Q&A from the Emissions Event Workshop

Below are the questions and answers from part one of our three-part series of oil and gas workshops. If you have any specific questions regarding the workshops, please send them to PermianEE@tceq.texas.gov

Railroad Commission of Texas

- 1. Are there any recordkeeping requirements for demonstrating compliance with the 50 mcf per day flaring allowance?
 - Yes. RRC expects operators to be able to justify exemptions or rule-authorized flare volumes. Rule 3.1 requires operators to keep records for three years. Further, Rule 32(f)(1) requires that "released gas shall be measured or estimated in accordance with §3.27 of this title (relating to Gas To Be Measured and Surface Commingling of Gas) and reported and charged against lease allowable production." Gas flared/vented must be reported on Form PR Monthly Production Report.
- 2. When will the online SWR32 tool be available? Also, is the R-32 the form found on RRC's website as opposed to the old SWR32 form?
 - The online system should be implemented by April 1, 2021. Form R-32 is the newly revised SWR 32 data sheet. Operators may use the new Form R-32 or continue to use the old Rule 32 Data sheet until the online system is implemented. Submit the new form either by email or through "snail" mail (USPS or some contract delivery) until the online system is available. Email is preferred during this time of dealing with COVID-19.
- 3. Is there a need for an exception from the RRC to flare flash gas from downstream vessels (tanks, heaters, etc) that are permitted to be flared under the TECQ permit?
 - Tank vapors from crude oil storage tanks, gas well condensate storage tanks, or saltwater storage tanks, including makeup gas for gas blanket maintenance are exempt from Rule 32 (16 Texas Administrative Code §3.32) and therefore do not need an exception. Releases from lease production facilities may be authorized if less than 15 mcf/d for gas wells or less than 50 mcf/d for oil leases and commingled facilities. Release rates in excess of 15 mcf/d for gas wells or less than 50 mcf/d for oil leases and commingled facilities are required to have an exception.
- 4. For RRC, what is required in order to flare >15/50 mmscfd only during VRU downtime. The VRU in this case routes the LP gas to the sales line and may have up to 10% downtime.
 - If the gas is from an exempt source, like an oil tank, then nothing is required. If the gas is from a non-exempt source, then an exception is required if the flare volume > 50 MCFD (oil lease) / 15 MCFD (gas well). The presence of a VRU is not relevant to RRC rules.
- 5. We used to be able to get an administrative exception for 60-day periods at one time. Can we now file one Form R-32 for the full 180 days at one time, if we know we will have to flare that long? i.e. gas plant fire and plant will be down.
 - Generally, the procedure remains unchanged. However, on the new Form R-32, Section 7 Rule-Defined Necessity for Release (Section 7), some instances have prescribed time periods.

- 6. Can you explain a bit more how RRC can allow flaring for 180 days and how that comports with EPA and TCEO regulations and requirements?
 - The authorizations are separate and independent. As the state's primary regulator of energy resource production, the Railroad Commission has jurisdiction over flaring operations with respect to prevention of waste of natural resources. TCEQ has jurisdiction over air emissions. The two sets of regulations serve different purposes, and compliance with all applicable rules is required.
- 7. What is RRC position on World Bank Routine Flaring?
 - The RRC has not taken a position on the World Bank's Routine Flaring initiative.
- 8. Are there any recordkeeping requirements for demonstrating compliance with the 50 mcf/day flaring allowance?
 - Yes. RRC expects operators to be able to justify exemptions or rule-authorized flare volumes. Rule 3.1 requires operators to keep records for three years. Further, Rule 32(f)(1) requires that "released gas shall be measured or estimated in accordance with §3.27 of this title (relating to Gas To Be Measured and Surface Commingling of Gas) and reported and charged against lease allowable production." Gas flared/vented must be reported on Form PR Monthly Production Report.
- 9. I thought the RRC had a Memo of Understanding to have TCEQ handle air issues like flaring?
 - RRC's rules are derived from the Texas Natural Resource Code and are concerned with accounting for production to prevent waste and to ensure safety when hydrogen sulfide is present. TCEQ's rules are derived from State and Federal Law. It is important for operators to know that the rules do not overlap; compliance with RRC rules does not imply compliance with TCEQ or EPA rules, and vice versa.
- 10. The <u>Memorandum of Understanding (MOU) between the RRC and the TCEQ</u> provides additional explanation of the agencies' jurisdictions over various oil and gas activities, however it does not address air emissions.
 - RRC's rules are derived from the Texas Natural Resource Code and are concerned with accounting for production to prevent waste and to ensure safety when hydrogen sulfide is present. TCEQ's rules are derived from State and Federal Law. It is important for operators to know that the rules do not overlap; compliance with RRC rules does not imply compliance with TCEQ or EPA rules, and vice versa. The document "Who Regulates Oil and Gas Activities in Texas?" can provide more guidance when determining jurisdiction over oil and gas activities.
- 11. Where is the dividing line between the RRC authorized flaring vs the TCEQ?
 - RRC Rule 32 authorizes the flaring of gas while drilling a well and for up to 10 days after a well's completion for operators to conduct well potential testing. Outside of that time period, the Commission requires operators to obtain an exception to Rule 32 authorizing flaring for specific situations and circumstances. TCEQ has jurisdiction over air emissions and flaring from facilities (after drilling and well test). The authorizations are separate and independent. The two sets of regulations serve different purposes, and compliance with all applicable rules is required.
- 12. Could you expand what is considered a low-pressure separator? Would a vessel operating at ~50psig be considered low pressure?
 - Though it is counterintuitive, "low pressure" is not defined by a certain pressure. Different gathering systems operate at different pressures. One way to look at it low pressure would be any on-lease pressure vessel that does not require the produced gas to be compressed to go through that vessel. The one exception to this

