

# Chapter 1 General Information

## Introduction

As part of national and state efforts to protect human health and the environment, federal and state laws require the State of Texas to develop an annual emissions inventory (EI) of the air pollutants.

The Texas Commission on Environmental Quality is authorized to request emissions inventories and supporting documentation under the provisions of:

- Federal Clean Air Act.
- Texas Clean Air Act, Texas Health and Safety Code Section 382.014.
- Title 30 of the Texas Administrative Code (30 TAC), Section 101.10—the Emissions Inventory Requirements.

To meet the reporting requirements of these regulations, the regulated community will be working with the Emissions Assessment Section (EAS) of the TCEQ's Office of Air.

The TCEQ uses the EI to plan pollution control programs, promote compliance with laws and regulations, conduct permit reviews, develop airshed modeling and rulemaking activities, and supply required data to the U.S. Environmental Protection Agency (EPA).

## ***What This Publication Contains***

This chapter discusses 30 TAC Section 101.10 and what constitutes a complete EI submission. This information should help owners or operators of regulated entities determine whether an EI is required for a site and correctly prepare a complete EI submission by the due date. A brief discussion of the EAS's confidentiality policy is included in this chapter. The chapter concludes with a brief discussion of the two options available for submitting an EI through the STEERS-AEIR Web-EI System.

Chapter 2 explains the EI process and its key concepts to those unfamiliar with the EI.

Chapter 3 discusses correct EI structure (representing processes in the EI), gives examples for some common industrial processes, and supplies guidance for modifying existing representations.

Chapter 4 presents information about requested emissions data; using acceptable actual emissions determination methodologies; speciating emissions; and correctly reporting actual annual emissions, ozone season emissions, and emissions due to emissions events and scheduled maintenance, startup, and shutdown activities.

Chapter 5 offers an example of creating an initial EI.

Chapter 6 contains instructions for updating an EI.

Chapter 7 includes instructions on revising EI data, requesting EI data, and verifying site coordinate data.

The appendixes contain:

- Technical supplements intended to help determine emissions from certain sources.
- Sample letters that may help address some common situations.
- EPA and TCEQ resources to assist in completing or updating an EI.

Also included in this publication are a (1) checklist to help determine if all necessary supporting documentation is included with the EI, (2) glossary, (3) list of abbreviations, and (4) information on contacting the EAS.

*Note:* Detailed EI reporting instructions and frequently asked questions are available for download at <[www.tceq.texas.gov/goto/ieas](http://www.tceq.texas.gov/goto/ieas)>. Any EI tools referred to in this publication can be found on that webpage.

## **About 30 TAC Section 101.10**

This section includes a discussion of the EI process as a self-reporting process, the special inventory request, location of 30 TAC Section 101.10, and a table depicting the state's special inventory areas.

A map and summary table entitled "Emissions Inventory Reporting Requirements" that identifies EI reporting thresholds, ozone nonattainment and ozone-precursor special inventory reporting requirements can be found on the EAS webpage, <[www.tceq.texas.gov/goto/ieas](http://www.tceq.texas.gov/goto/ieas)>. The map and associated table are intended to clarify reporting requirements and do not supersede or replace requirements of federal or state law, including 30 TAC Section 101.10. It is the responsibility of the owner or operator of a regulated entity to read and understand all federal and state laws and regulations applicable to the regulated entity, including 30 TAC Section 101.10, the Emissions Inventory Requirements. The requirements of 30 TAC Section 101.10 can be found at

<[http://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&ti=30&ch=101&rl=10](http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&ti=30&ch=101&rl=10)>.

### ***A Self-Reporting Process***

The TCEQ requires sites that meet the reporting requirements of 30 TAC Section 101.10 to submit emissions inventories through the STEERS-AEIR Web-EI System. Please contact the EAS immediately if you have concerns regarding the online reporting requirement.

The EI process requires self-reporting. The owner or operator of the regulated entity is responsible for determining whether 30 TAC Section 101.10 applies to the site. If so, or if the TCEQ requests a special inventory, the owner or operator must submit an EI by March 31 of the calendar year immediately after the reporting year or on the due date as directed in writing by the agency. Failure to do so may result in the agency initiating an enforcement action against the owner or operator. Responsibility for submitting the EI resides with the owner or operator of the site on March 31 of the calendar year immediately after the reporting year or on the due date as directed in writing by the agency.

