

# Emissions Events: You had an upset. Now what?

TCEQ Environmental Trade Fair, June 4, 2025

## **Presentation Outline:**

- Overview of Emissions Event Program
- Emissions Event Program Updates
- Affirmative Defense Tips
- Emissions Event FAQ
- Time for questions





## Overview of Emissions Event Program





# **Emissions Event Review Section (EERS)**

- Effective September 1, 2022
- Centralized review of statewide EEs
- 3 teams based on industry sector
- Technical Team
- Objectives: Consistency, Certainty, Clarity



# **EERS Org Chart**



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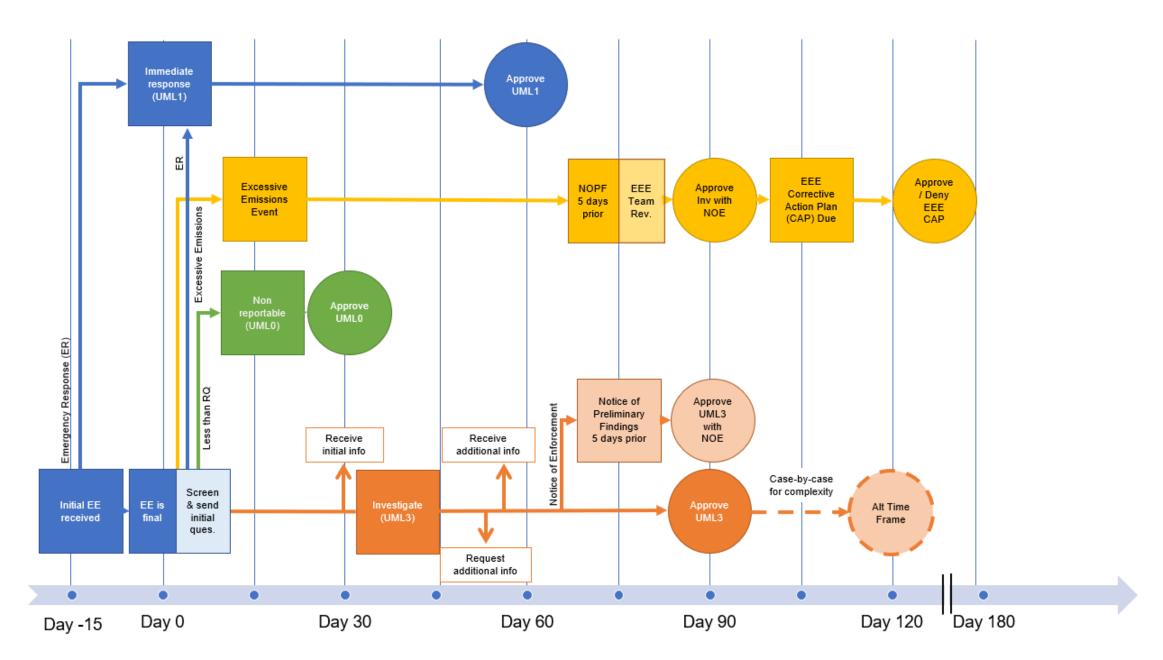
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### **Emissions Event Review Process**



### **Enforcement Process**

- Meets Affirmative Defense
  - No violations or further action required
- Notice of Violation (NOV)
  - Violations cited
  - Notice of Preliminary Findings (NOPF)
  - Submit resolution documentation within 30 days of NOV Letter
- Notice of Enforcement (NOE)
  - Violations cited
  - NOPF
  - NOE Letter
  - Referral to Enforcement Division



# **Enforcement Process (cont.)**

- Enforcement Division receives referral
- Enforcement Coordinator (EC) assigned to the case
- EC screens and contacts the Respondent
- Administrative Order prepared and issued to Respondent
- Administrative Order:
  - Legal agreement between the Respondent and Agency
  - Identifies violations associated to NOE
  - Recognizes any corrective actions that may have been completed
  - Assesses administrative penalties for violations associated to NOE
  - Includes Ordering Provisions (Technical Requirements) to correct the violations



### **Enforcement Process**

- Types of Administrative Orders:
  - 1660 Order
  - Findings Order
- Settlement Paths:
  - Expedited settlement with Enforcement Division
  - Non-expedited settlement with Litigation Division
  - Referral to the Office of Attorney General



### **Emissions Events or "EEs"**

EE - "Any <u>upset</u> event or unscheduled maintenance, startup, or shutdown activity, from a common cause that results in <u>unauthorized</u> <u>emissions</u> of air contaminants from one or more emissions points at a <u>regulated entity</u>"



# Not Sure What an Upset Is?

Upset - "An unplanned and unavoidable breakdown or excursion of a process or operation that results in unauthorized emissions"



## What are Unauthorized Emissions?

Unauthorized emissions - "Emissions of any air contaminant except water, nitrogen, ethane, noble gases, hydrogen, and oxygen that exceed any air emission limitation in a permit, rule, or order of the commission or as authorized by Texas Health and Safety Code, §382.0518(g)."



# Regulated Entity

- All regulated units, facilities, equipment, structures, or sources at one location that are owned or operated by the same person.
- Includes any property identified in a permit or used in conjunction with the regulated activity at the same location.
- Owners or operators of pipelines, gathering lines, and flowlines may be treated as a single regulated entity for regulation of emissions events.



