket@epa.gov. Include Docket ID No. EPA-HQ-OAR-2019-0313 in the subject line.
- Mail: Environmental Protection Agency, EPA Docket Center (EPA/DC), Mailcode 28221T, Attention Docket ID No. EPA-HQ-OAR-2019-0313, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.
- Fax: (202) 566-9744.
- Hand/Courier Delivery: UEPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Ave., NW, Washington, DC 20004. Attention Docket ID No. EPA-HQ-OAR-2019-0313. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA-HQ-OAR-2019-0313. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or email. The www.regulations.gov website is an "anonymous access" system, which means EPA

will not know your identity or contact information unless you provide it in the body of your comment.

If you send an email comment directly to EPA without going through www.regulations.gov, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

For additional information about EPA's public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>. All documents in the docket are listed in the Federal Docket Management System index at www.regulations.gov. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the EPA Docket Center, EPA WJC Building, Room B-102, 1301 Constitution Avenue, NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202) 566-1742.

7. Term Definitions

The table below lists and defines all of the data elements listed in the summary and revision forms found in the database.

Data Element	Definition
Actual Emissions (TPY)	Numeric value of actual emissions in tons/year
Actual Emissions (TPY) Revised	Enter revised actual emissions value here
Acute Emissions (TPY)	Numeric value of acute emissions in tons/year
Acute Emissions (TPY) Revised	Enter revised acute emissions value here
Allowable Emissions (TPY)	Numeric value of allowable emissions in tons/year
Allowable Emissions (TPY) Revised	Enter revised allowable emissions value here
City	City where the regulatory facility is located
City Revised	Enter revised city name here
Control Measure	Select control measure from list provided
Control Status	Indicates whether emissions controlled (controlled, uncontrolled, or unknown).
County Name	County name for regulatory facility
County Name Revised	Enter revised county name here
Data Source Code	Code indicating source of emissions estimate (state, EPA, TRI, etc.).
Data Source Description	Descriptive text associated with data source code
Delete	Indicate here if the facility or record should be deleted
Delete Comment	Describes the reason for deletion
Emission Calculation Method Code For Revised Emissions	Code description of the method used to derive actual emissions. For example, CEM, material balance, stack test, etc.
Emission Process Group	The general type of emissions process associated with the specific emissions point
Emission Release Point ID	State/local/tribal ID for point/location where emissions are released to ambient air
Emission Release Point Type	The code for physical configuration of the release point, i.e. vertical, fugitive, etc.
Emission Release Point Type Description	Descriptive text for emission release point type code
Emission Release Point Type Revised	Enter revised emission release point type here
Emission Unit Description	A description of the emission unit
Emission Unit ID	Unique ID reported consistently over time by state/local/tribal agency
End Date	End date of the period in which reported emissions occur, e.g., 20081231 = December 31, 2008
End Date Revised	Enter revised end date here
EPA Region	EPA Regional code
Exit Gas Flow Rate	Numeric value of stack gas flow rate in actual cubic feet per second
Exit Gas Flow Rate (cuft/sec) Revised	Enter revised exit gas flow rate here
Exit Gas Temperature	The temperature of an exit gas stream (degrees Fahrenheit)
Exit Gas Temperature (F) Revised	Enter revised exit gas temperature here
Exit Gas Velocity	The velocity of an exit gas stream (feet per second)
Exit Gas Velocity (ft/sec) Revised	Enter revised exit gas velocity here
Facility Category	Code indicating if HAP emitting facility is major or area.
Facility Category Code Revised	Enter revised facility category code here
Facility Category Desc	Definition associated with facility category code
Facility Identifier	Unique ID number used by a state/local/tribal agency to identify a facility