would be a Vapor Recovery Unit (VRU) which compresses tank vapors (tank vapors are an exempted release under R32) up to a high enough pressure to enter the gas sales line or circulate back through the process system to eventually get to the gas sales line.

- 13. Is there or has there been any consideration to reducing the SWR32 exception fee for those facilities affected by upsets beyond their control (e.g. power outage, gas purchaser upset, etc.)
 - No. Fees and surcharges for Rule exceptions are incorporated into Rule 78. However, Rule 32(h)(8) states "One application for exception to the requirements of this section may be filed for multiple releases from gas wells, commission-designated oil leases, gas gathering systems, gas compressors or other gas handling facilities when the release of gas is the result of a full or partial shut-down of a gas gathering system, gas plant, gas compressor or other gas handling facility under subsection (f)(1)(C) or (g)(1). Each well, lease or facility must be clearly identified by the applicant and a single fee paid under §3.78(b)(5) of this title (relating to Fees and Financial Security Requirements)." Rule 32(h)(8) does, therefore, offer some cost relief in these situations.
- 14. RRC Inspectors have been requesting to see RRC "Flare Permits" at midstream facilities, particularly, gas plants. A gas plant typically processes gas from literally thousands of leases. Does RRC intend to actively regulate flaring at gas plants in addition to the facility TCEQ permit?
 - Gas plants are required to have RRC flaring exceptions pursuant to Rule 32(g). A gas plant is not required to identify each producing property that feeds into the plant.
- 15. If an RRC inspector comes on site to a gas processing plant. what documentation should be provided to the inspector for the process and/or upset flares that are located at the facility?
 - The plant should have a valid exception for any flaring required as specified in the provisions of SWR 3.32(g).
- 16. Can you please clarify whether a hearing is required for a flare that is on location purely for the case that a midstream gatherer has an upset and the flare will be more than 50 mcf per day for that upset period?
 - A hearing is only required when an operator requests an exception for more than 180 days. An operator has several options for these situations. Some operators obtain and maintain (via hearing) exceptions that cover all their potential flaring needs for a long period of time. An operator can also request individual exceptions based on individual needs regarding flaring events.

CATEGORY-GENERAL

- 17. How is TCEQ tracking scheduled maintenance, start up and shutdown (MSS)?
 - Scheduled MSS is reported in STEERS. Individual events are reviewed by the regions
 as they are reported. Trends are reviewed as needed but at least annually as part of
 the development of the Annual Enforcement Report. More information is available
 here: Annual Enforcement Report Texas Commission on Environmental Quality www.tceq.texas.gov
- 18. What is the definition of unavoidable?
 - There is no regulatory definition of unavoidable. In layman's terms, an unavoidable event could not have been planned for or prevented with better design, operation, or maintenance.