## Reportable vs. Not

 Reportable EE - "Any emissions event that in any 24-hr. period, results in an unauthorized emission from any emissions point equal to or in excess of the reportable quantity (RQ) as defined in [30 Texas Administrative Code Chapter101]"



## Non-reportable Emissions Events

"Any emissions event that in any 24-hour period does not result in an unauthorized emission from any emissions point equal to or in excess of the reportable quantity as defined in this section."

EEs that are not reportable are referred to as "nonreportable" or "recordable." (These terms are synonyms.)



# Reportable Quantity (RQ)

- Limit for which unauthorized emissions from any emissions point becomes reportable.
- Listed in 40 Code of Federal Regulations (CFR) Part 302, Table 302.4, the column "final RQ";
- Listed in 40 CFR Part 355, Appendix A, the column "Reportable Quantity"; or
- Texas specific listed compounds: 30 Texas Administrative Code (TAC) §101.1(89)(A)(i)(III)-Definitions;
- If not listed use a 100 pound default;
- For greenhouse gases, individually or collectively, there is no reportable quantity, except for the specific individual air contaminant compounds listed in the rules above;
- For mixtures, RQ of natural gas and air emissions from crude oil, use 5,000 pounds of natural gas, or 100 pounds of hydrogen sulfide, whichever occurs first.



# **Opacity**

- The degree to which an emission of air contaminants obstructs the transmission of light expressed as the percentage of light obstructed as measured by an optical instrument or trained observer.
- Opacity is the only RQ applicable to boilers and combustion turbines.
- An Excess Opacity Event (EOE) occurs when an opacity reading is equal to or exceeds 15 additional percentage points above an applicable opacity limit, averaged over a sixminute period.
- Don't forget the 30 TAC Chapter 111 rules.

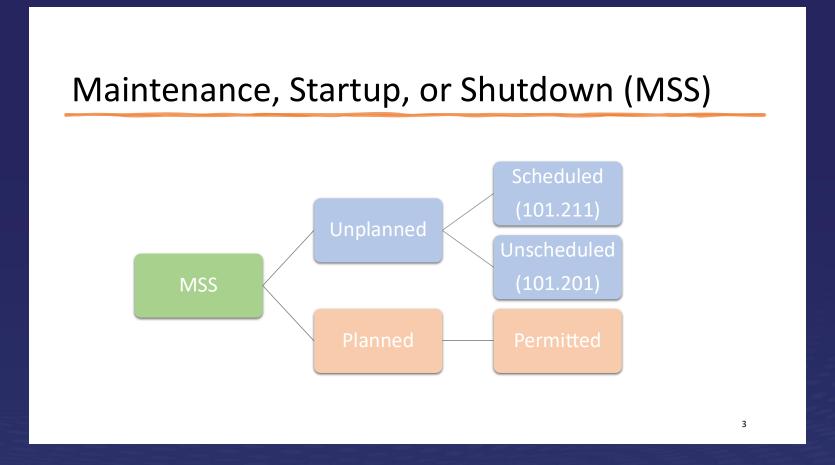


# Maintenance, Startup, or Shutdown Activity

- Planned=Permitted
- Unplanned (expected to exceed an RQ): a startup or shutdown that was not part of normal or routine facility operations or maintenance that is sudden and unforeseeable that requires immediate corrective action to minimize or avoid an upset or malfunction.
- Scheduled (expected to exceed an RQ): prior notice required and in the final report the unauthorized emissions do not exceed the emissions estimate submitted in the initial notification by more than an RQ.
- Scheduled (not expected to exceed and RQ and do not): record as required by 30 TAC §101.211 and opacity is recorded and reported as required by 30 TAC §101.211.
- Unscheduled: MSS activity that complies with the requirements of 30 TAC §101.201 and demonstrates reporting under 30 TAC §101.211 was not reasonably possible; notification required within 24 hours of discovery (similar to EEs).

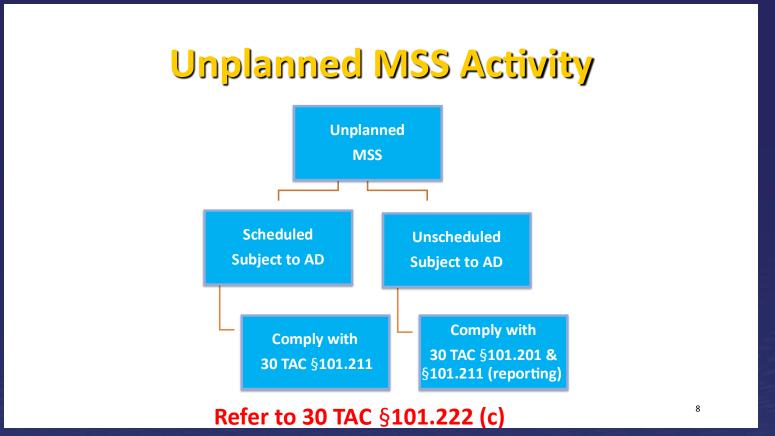


# Maintenance, Startup, or Shutdown Activity (cont.)





# Maintenance, Startup, or Shutdown Activity (cont.)





### What makes an event "excessive"?

- EEE Criteria 30 TAC §101.222(a)(1)-(6):
  - (1) the frequency of the facility's emissions events;
  - (2) the cause of the emissions event;
  - (3) the quantity and impact on human health or the environment of the emissions event;
  - (4) the duration of the emissions event;
  - (5) the percentage of a facility's total annual operating hours during which emissions events occur;
  - (6) the need for startup, shutdown, and maintenance activities.