Data Element	Definition
Facility Name	The name of the facility of the regulatory facility
Facility Name Revised	Enter revised facility name here
Facility Registry Identifier	The ID number assigned by the EPA Facility Registry System. FRS IDs can be found at: https://www.epa.gov/enviro/facility-registry-service-frs
Facility Registry Identifier Revised	Enter revised facility registry identifier here
FIPS	5 digit code assigned to state and county.
Fugitive 2D Endpoint 1 X Coordinate	The longitude of the midpoint of one of two opposing sides of a fugitive source
Fugitive 2D Endpoint 1 X Coordinate Revised	Enter revised fugitive 2D endpoint coordinate here
Fugitive 2D Endpoint 1 Y Coordinate	The latitude of the midpoint of one of two opposing sides of a fugitive source
Fugitive 2D Endpoint 1 Y Coordinate Revised	Enter revised fugitive 2D endpoint coordinate here
Fugitive 2D Endpoint 2 X Coordinate	The longitude of the midpoint of the second of two opposing sides of a fugitive source
Fugitive 2D Endpoint 2 X Coordinate Revised	Enter revised fugitive 2D endpoint coordinate here
Fugitive 2D Endpoint 2 Y Coordinate	The latitude of the midpoint of the second of two opposing sides of a fugitive source
Fugitive 2D Endpoint 2 Y Coordinate Revised	Enter revised fugitive 2D endpoint coordinate here
Fugitive Angle (degrees)	Release angle (clockwise from true North); orientation of the y-dimension relative to true North, measured positive for clockwise starting at 0 degrees (maximum 89 degrees); will assume 0 degrees if it is not provided in data submittal
Fugitive Angle (degrees) Revised	Enter revised fugitive angle here
Fugitive Length (E-W) (ft)	Dimension of the source in the east-west (x-) direction, commonly referred to as length
Fugitive Length (E-W) (ft) Revised	Enter revised fugitive length here
Fugitive Width (N-S) (ft)	Dimension of the source in the north-south (y-) direction, commonly referred to as width
Fugitive Width (N-S) (ft) Revised	Enter revised fugitive width here
HAP Category Name	Broader grouping to which an individual chemical compound is assigned to by EPA. For example, "lead and compounds" contains all pollutants containing lead
Latitude (decimal degrees)	Latitude measure in decimal degrees of the angular distance on a meridian north or south of the equator. Positive (+) data point for N America. Include (+) sign, Ex. +78.123456. For point sources this represents the center of the source; for fugitive sources this is the southwest corner if the fugitive angle is zero, or the western most corner if the fugitive angle is greater than zero
Latitude (decimal degrees) Revised	Enter revised latitude here
Location Address	Physical street address for regulatory facility
Location Address Revised	Enter revised location address here
Location Default Flag	Code that indicates source of locational coordinates.

Data Element	Definition
Longitude (decimal degrees)	Longitude measure in decimal degrees of the angular distance on a meridian east or west of the prime meridian. Negative (-) data point for N America. Include (-) sign, Ex. -123.234561. For point sources this represents the center of the source; for fugitive sources this is the southwest corner if the fugitive angle is zero, or the western most corner if the fugitive angle is greater than zero
Longitude (decimal degrees) Revised	Enter revised longitude here
NAICS Code	North American Industry Classification Code. An industry classification system, NAICS is erected on a production-oriented conceptual framework that groups establishments into industries according to similarity in the process used to produce goods or services
North American Datum	North American Datum (NAD) for longitude and latitude coordinates (NAD27 or NAD83). If left blank NAD83 is assumed
Pollutant Code	Code assigned by EPA to individual pollutants.
Pollutant Code Revised	Enter revised pollutant code here
Pollutant Code Desc	Descriptive text associated with pollutant code
Process ID	Unique ID reported consistently over time by state/local/ tribal agency
Regulatory Code	Code assigned to regulated sources. Identifies one or more similar processes that cause hazardous air pollutant emissions that are subject to a regulatory determination
Regulatory Code Description	Descriptive text associated with regulatory code
Regulatory Code Revised	Enter revised regulatory code here
Reviewer Email Address	Email address for person providing comments
Reviewer General Comment	A general descriptive comment on the revision
Reviewer Name	Name of person providing comments
Reviewer Organization	Reviewer's affiliation - state/local/agency, trade association, company, etc.
Reviewer Phone Number	Phone number for person providing comments
SCC	Source Classification Code.
SCC Description	Descriptive text associated with SCC code
SCC Revised	Enter revised SCC code here
SPPD Facility Identifier	The unique ID number used by the EPA Sector Policies and Programs Division (SPPD) to identify a facility
Stack Default Flag	The stack default code is a 5-digit code that indicates if and how the stack parameters were defaulted. Each digit represents a stack parameter in the following order: stack height, exit gas temperature, stack diameter, exit gas velocity, and exit gas flowrate. The individual digits in the string indicate the source of the defaulted parameters: 0= Original Value, 1 = SCC Default, 2 = SIC Default, 3 = National Default, 4 = Calculated Value, 5 = Regulatory Default, 6 = State Revision, 8 = CAMD Value. Thus, 22222 means all 5 parameters were defaulted using SIC Default List
Stack Default Flag Description	Descriptive text associated with stack default flag

