Emissions Inventory: Rule Applicability and What’s New?

Jill Dickey-Hull
Team Lead
Air Quality Division

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Overview

- 30 Texas Administrative Code (TAC) Section (§) 101.10
- Applicability
- Emissions inventory (EI) types
- EI Guidelines updates, clarifications, and reminders
- EI publications
EI rule organization

(a) Applicability
(b) Types of inventories
(c) Calculations
(d) Certifying statements
(e) Reporting requirements
(f) Enforcement
Applicability Requirements: Do You Need to Submit an EI?

- Major stationary source defined under 30 TAC §116.12, Nonattainment and Prevention of Significant Deterioration
  Definitions
  - The rule defines potential to emit (PTE) thresholds.
  - The major source classification changes based on the attainment status of county.

- Need to know:
  - **Actual emissions** and PTE thresholds for regulated pollutants
  - **Actual emissions** and PTE thresholds for hazardous air pollutants (HAPs)
  - Site location and attainment status of county
Applicability Requirements: Do You Need to Submit an EI? (cont.)

Statewide

- Any account that **emits** or has the **PTE** 100 tons per year (tpy) or more of any contaminant except for greenhouse gases

- Any account that **emits** or has the **PTE** 10 tons of any single or 25 tons of aggregate hazardous air pollutants as defined in Federal Clean Air Act, §112(a)(1)
Applicability Requirements: Do You Need to Submit an EI? (cont.)

Ozone Nonattainment

- Any account located in an ozone nonattainment area **emitting**:
  - 10 tpy or more of volatile organic compounds (VOC),
  - 25 tpy or more of nitrogen oxides (NO\textsubscript{x}), or
  - 100 tpy or more of any other contaminant subject to National Ambient Air Quality Standards.

- What about PTE requirements for accounts located in an ozone nonattainment area?
  It depends on the county. Let’s look at the next slide.
### Summary of Reporting Requirements in Tons per Year (TPY) for 30 TAC §101.10

Note: For ozone nonattainment areas, the more stringent or severe classification (where applicable) between the 1997 and 2008 ozone standards is used to determine reporting requirements for ozone precursor potential emissions.

<table>
<thead>
<tr>
<th>County</th>
<th>Volatile Organic Compounds (VOC)</th>
<th>Nitrogen Oxides (NO\textsubscript{x})</th>
<th>Other</th>
<th>Individual HAPs</th>
<th>Aggregate HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>PTE</td>
<td>Actual</td>
<td>PTE</td>
<td>Actual</td>
</tr>
<tr>
<td>Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, Waller</td>
<td>SEVERE/OZONE</td>
<td>10</td>
<td>25</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant,</td>
<td>SERIOUS/OZONE</td>
<td>10</td>
<td>50</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Wise</td>
<td>MODERATE/OZONE</td>
<td>10</td>
<td>100</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>All Other Counties</td>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Special Inventory

- Any source of emissions subject to special inventories under 30 TAC §101.10(b)(3)

- Will review the current special inventories and the requirements later in the presentation
Applicability Requirements: Example

• Important: If an account (site) meets any of the EI reporting requirements at any time during the calendar year, an updated EI must be submitted.

• Remember, regardless of authorization type or status, this includes:
  – actual emissions and/or
  – potential emissions.

• Most common scenario:

  An operational major source voided the site's applicable permits in June 2015.
  ▪ The site met 30 TAC §101.10 PTE reporting thresholds.
  ▪ The site must submit a 2015 EI.
  ▪ The 2016 EI may not be required if none of the 30 TAC §101.10 reporting requirements are met.
Applicability Summary: What Does This Mean to You?

- What is the attainment status of the county where the site is located?

- What are the site’s actual emissions for regulated pollutants and HAPs (single and aggregate)?

- What are the site’s PTE limits for regulated pollutants and HAPs (single and aggregate)?
EI Types

- Initial
- Annual update
- Special
• Sites that have never submitted an inventory
• Data collected using the Web-based system
• *2015 Emissions Inventory Guidelines* (RG-360/15)
  – Chapter 2: "Creating an Initial Emissions Inventory"
  – Chapter 5: "Example Initial Emissions Inventory"
• Due by March 31st
Annual EI Update

- Required every year the reporting criteria are met
- Guidance for annual update
  - *2015 Emissions Inventory Guidelines*, Chapter 6: "Updating an Emissions Inventory Questionnaire"
  - *2015 Emissions Inventory Guidelines*: "Emissions Inventory Checklist"
- Due March 31st unless otherwise directed in writing by the Texas Commission on Environmental Quality (TCEQ)
Special EI

- Regulated entities that receive a written request from the TCEQ
  Respond to the letter even if site does not meet reporting thresholds.