### **EEE Process**

- If found to be excessive, the company will receive a Notice of Preliminary Findings (NOPF) letter via email
- The company at this point can provide any additional information or request a meeting to discuss the EEE determination.
- A Corrective Action Plan (CAP) letter will then go out. The company must file a letter of intent to permit or provide a CAP which must:
  - Identify the cause of the incident
  - Specify control devices or other measures to prevent or minimize similar events
  - Identify operation changes that will be taken to prevent or minimize similar events
  - Specify time frame in which the changes will be implemented, which is enforceable

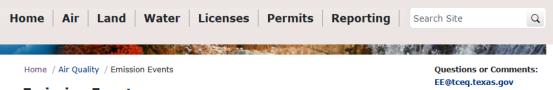




Emissions Event Program Updates



## **Emissions Event Webpages**



#### **Emission Events**

**Emission Event Forms and Reports** 

#### **Air Emissions and Maintenance Events**

Air Emissions Events and Maintenance, Startup, and Shutdown Activities regulated under 30 TAC Chapter 101

Certain incidents that result in unauthorized emissions are required to be recorded or reported to TCEQ. The types of included events are emissions events; scheduled maintenance, startup, and shutdown (MSS) activities; and excess opacity events as defined in 30 TAC Chapter 101 Subchapter F. With the goals of efficiency and consistency, the TCEQ created the Emissions Event Review Section on September 01, 2022, which was tasked with reviewing and investigating all air emissions and maintenance events reported in the State of Texas.

For more information about STEERS, reporting requirements, or to search for incidents reported to TCEQ, you can visit **Reports of Air Emissions Events**.

How do I report an incident/event?	^
What is Affirmative Defense (AD)?	^
How does TCEQ investigate my incident/event?	^
What is an excessive emissions event (EEE)?	^
Forms	^
Rules and Guidance	^
Did You Know? Answers to common questions	^

Home / Air Quality / Emission Events / Reports of Air Emissions Events

Questions or Comments: EE@tceq.texas.gov

#### Reports of Air Emissions Events

View air emissions incidents reported to TCEQ under 30 TAC 101.201 and 30 TAC 101.211.

TCEQ receives reports on air emission events under 30 TAC 101.201 [7] and 30 TAC 101.211 [7]:

Air Emission Event Report Database.

Users can search the database by different parameters including incident number, regulated entity number, date range, county, and more criteria. Search results include, but are not limited to, where the incident was reported, compounds released and quantities, and the event duration. The search results and each incident detail report can be exported to an Excel spreadsheet.

Please note that the RSS Feed referenced on the database search is updated hourly. To access it, you will need to have an RSS Reader installed on your device. Kindly be aware that TCEQ staff do not provide support for RSS Feed issues.

#### State of Texas Environmental Electronic Reporting System (STEERS)

STEERS notification and reporting is not required for small businesses that meet the small business definition in Texas Water Code Section 5.135(g)(2). Small businesses shall provide notifications and reporting by any viable means that meet the time frames required by 30 TAC Chapter 101. Small businesses should email the notification or report to **EE@tceq.texas.gov**.

In the event that STEERS is unavailable due to mechanical failures or scheduled maintenance or you are a small business, required reporting under 30 Texas Administrative Code (TAC) Chapter 101 (e.g. emissions event, opacity event, and maintenance, startup, & shutdown activity) may be completed by emailing the form below to EE@tceq.texas.gov. Please remember that if you are not a small business, when you submit the form via email that allows you to meet the reporting deadline. Once STEERS is available you must submit the required notification or report via STEERS.

If you encounter issues with the STEERS operating system, your user account or password, or have questions about scheduled system maintenance:

- · Call the STEERS Help Line at 512-239-6925 or
- Email steers@tceq.texas.gov for assistance.

You can also consult the STEERS Air Emissions and Maintenance Events (AEME) Help page for assistance with entering events into STEERS.

- Air Emissions and Maintenance Events Report Form in pdf format
- W Air Emissions and Maintenance Events Report Form in Word format
- A Follow these instructions for completing the AEME Report Form

For more detailed information on emissions events, affirmative defense claims, and frequently asked questions, you can visit Air Emissions and Maintenance Events.

## **Enforcement Initiation Criteria- A**

### A12.i(1)

A violation associated with a non-excessive emissions event that does not meet the demonstration criteria of 30 TAC 101.222(b) or (c) and the total emissions are equal to or greater than two times the reportable quantity for any pollutant OR a release of vinyl chloride of 100 lbs. or more per incident OR a release of sulfur dioxide of 10,000 lbs. or more per incident in areas that are in attainment of the SO2 NAAQS standard.

See B18.g(13) for emissions events where the total emissions are less than two times the reportable quantity; vinyl chloride releases under 100 lbs.; or sulfur dioxide less than 10,000 lbs. in areas that are in attainment of the SO2 NAAQS standard.