Data Element	Definition
Stack Diameter	The diameter (in feet) of a stack
Stack Diameter (ft) Revised	Enter revised stack diameter here
Stack Height	The height (in feet) of a stack
Stack Height (ft) Revised	Enter revised stack height here
Start Date	Start date of the period in which reported emissions occur, e.g., 20080101 = January 1, 2008
Start Date Revised	Enter revised start date here
State	State where regulatory facility is located
State Abbreviation	Two-character alphabetical code for state
State County FIPs	5 digit code assigned to state and county.
State Revised	Enter revised state here
Tribal Code	Code that represents American Indian tribes and Alaskan Native entities.
Tribal Code Revised	Enter revised tribal code here
Tribe Name	Tribal name
Year Closed	Indicate the year closed if the facility is no longer in operation (permanently closed)
Zip Code	Zip code for the regulatory facility
Zip Code Revised	Enter revised Zip code here

Appendix A
Fugitive Releases

FUGITIVE SOURCE DESCRIPTION AND PARAMETER REQUIREMENTS

Fugitive Vent source (<10sqft) is a fugitive emission release from a single point. Examples include a single roof or wall vent for building fugitives.

Required parameters are:

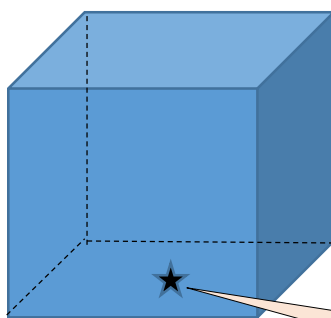
- release height (ft),
- exit gas temperature >50F,
- stack diameter (default is 0.003 (ft),
- exit gas velocity (ft/sec) (default is 0.0003 ft/sec),
- exit gas flow rate (cu ft/sec) (default is 0 cu ft/sec) and
- lat/lon of release

Fugitive three-dimensional source has multiple release vents, a few examples would be a building with many wall and roof vents or an outdoor material storage pile.

Required parameters are:

- side length (ft) [length and width are equal with three-dimensional sources]
- lat/lon is the center of the footprint of the square and
- height of the three-dimensional source