**Compliance with 30 TAC Section 101.10 is required even if you do not receive a courtesy reminder notification from the TCEQ.**

Requirements for submitting an EI may vary based on the site location and on the type and quantity of emissions released. This publication will help in determining whether the owner or operator must submit an EI and, if so, how to determine emissions and how to prepare and submit the required information.

The TCEQ requires emissions inventories to be submitted online through its STEERS-AEIR Web-EI system, either by interactive Web entry or text-file upload. For more information on how to submit online, please see the EAS webpage, <[www.tceq.texas.gov/goto/ieas](http://www.tceq.texas.gov/goto/ieas)>.

***Nonattainment Designations***

For the official list and boundaries of nonattainment areas, see Title 40, Code of Federal Regulations, Section 81.344 and pertinent *Federal Register* notices.

Beginning with the 2018 reporting year, Bexar County is designated as nonattainment under the 2015 ozone standard.

The map entitled “Emissions Inventory Reporting Requirements” identifies the EI reporting thresholds, ozone nonattainment areas, and ozone-precursor special inventory counties.

A link to this map can be found on the EAS webpage, <[www.tceq.texas.gov/goto/ieas](http://www.tceq.texas.gov/goto/ieas)>. The map and its associated table are intended as guidance and do not supersede or replace any state or federal law or regulation.

***Special Inventory Request***

The TCEQ, under the “special emissions inventory” provisions of 30 TAC Subsection 101.10(b)(3), has the authority to request emissions inventories to be completed and submitted. If a regulated entity meets the thresholds explained below and the TCEQ has notified the regulated entity with a formal written request, the owner or operator must complete and submit an EI by the required date.

**Requirements for Sources that Emit Ozone Precursors in Specified Counties**

The TCEQ is conducting a special EI for sources that emit ozone precursors in specified counties under the authority of 30 TAC 101.10(b)(3). Regulated entities that are located in a specified county and had actual annual emissions of either 10 tons per year (tpy) of volatile organic compounds or 25 tpy of nitrogen oxides during normal operations must submit a complete EI by the required due date, if the TCEQ has notified the regulated entity with a formal written request.

*Note:* Regulated entities that meet any of the other applicability requirements of 30 TAC Section 101.10 are required to submit an EI regardless of whether the TCEQ has made a formal written request.

**Ozone-Precursor Special Inventory Counties are:**

Bastrop

Bell

Caldwell

Comal

El Paso

Gregg

Guadalupe

Hardin

Harrison

Hays

Henderson

Hood

Jefferson

McLennan

Nueces

Orange

Rusk

San Patricio

Smith

Travis

Upshur

Victoria

Williamson

Wilson

## ***Emissions Inventory Reporting Requirements Map***

The map is located on the EAS webpage, <[www.tceq.texas.gov/goto/ieas](http://www.tceq.texas.gov/goto/ieas)>. The map and associated table are intended to clarify reporting requirements and do not supersede or replace requirements of federal or state law, including 30 TAC Section 101.10.

## **Due Date**

The EI is due on March 31 of the calendar year immediately after the reporting year unless otherwise specified in writing by the TCEQ.

Emissions inventories that are submitted through the STEERS-AEIR Web-EI system will not be considered late as long as the file is validated by the due date. After submitting the EI, the user will receive two emails. The first email confirms that the data have been placed in the queue for validation processing. The second email will state whether the submission passed or failed validation. If validation succeeded, the TCEQ will consider the EI “received” in accordance with 30 TAC Section 101.10. If validation failed, the user must correct the errors and submit the data again. The EI will not be assigned a received date until the EI passes validation.

Sample calculations and supporting documentation are part of a complete EI submission and must be either attached to the STEERS-AEIR Web-EI system (for non-confidential data) or postmarked (for confidential data) by the EI due date.

Inapplicability and Insignificant Change notification letters can be submitted on paper and must be postmarked by the due date.

The owner or operator on the date that the inventory is due is responsible for submitting the EI.