- 19. What examples in O&G industry would you think are routine or predictable?
 - If a downstream facility shuts-in at a certain interval for turbine washing or other planned maintenance, the upstream facilities can plan for these outages and must include them in a TCEO authorization.
- 20. How about low coolant levels or low suction pressure?
 - More information is needed to best answer this question. When evaluating events, it's important to consider the cause. Low coolant levels might be a part of routine, predictable maintenance or caused from an upset such as a leak. Same with pressure. Remember, you can email specific questions to PermianEE@tceq.texas.gov
- 21. How many PDHs are these seminars worth and will TCEQ issue any sort of certification other than attendance confirmation?
 - We are not offering PDH or CEUs for this series, but you will receive attendance confirmation

CATEGORY-RN OR CORE DATA INFORMATION

- 22. Are you asking us to obtain RN for well?
 - For the Part 60, Subpart OOOO/OOOOa well completion notification, you are not required to obtain an RN, but it would be helpful if you did. A link on how to obtain an RN is provided at the bottom of the form. Please note that an RN is needed to participate in certain agency programs such as Find it and Fix It, the Audit Act, and to report emissions events.
- 23. What RN is expected to be entered in Well Completion Notification form?
 - If the site where the well is located has an RN already established, please enter it. There is also information on the form on how to obtain an RN.
- 24. When the presenter said RN for well pads for NSPS OOOO notifications, is that implying tank batteries/facilities?
 - The RN would be for the well pad where the tank battery or facilities were located.
- 25. Are pipelines considered "facilities" that would require to report emission events/MSS via steers with a county RN?
 - Yes, see the definition of regulated entity in 30 TAC 101. The pipeline is a regulated entity subject to our regulations and authority. If you have a leak or spill, then yes use a county RN for pipelines, work with the region you are in and then report by them to the emission event rules.
- 26. If you have a reportable emissions event on a pipeline segment and there is no RN associated in STEERS, how do you submit the emissions event report?
 - For facilities that do not have an RN, a core data form must be submitted to the TCEQ regional office via fax or mail. In addition, the emissions event must be reported within the required timeframe using the paper form. More information is available here: <u>Air Emissions and Maintenance Events Reporting Form Texas Commission on Environmental Quality www.tceq.texas.gov</u>
- 27. If a well is going to an existing facility already permitted with an RN, should we use that RN?
 - Yes.

- 28. We have been preemptively registering pipeline county segments per pipeline entity RNs to manage potential reportable EE's and 106.355 PBR recordkeeping, is that a good work practice?)
 - Yes
- 29. With respect to getting a county specific RN number with the regional office, what does the timeline look like with respect the 24-hour emission event notification requirement? How soon can we obtain the RN number from the time we call the regional office and request one? If we are not able to get one within the 24-hour notification timeline can we wait until we get the RN number from the regional office and then use it to submit the notification?
 - Establishing an RN with the regional office may take longer than 24 hours. For the initial notification, if a regulated entity number and/or air account number does not exist, then identify the location of the release when you submit the STEERS notification within the required timeframe. You should have enough time to obtain an RN by the time the final report is due.

CATEGORY- MSS

- 30. What if you exceed your planned permitted MSS emission rates? Would those excess emissions be considered an EE?
 - It depends on why the MSS rate was exceeded. If the rates were exceeded due to an upset, then it's an EE. If the rates were exceeded because of planned MSS, then this is a potential violation and the authorization may need updating.
- 31. How can you have an unplanned, scheduled maintenance event?
 - Planned MSS should be authorized. Unplanned MSS can be reported before the
 activity occurs (scheduled) or after the activity has started (unscheduled). An
 example of an unplanned, scheduled event is replacing a faulty gasket. The fault in
 the gasket was unplanned, but you can file a report before bringing down the
 affected facility to schedule the activity.
- 32. What are examples of scheduled and unscheduled in the unplanned MSS category of the MSS flowchart?
 - Scheduled and unscheduled refers to the timing of reporting an unplanned MSS event. Reporting the event before it occurs makes it scheduled; reporting the event after it's already started makes it unscheduled. For example, if an engine is making a knocking sound and requires maintenance, a report can be filed before taking the engine down to schedule the event; or if the engine needs to be taken down right away a report can be filed after the engine is already down to make the event unscheduled.
- 33. What about events that are unplanned, but the emissions associated with fixing the problem is similar to MSS activities that are permitted? i.e., permitted MSS of 5 compressor blowdowns, but later in the year a compressor breaks down unplanned and you need to do a compressor blowdown in order to fix it? Is there a special MSS designation for those? Or would that be counted as emissions event?
 - If the MSS activity can be conducted in accordance with an existing authorization, it may be authorized. If the existing authorization limits the site to 5 blowdowns, and a 6th is needed, then this is an unauthorized MSS activity. If the 6th one occurred due to an unforeseeable event, then it can be scheduled MSS (reported prior to the event) or an emissions event (reported after the event).