Figure 1. Depiction of Fugitive Three-dimensional Source Parameters



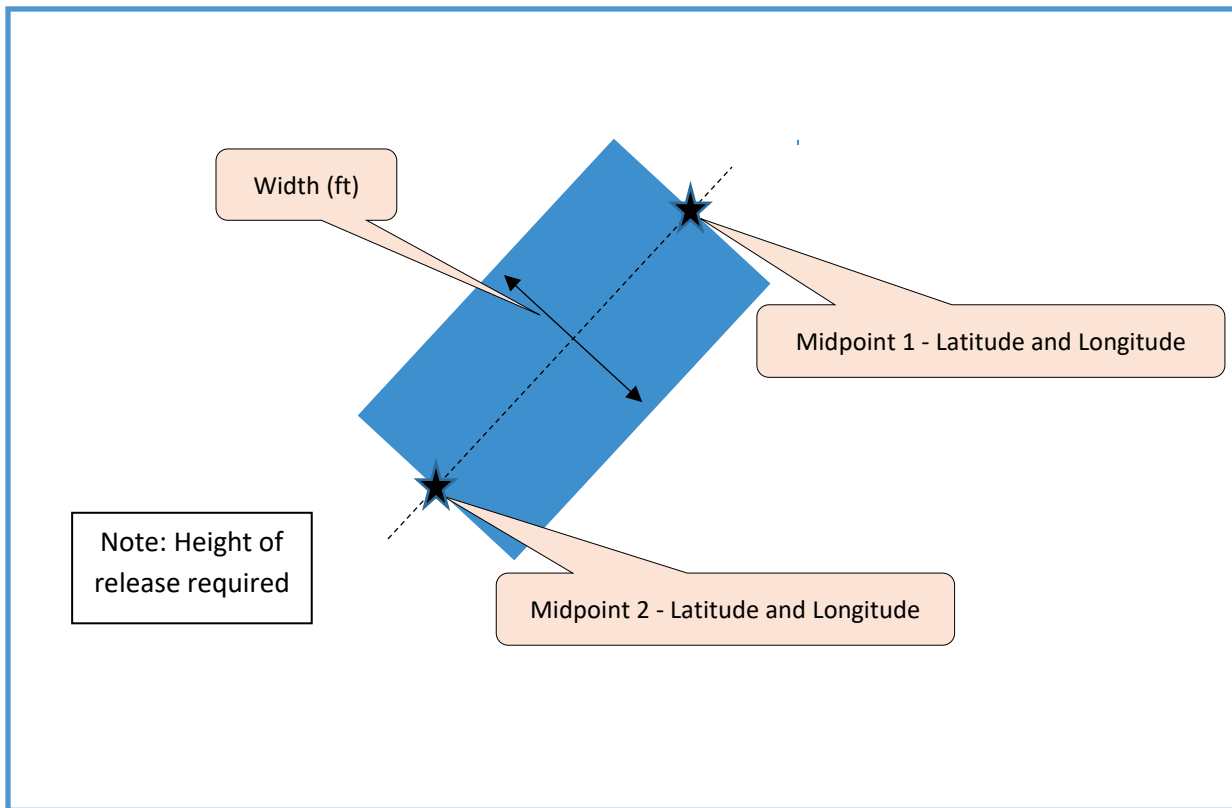
A three-dimensional shape with equal length and width (Length = Width) and a specified height. The lat/lon is the center of the footprint (or bottom face of the shape).

Fugitive two-dimensional source (>10sqft) is an emission release on one plane. For example, an elongated roof vent or a wastewater holding pond.

Required parameters description:

Pick the midpoints of two opposing sides of the source, and enter the lat/lon of these midpoints. A width is also required, which is the distance between the remaining two sides of the source (that is, the width is perpendicular to the line between the two midpoints) For irregularly shaped sources, first create a rectangle that best approximates the shape of the actual source, then determine the parameters described above. Also, estimate the height where the release occurs.