Compliance with 30 TAC Section 101.10 is required even if you do not receive a courtesy reminder notification from the TCEQ.

*Note:* New owners or operators should ensure that they obtain all appropriate records necessary to accurately represent emissions for the full EI reporting period. To document compliance, the TCEQ recommends that the owner or operator use a delivery method that confirms receipt by the agency and keep a record of the confirmation on file.

*Note:* If the due date falls on a weekend or legal holiday, the EI must be validated for STEERS-AEIR Web-EI system submissions or postmarked for notification letters or paper forms by the following business day per 30 TAC Section 1.7.

## **What Constitutes a Complete Submission?**

A complete EI submission includes a complete and updated EI; a signed certification statement; sample calculations representative of the current processes at the site; summary test results, if stack-test data are used to determine emissions; either summary Relative Accuracy Test Audit (RATA) sheets, or, if a RATA is not required by applicable permit conditions or regulations, documentation from a similar system

audit (e.g., cylinder gas audit) for CEMS or predictive emissions-monitoring systems data that are used to determine emissions; and material throughput forms.

Submission through the STEERS-AEIR Web-EI system serves as the certification and constitutes a legally binding electronic signature by the legally responsible party. The STEERS-AEIR Web-EI submission process includes an option for an electronic Emissions Events Certification signature (if applicable).

The TCEQ requires annual EI updates, initial emissions inventories, and special emissions inventories to be submitted online through the STEERS-AEIR Web-EI system, using either the interactive Web entry or text-file upload. For additional requirements regarding EI submissions through STEERS-AEIR Web-EI system, refer to the sections later in this chapter and the information at the EAS webpage, <[www.tceq.texas.gov/goto/ieas](http://www.tceq.texas.gov/goto/ieas)>.

*Note:* Submission through the STEERS-AEIR system serves as the certification and constitutes a legally binding electronic signature and must be certified/submitted by a legally responsible company official. For Title V sites, submit authority should only be given to the Responsible Official or their Duly Authorized Representative. Under no circumstances should a consultant be given submit authority or certify an EI.

This section discusses various reporting situations in detail below. No matter what the reporting situation, compliance with 30 TAC Section 101.10 is required even if you do not receive a courtesy reminder notification from TCEQ.

### ***Requirements for a New Emissions Inventory or Updating an EI***

If a site has not previously submitted an EI and it meets the EI reporting requirements of 30 TAC Section 101.10 for a given calendar year (reporting year), then the owner or operator is required to submit an initial emissions inventory (IEI).

Any regulated entity that continues to meet the EI reporting requirements of 30 TAC Section 101.10 is required to submit an annual emissions inventory update (AEIU).

When submitting the IEI or AEIU through the STEERS-AEIR Web-EI system, the following information must also be submitted:

- A Core Data Form (TCEQ-10400). For an IEI, this form is necessary when the information is not yet in the Central Registry. For an AEIU, the form is necessary for sites updating ownership, name or location. If this form has already been submitted to the Central Registry, please include a copy with the EI.
- Supporting documentation and sample calculations representative of the current processes at the site.

The Core Data Form, supporting documentation and sample calculations may be submitted using the document-attachment function in the STEERS-AEIR Web-EI system. Supporting documentation and sample calculations that are considered confidential must be mailed to the EAS. Consult the section entitled “Confidential Data and Other Information” below for instructions on submitting supporting documentation that is considered confidential.

When sending electronic files, ensure that the data are self-contained and not linked to external data sources unavailable to the TCEQ. For electronic files, the preferred formats are Microsoft Word, Excel, Access, and Adobe PDF.

*Note:* The EAS will no longer accept emissions inventories submitted by mail on an external medium, such as CD. All EIs must be submitted through the STEERS-AEIR Web-EI system. For more information on how to submit online, please see the EAS webpage, <[www.tceq.texas.gov/goto/ieas](http://www.tceq.texas.gov/goto/ieas)>, or contact the EAS.