### **Enforcement Initiation Criteria-B**

B18.g(13)

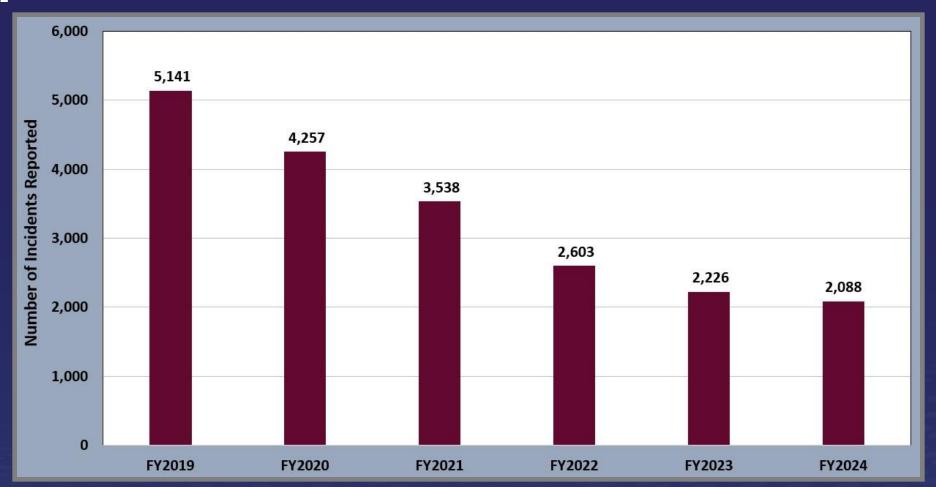
A violation associated with a non-excessive emissions event that does not meet the demonstration criteria of 30 TAC 101.222(b) or (c) and the total emissions are less than two times the reportable quantity for any pollutant OR a release of vinyl chloride less than 100 lbs. per incident OR a release of sulfur dioxide less than 10,000 lbs. per incident in areas that are in attainment of the SO2 NAAQS standard.

A violation associated with an excess opacity event that does not meet the criteria in 30 TAC 101.222(d) or (e).

See A12.i(1) for emissions events where the total emissions are equal to or greater than two times a reportable quantity, vinyl chloride releases greater than 100 lbs., or sulfur dioxide greater than 10,000 lbs.