Figure 2. Depiction of Fugitive Two-dimensional Source Parameters

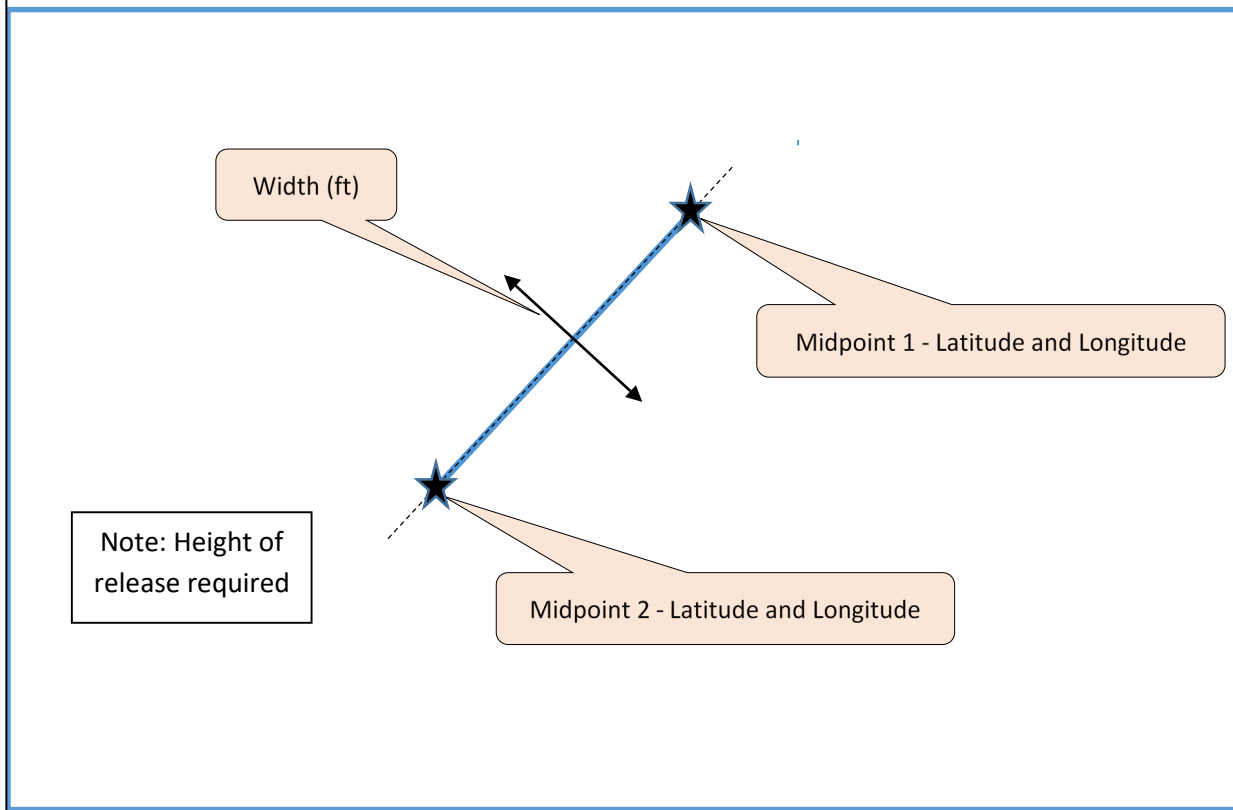


Fugitive two-dimensional source (>10sqft) is an emission release on one plane. For example, an elongated roof vent or a wastewater holding pond.

Required parameters description:

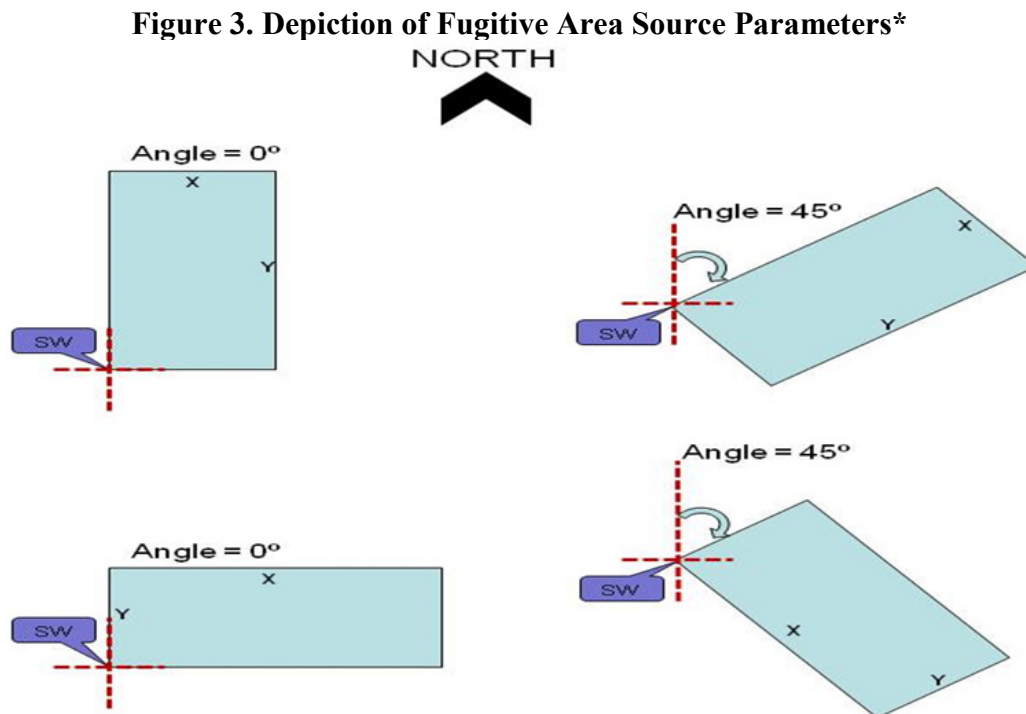
Pick the midpoints of two opposing sides of the source, and enter the lat/lon of these midpoints. A width is also required, which is the distance between the remaining two sides of the source (that is, the width is perpendicular to the line between the two midpoints) For irregularly shaped sources, first create a rectangle that best approximates the shape of the actual source, then determine the parameters described above. Also, estimate the height where the release occurs.

Figure 2. Depiction of Fugitive Two-dimensional Source Parameters



Fugitive area source (>10 sqft) is an alternative way of representing a fugitive two-dimensional source. It is an emission release on one plane. For example, an elongated roof vent or a wastewater holding pond.

Required parameters description: Enter the coordinates of the southwest corner of the release. The figure below shows examples of how fugitive area source rectangles are created. The red dashed lines represent the coordinate plane with north towards the top. The purple SW points to the southwest corner to show correct location of fugitive coordinates. The L and W represent fugitive length and width. The rotation of each angle is also shown. You may wish to review your coordinates and fugitive areas in a GIS program or Google Earth to verify the accuracy.



*Figure created by ICF International.

Table 1. Population of Fugitive Parameters

Fugitive Parameter	Fugitive Vent Source	Fugitive Three-Dimensional Source	Fugitive Two-Dimensional Source	Fugitive Area Source
Fugitive Length (ft)	NA	NA – only a single side required	NA	Required >0
Fugitive Width (ft)	NA	Required >0	Required >0	Required >0
Fugitive Angle (Degrees)	NA	NA	NA	Required; between 0 and 90, inclusive
Stack Diameter (ft)	0.003 (Default)	NA	NA	NA
Exit Gas Velocity (ft/sec)	0.0003 (Default)	NA	NA	NA
Exit Gas Flow Rate (cu ft/sec)	0 (Default)	NA	NA	NA
Stack Height (ft)	Required >0	Required >0; Top of Three-Dimensional Source	Release height required >0	Required >0
Exit Gas Temperature (F)	Required >50	NA	NA	NA
Latitude (decimal degrees), Longitude (decimal degrees)	Required	Required, center of source footprint	Two sets of lat/long for the midpoints of opposing sides of source (Fugitive 2D Endpoint 1 and Fugitive 2D Endpoint 2)	Required, southwest corner of source
Examples	Single roof vent/opening/window for building fugitives	Entire building with multiple release point on walls and/or roof, outdoor storage pile	Waste water holding pond, building with elongated roof vent, haul road	Waste water holding pond, building with elongated roof vent, haul road