### ***Special Requirements for a Site that Experienced Insignificant Changes in Emissions***

Submission of an updated EI is not required if the total actual annual emissions of VOCs, NO<sub>x</sub>, CO, SO<sub>2</sub>, Pb, and PM<sub>10</sub> are each within 5 percent or five tons, whichever is greater, of the most recent total actual annual emissions reported in the STARS database. Instead, the owner or operator may request that the EAS copy the most recent annual emissions to the current reporting year.

If the site experienced no emissions due to emissions events (EE) or scheduled maintenance, startup, or shutdown (SMSS) activities, then the owner or operator may formally request to have the EAS copy the most recent annual and ozone season emissions to the current reporting year by submitting the following by the EI due date:

- Letter similar to the Insignificant Change Notification letter in Appendix B.
- Account Information and Emissions Inventory Contact Information, page 2 of the EIQ.
- Criteria Emissions Totals and Site Quantifiable Event Totals, page 3 of the EIQ with the current year's totals entered.
- Signed Emissions Events and Legally Responsible Party certification statements, page 4 of the EIQ.

If the site experienced emissions due to EE or SMSS activities, the owner or operator may still submit a formal request to have the EAS copy the most recent annual and ozone season emission rates to the current year. However, the emissions from EE or SMSS activities are required to be updated by submitting the following by the EI due date:

- Letter similar to the Insignificant Change Notification letter in Appendix B.
- Account Information and Emissions Inventory Contact Information, page 2 of the EIQ.
- Criteria Emissions Totals and Site Quantifiable Event Totals, page 3 of the EIQ.
- For regulated entities reporting only SMSS emissions and not reporting emissions events, the signed Emissions Events certification statement, page 4 of the EIQ.
- Signed Legally Responsible Party certification statement, page 4 of the EIQ.
- All applicable pages relating to path emissions of the original EIQ updated to reflect emissions from EE or SMSS activities.

The hard-copy letter must be delivered to the EAS; currently there is no option to submit an Insignificant Change Notification letter through the STEERS-AEIR Web-EI

System. The necessary EIQ pages for the certification signatures, EI contact information and EE and SMSS activities can be printed and mailed. A printable version is available through the Integrated Web Reporting System at the Central Registry webpage, <[www.tceq.texas.gov/goto/cr-query](http://www.tceq.texas.gov/goto/cr-query)>. Instructions for navigating the Central Registry webpages and downloading an EIQ formatted for printing are available at <[www.tceq.texas.gov/goto/eiqprint](http://www.tceq.texas.gov/goto/eiqprint)>.

For this reporting situation, sample calculations and other supporting documentation may need to be supplied upon request.

*Note:* The Insignificant Change Notification letter and the certification statements must be signed by a legally responsible official of the company. These documents cannot be signed by a consultant.

### ***If a Site Does Not Meet the Requirements of 30 TAC Section 101.10 for the Current Emissions Inventory Year***

If an account receives an EI notification request letter and the owner or operator has determined that a site does not meet the EI reporting requirements of 30 TAC Section 101.10 for the current inventory year, but may meet applicability requirements in future years, then the site may submit an Inapplicability Notification letter (Appendix B) or similarly worded letter by the EI due date. In this reporting scenario, choose “Option 1” on the Inapplicability Notification letter in Appendix B to keep the site on the mailing list. The hard-copy letter must be delivered to the EAS; currently there is no option to submit an inapplicability notification through STEERS-AEIR Web-EI system.

*Note:* By submitting this letter or a similarly worded letter, the owner or operator of the regulated entity will remain on future EAS mailing lists and continue to receive a courtesy notification letter. The owner or operator must submit a letter to the agency for each reporting year that the site does not meet the reporting requirements. The letter must be signed by a legally responsible official of the company and may not be signed by a consultant or other employee or agent.

For this reporting situation, sample calculations and other supporting documentation may need to be supplied upon request.

### ***If a Site Does Not Expect to Meet the Applicability Requirements of 30 TAC Section 101.10 in Future Years***

If the owner or operator has determined that a site does not meet the applicability requirements of 30 TAC Section 101.10 for the current reporting year and does not expect to do so in future reporting years, then the owner or operator may formally request the site’s removal from the EAS mailing list by submitting an Inapplicability Notification letter (Appendix B) or a similarly worded letter by the EI due date. In this reporting scenario, choose “Option 2” on the Inapplicability Notification letter in Appendix B to remove the site from the mailing list. The hard-copy letter must be delivered to the EAS; currently there is no option to submit an Inapplicability Notification through STEERS-AEIR Web-EI system.