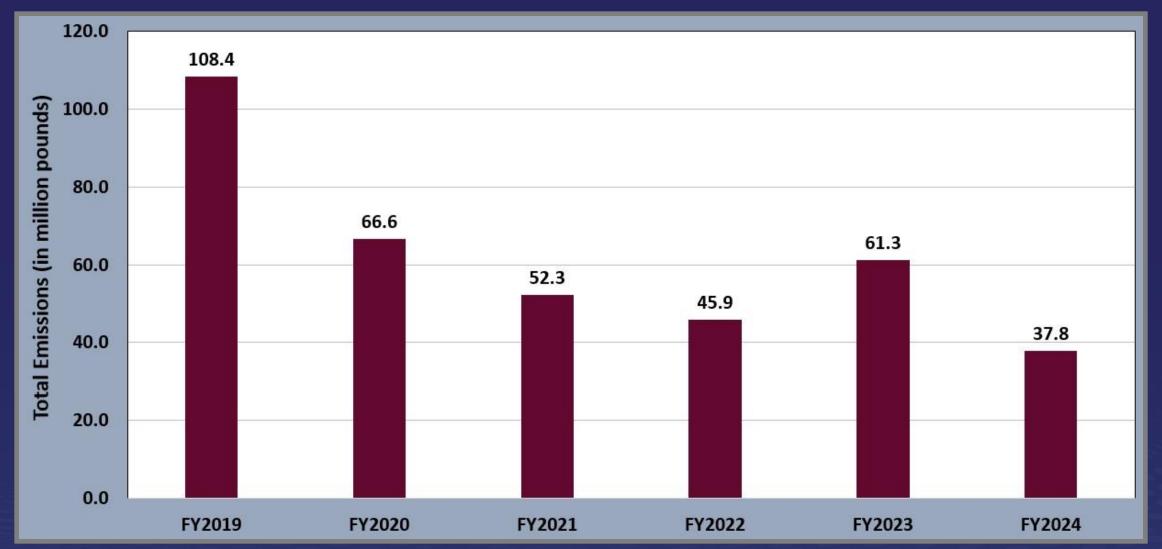


# Total Number of Emission Incidents Reported from FY2019 to FY2024



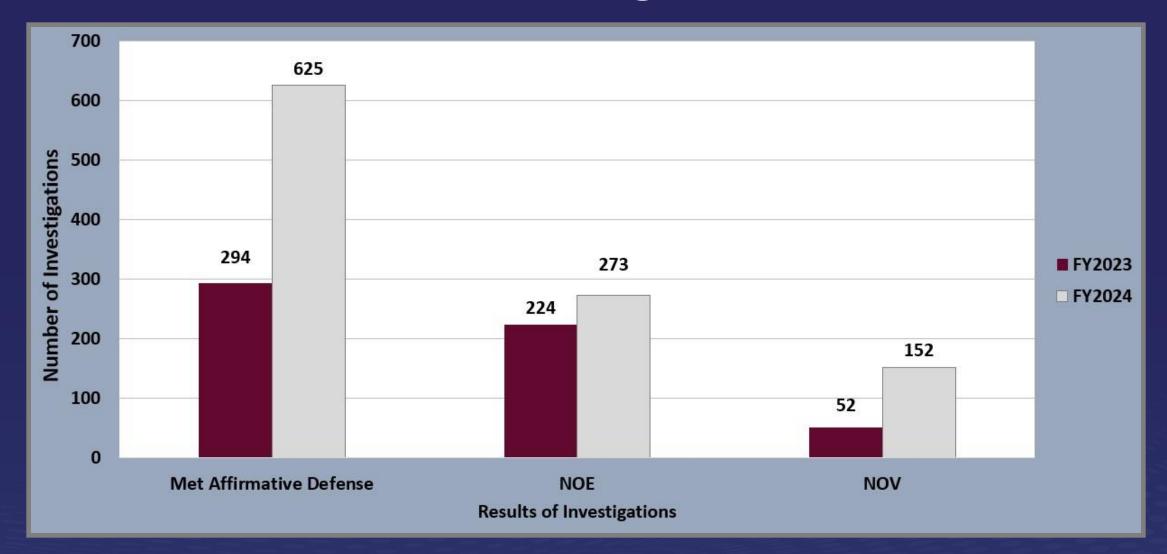


## Total Quantity of Emissions Reported Statewide by FY





## **Emissions Incident Investigations Results**







Affirmative Defense (AD) Tips



## Texas's approach to EEs:

(Big picture, broad brushstrokes)

- Remember all unauthorized emissions are a violation.
- However, when EEs happen, if the source reports it correctly, can prove they did everything possible to prevent it, and minimize it, they <u>may</u> receive enforcement discretion. (i.e. the event "meets an affirmative defense.")
- Receiving an affirmative defense is not a guarantee or a right and it must be proven by the company.
- If it is determined to be a "EEE" (Excessive Emissions Event) there is no affirmative defense opportunity for these EEs.



### What is an "Affirmative Defense" or AD

- Your opportunity to persuade the TCEQ that:
  - The EE couldn't have been prevented or avoided. (Not a black-and-white decision.)
  - The consequences of the EE were minimized as much as possible.
  - Also requires all reporting requirements to be met



## Making Your Case

- Primarily, this is accomplished by what you write in the STEERS report.
- Secondarily, it might be accomplished with a \*timely\* response to a request for additional information from a TCEQ investigator.
- Burden of proof on industry, not regulator, to make the case for affirmative defense.



# Affirmative Defense (AD) Questions

- Request for additional information to support AD claims
- Questions will be sent automatically, company has 30-days to respond
- 15 questions that reference 30 TAC 101.222(b)- Updated 1/1/2024
- Questions will come from a general Emissions Event email (<u>EE@tceq.texas.gov</u>)
- Response is voluntary, but burden is on company to support claim



# Main Reasons Why an Affirmative Defense is Lost

- Tends to be evenly divided between:
  - Reporting reasons ONLY (includes late reporting)
  - Cause-related reasons ONLY
  - Combination of Reporting and Cause-related reasons



## **AD Question 1 – Reporting**

What was the specific equipment or process that failed and resulted in this incident?

If this incident was due to a failure of equipment at a facility that you do not own or operate, identify the name of the facility that had the failure and how the failure impacted your equipment or processes?

30 TAC §101.222(b)(1) the owner or operator complies with the requirements of §101.201 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements). In the event the owner or operator fails to report as required by §101.201(a)(2) or (3), (b), or (e) of this title, the commission will initiate enforcement for such failure to report and for the underlying emissions event itself. This subsection does not apply when there are minor omissions or inaccuracies that do not impair the commission's ability to review the event according to this rule, unless the owner or operator knowingly or intentionally falsified the information in the report.



#### AD Question 1 – Reporting (cont.)

What was the specific equipment or process that failed and resulted in this incident?

If this incident was due to a failure of equipment at a facility that you do not own or operate, identify the name of the facility that had the failure and how the failure impacted your equipment or processes?

If all reporting requirements were fully met and there is no new information, there is no need to provide additional information for this AD criterion.

If an extraordinary circumstance led to noncompliance with a reporting requirement, describe the extraordinary circumstance.



#### AD Question 1: Reporting Error (cont.)

#### Late Initial Notification

- Tip: Understand that the 24-hour clock starts when someone in your company (or a contractor) knows or should have known that something happened\* that might cause increased emissions.
- Tip: If STEERS is giving you problems, take a screen shot that shows this, and email the form instead.
- \* If there is a lag time between when "something happened" and when the unauthorized emissions begin, discovery would be when the unauthorized emissions begin.



#### AD Question 1: Reporting Error

Late Initial Notification: Get Ready to Quiz Yourself!

The pressure relief valve opens on a condenser (bypass/pop-off valve) controlling glycol dehydrator still vent emissions at **noon**. An operator sees "steam" from this valve at **12:15** pm. The operator emails environmental staff at **2:30** pm. Calculations of emissions estimates show RQ is reached for benzene at **4:00** pm. This occurs while environmental staff is on vacation, and environmental staff does not read the operator's email until **7:30** a.m. the next morning.



#### **AD Question 1: Quiz answer**

- Late Initial Notification
  - What time is "discovery" of the event? I.e. when does the 24hour clock start counting down to the time initial notification is due?
  - **Discovery of this event is 12:15 pm.** Initial notification due by 12:15 pm the next day.



#### Additional Tip for AQ Question 1

If your initial projection, correctly performed, shows that emissions will be below RQ, and then something else/new/additional happens that increases emissions....

And ...if that "something" in itself meets the definition of an upset, it may warrant "re-setting" the 24-hr. clock for initial notification.

- You should communicate that clearly on the initial notification.
- (We know you don't have a magic crystal ball for determining emissions.)