- 34. What is the difference between deviation part 2 (referring to Title V) upsets and unplanned MSS?
 - Upsets and unplanned MSS should be included on Title V deviation reports. If the events exceed an RQ and are reported in STEERS, they can go on part 1. If they are below RQ, they should be included on part 2 of the deviation reporting form.
- 35. Does TCEQ grant some flexibility in number of MSS events if the default values in TCEQ's emissions calculation spreadsheet are used?
 - TCEQ permit application representations are enforceable, so applicants should make every effort to provide accurate estimates.
- 36. If the MSS event is scheduled and authorized under the permit, but exceeds an RQ, then a STEERS report is not required?
 - Scheduled events are unauthorized and should be reported in STEERS if the unauthorized emissions are expected to equal or exceed an RQ. Authorized events covered under a permit should not be reported in STEERS, and the RQ doesn't apply.
 - MSS activities that are planned should be authorized. If you have an MSS authorization, then you anticipated the need for MSS and obtained an authorization that should reflect your activities and emissions. If you are conducting MSS activities and are complying with your permit (even if the quantity of your emissions exceeds the RQ), no STEERS reporting obligation exists.

If you have emissions in excess of what is allowed by your MSS authorization, then you need to examine the circumstances surrounding those excess emissions. If the excess emissions were the product of an unplanned and unavoidable breakdown or excursion of process during your MSS activity, then those emissions are the result of an emissions event. If you anticipated that you would have unauthorized emissions in advance of your MSS activity and followed the recordkeeping and reporting requirements in 101.211, then those unauthorized MSS emissions would be considered scheduled. If you could not comply with the recordkeeping and reporting requirements in 101.211, then your unauthorized emissions would be considered unscheduled and you would need to comply with the recordkeeping and reporting requirements in 101.201.

However, please note that under 101.222(c), an affirmative defense for penalties is only available if the owner/operator can prove the MSS activity was unplanned. If your MSS activity was not unplanned – see definition in 101.1(109) – then the affirmative defense is not available. Planned MSS should be authorized with an appropriate authorization that can be complied with. Failing to comply with an authorization is a violation and may result in enforcement, including penalties. If your planned MSS activities are not fully permitted, then you need to change your MSS authorization (through a revision, amendment, obtaining a different authorization mechanism, etc.).

- 37. Do I have to submit a STEERS Report if we exceed an RQ while doing maintenance authorized under 106.355?
 - Yes, if unauthorized emissions exceed an RQ a STEERS report is required. PBR 106.355 authorizes total uncontrolled emissions of any air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen, and oxygen up to one ton during any metering, purging, or maintenance operation. Uncontrolled butadiene emissions may not exceed 0.04 pounds per hour. If the PBR is certified or registered, then the representations made in the certification/registration apply.

CATEGORY-THIRD PARTY

- 38. The air releases that occur from 3rd party plant outage routine or upset? What is TCEQ's position?
 - If the 3rd party plant outage is predictable and routine, then resulting emissions should be included in the upstream site's TCEQ authorization.
- 39. Is pipeline capacity limitation routine or upset? What about a situation where 3rd party delays their plant construction and impact it brings to upstream operator's projections? Do upstream identify that as emission event because it is outside their control?
 - Emissions associated with a pipeline capacity limitation would be considered routine, as long as the limitation is not due to an upset. Not being able to send your product to a dependent 3rd party due to construction delays is not an emissions event, in that it is not unplanned and unavoidable.
- 40. If a third-party residue sale pipeline frequently shuts a gas plant in due to maintenance or an unexpected/unplanned reason and the gas plant has to flare residue gas that reaches a reportable quantity, is TCEQ going to consider this predictable and should be permitted?
 - The TCEQ would have to review the specific events and determine if they meet the definition of an upset event. If an event is due to an unplanned and unavoidable breakdown or excursion of process or operation that results in unauthorized emissions would be considered an upset.
- 41. Does TCEQ expect facilities to permit emissions from "dependent" facilities if, for instance, the gas plant is owned/operated by a completely different entity?
 - You are not expected to permit emissions from a dependent facility. However, you
 are expected to obtain a permit authorization for emissions that are emitted from
 your site that are due to routine operations or process from not only your site but
 from planned routine maintenance operations that might occur at the dependent
 site.
- 42. Is it an emission event if your Gas plant flares because you are backed out by a downstream facility due to issues/upsets at their site?
 - If the downstream facility is experiencing an emissions event (an unplanned and unavoidable breakdown or excursion) that causes your site to have unplanned emissions, then this could be considered an emissions event. If the downstream facility is conducting a routine maintenance activity or if there that is a pipeline capacity issue then this would not be considered an emissions event.