*Note:* The legally responsible official of the company—not a consultant or other employee or agent—must sign the letter requesting this action. The EAS only accepts written requests for removal from the mailing list.

AEIU requests are based primarily on the most recent EI as it appears in the STARS database. If the latest emissions reported in the STARS database exceed the rule applicability requirements, the TCEQ cannot remove the regulated entity from the annual EI mailing list unless the owner or operator submits a current updated EI and sample calculations. After the EI data are updated in STARS, the site can then be removed from the mailing list.

If the site is a major source as defined in 30 TAC Section 116.12 at any time during the calendar year, the site cannot be removed from the mailing list for that year. The owner or operator must submit an EI by the applicable due date.

If the site meets any of the EI reporting requirements of 30 TAC Section 101.10 at any time during the calendar year, the owner or operator shall submit an annual emissions inventory for that calendar year.

*Note:* If a site has an active Title V permit due to either actual annual emissions or PTE levels, the site will remain on the mailing list.

For example, if the owner or operator of a site lowers the site's PTE levels below major-source thresholds by accepting federally enforceable limitations in a NSR permit issued in June of a calendar year, and actual annual emissions for that calendar year do not meet the reporting thresholds of 30 TAC Section 101.10, the owner or operator must submit an inventory for the entire calendar year since site PTE levels were at or above major-source levels for part of the year. For the subsequent calendar year, if the site did not meet reporting requirements of 30 TAC Section 101.10, the owner or operator can request to be removed from the mailing list.

**If a regulated entity that has been removed from the mailing list meets the EI reporting requirements of 30 TAC Section 101.10 at any time in the future, it is the responsibility of the owner or operator to submit an EI by the due date.**

### ***If a Site Is Permitted but Not Built***

If a site is permitted but not built, the requirement to submit an EI may not apply. However, an owner or operator may submit an IEI to establish structure. All emissions should be entered as zero. However, due to database requirements, seasonal percentages must total 100. For more information on reporting structure for sites that are “planned” or “under construction,” contact the EAS.

### ***Sample Calculations***

Per 30 TAC Subsection 101.10(c), sample calculations representative of the processes at the site must be submitted with the inventory and updated each year. Submit sample calculations showing determinations of emissions for each different type of process present in the EI, including enough data so that the determination results may be reasonably reproduced. The TCEQ cannot accept generic sample calculations, since they do not contain representative process data and do not demonstrate actual

emissions determinations. For similar reasons, summary spreadsheets listing emissions quantities are not considered sample calculations. Sample calculation templates giving minimum requirements for common source types are available on the EAS webpage.

Refer to the following guidelines when sending representative sample calculations:

- When several sources of the same type are present and a **single** calculation methodology was used to determine emissions:
  - Include calculations for the source with the highest emissions.
  - Include the current reporting year's process data for each source for which sample calculations are not supplied.
- When several sources of the same type are present but **different** calculation methodologies were used to determine emissions:
  - Include calculations for the source with the highest emissions for each calculation methodology.
  - Include typical process data for each source that uses a different calculation methodology and for which sample calculations are not supplied.

Examples of the current reporting year's process data include heat inputs and fuel types for combustion sources and chemical types and throughputs for storage tanks and loading sources.

*Note:* All printed supporting documentation should be submitted in 10 point or larger type unless specifically approved by EAS.

## Confidential Data and Other Information

The TCEQ holds data confidential as requested in accordance with agency policy and rules (see 30 TAC Section 1.5) unless the Texas Attorney General's Office rules or a court issues an opinion that the data are not protected by state law. If there are any special concerns about confidentiality, contact the EAS. Confidentiality claims do not justify withholding relevant information from the TCEQ.