#### TIP #2 for AQ Question 1

#### Issues:

- Not identifying each individual compound released that reaches RQ on the initial.
- Not identifying all compounds that are emitted on the final.



#### Tip #3 for AQ Question 1

- Although your 30 TAC-Chapter116 permit may limit "VOC" (volatile organic compounds) or "PM" (particulate matter) on its maximum allowable emission rates table (MAERT)...
- ...Neither "VOC" nor "PM" (PM10/PM2.5) are "individually listed compounds or mixtures in the definition of RQ" that 30 TAC-Chapter101 requires be reported.
- "VOC" typically needs speciation, and "PM" should be reported as the actual substance (cement dust, catalyst fines, carbon black, sand, grain dust, etc.)



#### Tip #3 cont. for AQ Question 1

So does that mean you must always speciate?

- No. The definition of RQ includes certain mixtures that are acceptable to report (e.g. "natural gas excluding carbon dioxide (CO<sub>2</sub>), water, nitrogen, methane, ethane..." (i.e. "Non-Methane, Non-Ethane (NMNE) VOC" or "natural gas VOC")
- Gasoline or diesel don't need to be speciated.



#### Yet Another Tip for AD Question 1

So, if it's not a listed mixture, you have to speciate down to the last molecule?

- No. Sometimes it is acceptable to lump several compounds together as "other"; read 30 TAC §101.201(b)(1)(G).
- You can lump all compounds as "other" for which BOTH of these things are true:
  - The RQ is 100 lbs. or more.
  - Less than 10 lbs. was released in a 24-hour period.



#### **And One More Tip for AD Question 1**

- If you believe the trigger for reporting was opacity...
- Remember to consider what substance caused the opacity, and whether emissions of that substance are authorized.
- If unauthorized emissions of that substance reach RQ, then it should be reported as an EE, not an excess opacity event.



## If the Only Thing You Take Home From This Talk...

• Is to do what you need to do to always report within 24 hours and to speciate all emissions correctly...

 Then you have substantially reduced your odds of getting an EE-related NOV/NOE.



#### Other Reporting Misunderstandings

- Incorrect authorized emissions limits for the facilities involved. (Tip: this is NOT the same as RQ!)
- "Placeholder" estimated quantities that are not actual estimates.



#### AD Question 2 – Cause

Identify the cause or causes of the emissions event and include all contributing factors that led to the emissions event.

Discuss how the emissions event could not have been avoided by good design, maintenance, and operation practices, if applicable.

Discuss any sudden breakdown of equipment or process that was beyond the owner/operator's control, if applicable.

30 TAC §101.222(b)(2) The unauthorized emissions were caused by a sudden, unavoidable breakdown of equipment or process, beyond the control of the owner or operator.



#### AD Question 2 – Cause (cont.)

Identify the cause or causes of the emissions event and include all contributing factors that led to the emissions event. Discuss how the emissions event could not have been avoided by good design, maintenance, and operation practices, if applicable. Discuss any sudden breakdown of equipment or process that was beyond the owner/operator's control, if applicable.

- Ultimate or root cause; the core issue, or the highest-level cause that set-in-motion the reaction/circumstance that led to the unauthorized emissions
- How do you know it was unavoidable and beyond your control? Without this discussion the agency will be unable to grant an Affirmative Defense for an "unknown" ultimate/root cause.



## AD Question 2 – Cause – 3<sup>rd</sup> Party and Contractors

- 3rd party cause? Coordinate to attempt to prevent/reduce impact? If loss of a utility (e.g., electrical power or steam), is alternate or back-up source available or feasible?
- Note that when the cause is an error made by a contractor hired by the owner or operator, the incident does not automatically receive an Affirmative Defense. They are under your control and you are still held responsible for their actions.



#### **AD Question 2: Human Error Causes**

If you have knowledge that human error caused or contributed to an EE, consider the after-effects of these opposing choices:

- Be straightforward. (i.e. don't claim affirmative defense on STEERS form)
- Practice "artful dodging" of the true cause in the information you submit.
- Which choice saves time (yours and ours)?
- Which choice builds trust between the people in our organizations?



#### AD Question 9 – Frequency

How many reportable and recordable emissions events (including this incident) have occurred at the facility/facilities contributing emissions during this incident for the 12-month period prior to this incident?

Have other incidents (both reportable and non-reportable) with a similar cause occurred at this facility in the past two years? If so, provide a list of such incidents.

What measures have been taken to prevent recurrence?

30 TAC §101.222(b)(9) The unauthorized emissions were not part of a frequent or recurring pattern indicative of inadequate design, operation, or maintenance.



#### AQ Question 9 – this one's complex

 "The unauthorized emissions were not part of a frequent or recurring pattern indicative of inadequate design, operation, or maintenance."

 Applies at the level of <u>facility</u> (piece of equipment experiencing the EE). Frequency includes non-reportables.



#### AQ Question 9 – more on why it is complex

- While there is no set number of incidents which establishes a frequent or recurring pattern, if frequency in the prior 12 months is three or fewer, it's probably not a frequent, recurring pattern.
- If facility's frequency is high enough that a frequent/recurring pattern might reasonably be suspected, have to show that the series of emissions events is not indicative of inadequate design, operation, or maintenance.



#### AQ Question 9: Still more

- Have to share information on causes (including non-reportables). If the causes are distinct from one another for the most part, that may show this Affirmative Defense criterion is met.
- What if frequency is relatively high, and the causes of the various incidents are the same or very similar? This makes it challenging to demonstrate that the series of emissions events is not indicative of inadequate design, operation, or maintenance.
  - Occurred in rapid succession? Root cause was unavoidably difficult to determine?