- Current special emissions inventories
  Lead
  - Any regulated entity that emits $\geq 0.5$ tpy of lead emissions during normal operations.
  - Any regulated entity that has the PTE 5 tpy or more of lead emissions.
### Current special emissions inventories (cont.)

#### Ozone precursors

Regulated entities that had at least 10 tpy of VOC or 25 tpy of NO\textsubscript{X} emissions during normal operation and that are located in one of the counties specified below.

<table>
<thead>
<tr>
<th>Bastrop</th>
<th>Gregg</th>
<th>Henderson</th>
<th>Orange</th>
<th>Upshur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bexar</td>
<td>Guadalupe</td>
<td>Hood</td>
<td>Rusk</td>
<td>Victoria</td>
</tr>
<tr>
<td>Caldwell</td>
<td>Hardin</td>
<td>Jefferson</td>
<td>San Patricio</td>
<td>Williamson</td>
</tr>
<tr>
<td>Comal</td>
<td>Harrison</td>
<td>McLennan</td>
<td>Smith</td>
<td>Wilson</td>
</tr>
<tr>
<td>El Paso</td>
<td>Hays</td>
<td>Nueces</td>
<td>Travis</td>
<td></td>
</tr>
</tbody>
</table>
Inapplicability Notification Letter

• If you receive a notification letter from the TCEQ but the site does not meet any of the reporting thresholds in 30 TAC §101.10 or special inventory requirements, a certifying letter instead of a full EI update is acceptable.

• The sample letter provided in the 2015 Emissions Inventory Guidelines, Appendix B is recommended.
  Similarly worded letter can be provided.

• No option currently to submit through the Web.

• The sample letter provides two options:
  – remain on the mailing list or
  – removal from the mailing list.
To be removed from the mailing list, the following are **required**:

- The most recently reported emissions in the State of Texas Air Reporting System (STARS) database cannot exceed the applicability requirements. Must submit a current updated EI and calculations if the last reported emissions in STARS exceed the applicability requirements.

- The site does not meet any special inventory reporting requirements.
Insignificant Change Notification Letter

If changes in emissions for each pollutant do not exceed 5% or 5 tpy, whichever is greater, a letter can be submitted.

- The changes can be either increases or decreases.
- The 5% or 5 tpy criteria are based upon 2015 emissions compared to the most recently submitted EI entered into the STARS database.
- If a letter is submitted several years in a row, the EI may need to be updated if the change for a pollutant exceeded 5% or 5 tpy from last submitted EI.
- The emissions from the last submitted EI are copied to current year.
- Sample letter provided in *2015 Emissions Inventory Guidelines*, Appendix B.
In addition to the Insignificant Change Notification Letter, the following must be provided:

- account information and EI contact information on page 2 of the EI;
- criteria emissions totals and site quantifiable event totals on page 3 of the EI;
- signature of the legally responsible party on page 4 of the EI; and
- updates to information about emissions events and/or scheduled maintenance, startup, and shutdown activities (EE/SMSS).

  - If the site experienced no EE, then the EE certification statement on page 4 of the EI must be signed.
  - If the site experienced EE, then provide EE updates on the applicable paths emissions pages of the EI.
Who’s Responsible and When Is the EI Due?

- The owner or operator of the site at the time the inventory is due is responsible for submitting the EI.
- The due date for sites that submitted an EI the previous year is March 31st unless otherwise directed in writing by the TCEQ.
- The due date for sites that did not submit an EI the previous year but are applicable to reporting requirements is March 31st.
Revising EI Data

When is a revision necessary?