The following information will be kept confidential (when clearly marked as confidential) in accordance with agency policy and rules (see 30 TAC Section 1.5) unless the Texas Attorney General's Office rules or a court issues an opinion that the data are not protected by state law:

- material data (as reported on material throughput forms)
- process flow diagrams
- process rates
- trade secrets (information that reveals secret processes or methods of manufacture or production)

**Information *not* considered confidential includes:**

- the EI report and data contained therein
- emission rates

- heat-input data
- emission point data
- type of emissions control equipment
- type of emitting equipment

Please do not submit confidential information through the STEERS-AEIR Web-EI system or by email to the EAS. Confidentiality cannot be ensured across multiple email servers. The STEERS-AEIR Web-EI system does not have a process to designate information as confidential. Confidential information should be submitted in hard copy, with each page clearly marked as confidential, or burned onto a CD marked as confidential.

## Web Reporting

Two options are available for updating EI data: an interactive Web entry system or text-file upload.

### ***Reporting an IEI or Submitting an AEIU through Interactive Web Entry***

IEIs and AEIUs can be submitted through interactive Web entry in STEERS, but please contact the EAS before submitting an IEI through STEERS. Interactive Web entry allows updating of the EI data on the company, site, contacts, facility, control devices, emission points, and path emissions through graphical-user-interface windows. The user may save the data in the work area in one or more work sessions until the Web entry for the entire updated EI is complete. Users who have historically submitted EI updates on paper may prefer this process. Built in data checks help prevent errors such as missing required information, data in the wrong format, or limited data that fall outside preset constraints.

After all required EI data is entered, the EI is submitted through STEERS. The system will run validation routines—typically overnight—and inform the user of the status (usually the following business day) by email. If no errors were encountered, the email will state, “AEIR validation process successful,” and the electronic submission will be considered complete. If errors were encountered, the email will state, “AEIR validation process failed,” and an error log will be attached with instructions for viewing the log through STEERS. The STEERS user must correct the errors and attempt validation again. The system will also supply the user with a copy of record of the transacted data.

*Note:* All STEERS-AEIR status emails are sent to users with “edit and submit” authority.

A date of receipt will be assigned to the file on the day the validation is successful. The TCEQ must receive a validated file by the EI due date. Otherwise, it will consider the AEIU submission delinquent. The sample calculations and supporting documentation must also be submitted by the EI due date.

The STEERS-AEIR Web-EI system features a document-attachment function that allows inclusion of non-confidential sample calculations and supporting documentation with

the Web-EI submission. The document-attachment function is the primary method for submitting sample calculations and supporting documentation. For electronic files submitted through STEERS, the preferred formats are Microsoft Word, Excel, Access and PDF.

Additional information on reporting through the STEERS-AEIR Web-EI system appears at the EAS webpage, <[www.tceq.texas.gov/goto/ieas](http://www.tceq.texas.gov/goto/ieas)>.

### ***Reporting an IEI or Submitting a Text File of the AEIU Online through STEERS***

IEI and AEIU can be updated and submitted through a text-file upload in STEERS. Please contact the EAS before submitting an IEI through STEERS. The text file must be in an approved electronic format, as outlined in the Electronic Emissions Inventory File Specification, available online at <[www.tceq.texas.gov/goto/starsguide](http://www.tceq.texas.gov/goto/starsguide)>.

Two steps are required to submit the AEIU text file. First, the text file must be loaded into the STEERS work area from the user's personal computer. After the AEIU text file is submitted to the STEERS work area, the TCEQ will respond via email, detailing whether the system accepted the AEIU text file. Second, the user will submit the file from the STEERS work area to the EAS. The system will run validation routines, typically overnight, and inform the user of the status, usually the following business day, by email. If no errors were encountered, the email will state "AEIR validation process successful" and the AEIU text-file submission is considered complete. If errors were encountered, the email will state "AEIR validation process failed." The system will also supply the user with a copy of record of the transacted data.

*Note:* All STEERS-AEIR status emails are sent to users with "edit and submit" authority.

If the AEIU text file does not pass the validation routine by the EI due date, the TCEQ will consider the AEIU submission delinquent. The sample calculations and supporting documentation must also be submitted by the EI due date for the submission to be considered complete.

Additional information on reporting through the STEERS-AEIR Web-EI system appears on the EAS webpage, <[www.tceq.texas.gov/goto/ieas](http://www.tceq.texas.gov/goto/ieas)>.