## AQ Question 9: Should it be Permitted?

When emissions with the same cause occur repeatedly, and no change in design, operation, or maintenance can prevent the emissions, that would be considered predictable/expected emissions and should be permitted through an Alternate Operating Scenario or other means of authorization.





#### Emissions Event (EE) FAQs



#### What is "discovery of the emissions event"?

- Reporting is based on discovery of the emissions event not if or when a reportable quantity (RQ) is exceeded.
- Per the rule: "30 TAC §101.201(a)(1) As soon as practicable, but not later than 24 hours after the discovery of an emissions event, the owner or operator of a regulated entity shall:..."
- Example 1: if a pumper on their daily checks, discoveries a leak, that would be when the discovery was made, not when the environmental personnel determines that a RQ was exceeded.
- Example 2: A gas plant informs the upstream producer that they will be shutting them in at a given date/time for an unscheduled reason. When the shut-in occurs, the 24 hours clock has started to determine if the event will cause unauthorized emissions equal to or in excess of a RQ.



## What is considered to be a process unit, facility common name, and/or emissions point common name?

- Process Unit or Area Common Names might be the site name of the tank battery. For a gas plant it would not be the site name. And it is not normally the facility or emissions point.
- Facility Common Name is the facility that experienced the emissions event at your site.
- Emission Point Common Name should be the common name where the unauthorized emissions that exceeded a RQ were released to the atmosphere; for example a flare or vent.



## Let's talk about what a "facility" is and is not.

- Meaning of "Facility" in air rules not waste or water rules.
- Look at definition in Texas Health and Safety Code
- The facility is the piece of equipment <u>experiencing</u> the breakdown/excursion.
- "Facility" is NOT the site.



## Facility - Is the Flare the correct facility?

- When the Emission Point Number (EPN) is a flare, and the flare is operating properly, the flare is not the facility. The facility is whatever piece of equipment is experiencing the breakdown/excursion that is sending a gas stream to the flare.
- When the EPN is a flare, and the flare is <u>NOT</u> operating properly, then yes, the flare is also the (or one of the) facility(s).



#### Quiz Time: Is this a facility or not?



Site--The total of all stationary sources located on one or more contiguous or adjacent properties, which are under common control of the same person (or persons under common control).



#### Quiz Time 2: Is this a facility or not?



Texas Health and Safety Code definition: "Facility" means a discrete or identifiable structure, device, item, equipment, or enclosure that constitutes or contains a stationary source, including appurtenances other than emission control equipment. A mine, quarry, well test, or road is not considered to be a facility.



#### Quiz Time: Is this a facility or multiple facilities?



Multiple facilities, but when filling out the notification and final report, it could be a single process unit/area.



#### Quiz: Is this a facility or multiple facilities?



While this could be a single process unit/area there are multiple facilities located on this site



### Quiz Time: Flare: Is this a facility or just a control device?



Both – while a flare is a control device, it is also considered a facility because it creates it own emissions; namely products of combustion. But you do not have to report the flare as a facility unless it is not operating properly.





For a tank battery where the tanks' vents are interconnected, and there is an incident where emissions are coming from multiple tank thief hatches and the common pressure relief valve. Do you report multiple incidents or just one for the whole tank battery?

If there is a common cause at the same regulated entity, you would report one event for the whole tank battery. But you will need to list each emissions point in the report.



#### Example: One report vs multiple incident reports



Since all of the tanks appear to be tied together this could be considered a facility for Ch. 101 reporting.

Facility Common Name: Tank Battery ABC

Process Unit/Area: Tank Battery ABC

Emission Point Common Name: PVR or flare



# What would be the "Facility Common Name" when a downstream third-party shuts us in due to an upset or maintenance?

The "Facility Common Name" would be the last facility or piece of equipment that was under your control where the incident occurred that required you to divert to a flare or other control device. For example, this could be the "Sales Meter".

The same would apply on the front end of your site. What piece of equipment caused the inlet gas stream to be diverted to the control device? For example; the inlet valve, Emergency Shut Down (ESD) or Safety Shut Off Valve (SSOV).



When determining if an RQ has been exceeded, is the determination based on the total emissions of a compound from multiple emissions points or is the RQ determination based on each individual emissions point?

The RQ determination is based on each, individual EPN, not a total of the quantity of emissions emitted from all of the affected EPNs.



## Should natural gas and crude oil emissions be speciated?

- You do not have to speciate natural gas and crude oil emissions if using the mixture reportable quantity (RQ) in 101.1(89)(B)(iv).
- However, non-VOC compounds should be speciated (e.g., NOx, CO, H2S, and SO2).
- A company can always provide VOC speciation for the natural gas mixture, but it is not required.
- After the final report is received, a company might be asked to speciate the crude oil/natural gas emissions in follow-up questions.



#### Should I report NO and NO2 or NOx on my initial notification and final report?

 The RQ requirement in 30 TAC § 101.1(89)(A)(i)(III)(ff) states: "oxides of nitrogen - 200 pounds in ozone nonattainment, ozone maintenance, early action compact areas, Nueces County, and San Patricio County, and 5,000 pounds in all other areas of the state, which should be used instead of the RQs for nitrogen oxide and nitrogen dioxide provided in 40 CFR Part 302, Table 302.4, the column 'final RQ."