CATEGORY-AIR PERMITTING

- 43. What if an authorization cannot be obtained for Maintenance, Startup, or Shutdown (MSS) events due to sour gas flaring that will exceed the NAAQS? Would you report it as unauthorized MSS/upset event?
 - These emissions should be controlled to meet the NAAQS. Depending on the cause of the flaring, these may not be upset events. In addition, upsets that exceed the NAAQS cannot meet the demonstration criteria.
- 44. If pipeline capacity is not an emissions event, are we supposed to authorize it in the permit? Sometimes it is temporary.
 - Yes, you need to try to prevent the emissions and ensure that the sites authorizations include potential emissions from this type of event.

- Refer to the STEERS report. When you look at it, one of the first things that it asks you is: "what's the plant area that's down? And then it asks what is the facility that is an upset? Then it asks where is the emission point of the emissions? The emission point in the case you're talking about is the flare. Unless that flare is in upset, it is not the facility that is listed. The facility would be the equipment that experienced the problem or broke down unplanned. It's not the flare, the flare is doing its job. It's reducing the emissions and it's combusting the emissions from the event. The emission limitation listed there would be from that facility that is experiencing the upset.
- 45. Regarding "under-permitting", it's possible a planned event that should be permitted results in more emissions than typical. If this isn't reported as an emissions event, when/how would TCEQ require it to be reported besides a permit revision? If no Title V it wouldn't be included in a deviation report.
 - A permit revision is most appropriate, but other reporting requirements may apply such as emissions inventory. A company may also report it under the Find it and Fix it Initiative or as a finding under the audit act.
- 46. Since we cannot authorize emissions from an equipment (eg. Flare) during emission events in the permit, there will not be a limit from an equipment. If i understand correctly, for an emission event that is submitted on STEERS, the "emission limit" for such equipment will be 0?
 - When preparing an emissions event report, an evaluation of which facilities are in upset should be conducted. What is venting to the flare? The permit limit for the piece of equipment venting to the flare should be used. If that piece of equipment does not have a specific limit, then zero should be reported as the emission limit.

CATEGORY-RQ/DISCOVERY

- 47. If your flare is authorized under 30 TAC 106.492 how do you determine when you exceed an RQ? Is it emissions over the represented emission in the PBR?
 - Yes, if there is a unplanned and unavoidable breakdown of the flare, permit representations are enforceable and can be used as short-term, lb/hr, limits. When preparing an emissions event report, an evaluation of which facilities are in upset should be conducted. What is venting to the flare? The permit limit for the piece of equipment venting to the flare should be used. If that piece of equipment does not have a specific limit, then zero should be reported as the emission limit.
- 48. If I permit flaring due to line capacity, but my flare pilot light goes out, is that an emissions event? (UPSET VS ROUTINE) A flare pilot outage is likely an upset, depending on the reason it went out.
 - Refer to the definition of an emissions event. Was it an unplanned and unavoidable breakdown? More than likely yes, and you would list the flare as the facility.

CATEGORY-SWEET VS SOUR/LDAR/0000 AND 0000a

- 49. For a sweet field, is monitoring the analysis from gas purchaser statements sufficient for periodic review?
 - Yes, and please note TCEQ prefers a gas analysis that is two years or less old.
- 50. Isn't there a difference between EPA and TCEQ on sour gas definition?

- https://www3.epa.gov/ttn/chief/ap42/ch05/final/c05s03.pdf
- 51. Gas gathering statements are site specific would that work?
 - Yes, and please note TCEQ prefers a gas analysis that is two years or less old.
- 52. Does TCEQ have any guidance document on list of approved techniques for H2S sampling Dragger tubes, Stain tubes, Four Gas Monitors, etc? (H2S SAMPLING GUIDANCE)
 - No, the agency does not have an approved list of H2S sampling techniques, but the ones listed in the question would be acceptable. Please note the TCEQ prefers a gas analysis that is two years or less old.
- 53. Is OOOOa delegated to TCEQ or administered by EPA?
 - OOOOa is delegated to TCEQ. More information is available here: New Source Performance Standards (NSPS 60) in Texas | EPA in Texas | US EPA

Contacts for Additional Information

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