- To correct EI data previously reported in error

- Do not use new methodology or data retroactively

- For example, if NO\textsubscript{X} emissions from an engine were stack tested in calendar year 2016; those test results can be used starting with the 2016 EI. The stack test results cannot be used to report NO\textsubscript{X} emissions in the 2015 EI, or revise any EI submitted for a year prior to 2016
<table>
<thead>
<tr>
<th>Inventory Year Revision Requested</th>
<th>Can the revisions be entered in STARS?*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Yes</td>
</tr>
<tr>
<td>2014</td>
<td>Yes</td>
</tr>
<tr>
<td>2013</td>
<td>Case-by-case</td>
</tr>
<tr>
<td>2012</td>
<td>Case-by-case</td>
</tr>
<tr>
<td>2011</td>
<td>Case-by-case</td>
</tr>
<tr>
<td>2010 and prior</td>
<td>No. Filed only and noted in the STARS tracking system.</td>
</tr>
</tbody>
</table>

*Subject to TCEQ review and approval*
Revising EI Data (cont.)

• What should be included with the emissions inventory revision request?
  – Signed cover letter describing the nature and reason for the revisions
  – Revised applicable EI pages
  – Updated criteria emissions total for the site (found on page 3 of the EI)
  – Detailed calculations and supporting documentation for the revised emissions

• All company-initiated revisions requests are subject to the TCEQ's review and approval.

• Revisions are processed as time permits.
  Typically after all EIs for the current reporting year have been processed
Using EI Data

- Required reporting to the national emissions inventory
- Auditing for air emissions fee
  The fees group compares the EI to the fee basis form.
- Public information and internal data requests
- State implementation plan development
- Photochemical and dispersion modeling
- Emissions trends
- Emissions reduction credits
EI Guidance Updates, Clarifications and Reminders

Emissions inventories must be submitted using the State of Texas Electronic Emissions Reporting System (STEERS), Annual Emissions Inventory Reporting (AEIR) system

- New Path Deactivation Form available
  - Cannot deactivate paths through the STEERS-AEIR system
  - Complete the form and attach as part of the supporting documentation
- Paper submissions are only allowed on a case-by-case basis and prior approval must be obtained
Chapters 1 and 2

- **Clarification:** The Insignificant Change Letter language 5% or 5 tpy, whichever is greater, pertains to each pollutant.

- **Reminder:** Submit non-confidential sample calculations and supporting documentation using the document attachment function in STEERS-AEIR system.

- **Reminder:** Do NOT submit confidential sample calculations and supporting documentation by email or using the STEERS-AEIR document attachment function.

  Please appropriately label each page as confidential and print or burn onto a CD labeled confidential and mail to the EAS.
Chapter 4

- VOC speciation requirement clarification
  90% VOC speciation required for non-combustion sources, undestroyed VOC from flares, and other combustion abatement devices.

- Use the correct determination methodology when half the detection limit is used to determine emissions.

- Contact the EAS when averaging stack test for HAPs from power utility sources.

- **Clarification** that the determination methodology for process simulators that use engineering principles should be coded as “S” for scientifically calculated.
EI Guidance Updates, Clarifications and Reminders (cont.)

- Appendix A, Technical Supplement 4: Flares
  Flare emission factors clarification

- Appendix A, Technical Supplements 1: Internal and External combustion
  If unit burns only pipeline grade sweet natural gas, AP-42 and vendor data are acceptable to determine sulfur dioxide emissions (if a higher order method is not available)

- Appendix B, Inapplicability Letter
  Removed requirement for annual reporting of the number of EE and SMSS activities and emissions for sites that are not required to submit an EI
EI Publications

• EI guidelines book (RG-360/15) provides:
  – Step-by-step instructions for completing an EI
  – Yearly updates with current reporting requirements
  – Technical supplements for common emissions sources

• Web-based EI reporting instructions
  http://www.tceq.state.tx.us/airquality/point-source-ei/psei.html

• All EI documents available at:
  – www.tceq.texas.gov/goto/ieas
  – Call TCEQ publication for your one free hard copy of the 2015 EI Guidelines: (512) 239-0028
Contact Information

Jill Dickey-Hull:
(512) 239-5912
jill.dickey@tceq.texas.gov

Emissions Assessment Section Help Line:
(512) 239-1773
psinvent@tceq.texas.gov

Point Source Emissions Inventory Web site:
http://www.tceq.texas.gov/airquality/point-source-ei/psei.html