## Which agency has jurisdiction over emissions from venting or flaring: the Railroad Commission of Texas or TCEQ?

- The RRC regulates flaring and venting operation with respect to preventing the waste of natural resources through authorization by rule and exceptions under its Statewide Rule 32.
- The TCEQ has jurisdiction over air emissions resulting from flaring and venting operations at oil and gas production and processing sites.



#### Are you required to report excess opacity from a flare?

- Opacity is not considered an air contaminant.
- Therefore, opacity cannot be considered an unauthorized emission and does not meet the definition of an emissions event and should not be reported for flares.
- Furthermore, visible emissions from a flare should not be reported under the excess opacity rules, unless the flare has a specific opacity limit in a permit, rule, or order of the commission or as authorized by Texas Health and Safety Code § 382.0518(g).
- Opacity is required to be reported for MSS events.



### Are you required to report excess opacity from a flare? (cont.)

- If the emissions from the flare included unauthorized emissions, determine if a RQ was exceeded, taking into consideration the effects of the flare's combustion (for example, the conversion of hydrogen sulfide to sulfur dioxide and the creation of carbon monoxide and oxides of nitrogen).
- If a RQ was exceeded, report it. If a RQ was not exceed, record it.
- Please remember if the site is a Title V source, the visible emissions from the flare would be required to be reported per the 30 TAC Chapter 122 requirements.



#### How are non-reportable emissions events handled during Title V investigations?

- For incidents that are recordable but not reportable, the agency will review a random sample of the incidents against recordkeeping requirements for administrative completeness and to ensure the event didn't exceed a RQ.
- Title V investigations are conducted by the regional offices or local air program acting on behalf of the TCEQ.
- Based on the results of that sample review, the investigator may review additional events for compliance with the requirements.



### Are the only emissions limits that apply to emissions event those in New Source Review lbs./hr. limits?

No, emissions limits may be in permits, rules, or orders (remember the definition of unauthorized emissions we discussed at the start).



#### What about fugitive components and heat exchangers?

- Fugitive components may be the subject of an emissions event. Emissions from a fugitive component that are considered "leaks" are authorized under conditions of a permit or rules for leak detection and repair (LDAR). A complete failure of a component is not considered a leak under LDAR permit conditions or rules and would be considered upset emissions and subject to the emissions event rules.
- Like fugitive components, heat exchangers may suffer a catastrophic failure. When this occurs, the facility owner or operator will follow the requirements for emissions events, including claims for affirmative defense.



Weather (heavy rains, high winds, drought or freeze, etc.) caused an upset that resulted in a reportable emissions event. Does the event meet the affirmative defense?

It depends, facilities should be designed and operated to withstand typical weather extremes for the area.



# A divestiture separated two production units into two companies that share a flare. Who reports emissions events when the flare is the EPN?

- The company that holds the permit for the flare is responsible for reporting emissions from the EPN.
- We can write a violation on both companies.
- Maybe it would be best if both companies had their own control device?



## For pipelines, sites without a permit, or a site authorized by a PBR without an hourly limit, how is RQ calculated?

- All emissions should be considered, start at zero.
- For pipelines, if you use portable flares to burn down the volume in the pipeline, don't forget to include those as an emissions point.
- And yes, pipelines, gathering lines, and flowlines are subject to the emissions event rules (regulated entity definition).



### Is a company responsible for incidents caused by a contractor's error?

When the cause is an error made by a contractor you hired, it is you, not the contractor that is responsible to comply with the permitted authorizations.



#### Can I make a change to the initial notification after it has been submitted?

You can make changes to what was submitted on the initial notification when you submit the final report.

If it is an excess opacity event, you can send an email to EE@tceq.texas.gov with the requested changes, since a final report is not required for excess opacity events.



#### How do I make a change to my final report after it has been submitted?

- Submit an email to EE@tceq.texas.gov with the requested changes.
- Be sure to double-check the information before proceeding with the final submittal to minimize the need for changes to the final.
- Once the changes have been inputted, you should be alerted to verify the changes.



## If an investigator determines an event met the affirmative defense criteria, can a violation still be cited?

• Yes, the affirmative defense criteria only apply to state; permits, rules, and orders. The region may cite a violations of applicable federal rule during separate investigations.

• Be sure to attend next year's Environmental Trade Fair where EPA's 40 CFR Part 60, Subpart OOOOb and OOOOc (state rules) will be discussed.



### Is there a formal process to challenge a NOE issued by the agency?

- If the AD was claimed, but the investigator issued a NOV/NOE, a NOPF letter will be sent out.
- Provides a final opportunity for the company to provide additional information before it goes final.
- Once a NOE is issued, the company can contact the TCEQ's Enforcement Division to discuss the term of an agreed order.
- If a settlement is not reached, the violation will be referred to the Litigation Division.



#### Could You Do Us a Favor?

- Regarding compounds <u>NOT</u> required to be reported at all on EEs (30 TAC Chapter 101 rules)
  - CO<sub>2</sub>, methane, ethane, nitrogen, noble gases, hydrogen, oxygen, water
- Please don't include these on EEs
  - Messes up our data inquiries for both our media/public info.
     requests and our internal trackers
  - Even if you have a Greenhouse Gas (GHG) permit that includes some of the above, <u>still</u> not necessary to report on EEs



#### Questions?



#### Thank you!

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