# Comments by the Texas Commission on Environmental Quality Regarding the EPA Release of Draft Control Techniques Guidelines for the Oil and Natural Gas Industry

# EPA Docket ID NO. EPA-HQ-OAR-2015-0216

## I. Summary

On September 18, 2015, the United States Environmental Protection Agency (EPA) published in the Federal Register notice of availability of a draft control techniques guidelines (CTG) document for oil and natural gas industry volatile organic compound (VOC) emission sources (80 FR 56577). The draft CTG includes recommendations for evaluation of VOC reasonably available control technology (RACT) for existing sources in ozone nonattainment areas classified as moderate or above. These sources include: storage vessels, compressors, pneumatic controllers, pneumatic pumps, equipment leaks from natural gas processing plants, and fugitive emissions from well sites and compressor stations. The EPA is providing a two-year period from the date of final issuance for the required state implementation plan (SIP) revision submittal in response to the CTG.

## II. Comments

### General Comments

**The EPA should not finalize this CTG and should instead retain the control recommendations to be used for non-CTG major source RACT determinations or to develop reasonably available control measures (RACM) strategies for those areas needing VOC emissions reductions to provide for attainment of the ozone National Ambient Air Quality Standard (NAAQS).**

The Oil and Natural Gas Industry Draft CTG recommendations should not be issued in a VOC RACT CTG, considering the many nonattainment areas for which VOC emissions reductions would not have a net ozone benefit. The intent of a CTG document under Federal Clean Air Act (FCAA), §182(b)(2) and §172(c)(1) is to provide states with available control technology information for the implementation of VOC RACT to help certain nonattainment areas attain the ozone NAAQS. For areas that are VOC-limited, the CTG-recommended controls may provide net ozone benefit and could contribute to attainment. However, for areas that have been demonstrated through photochemical modeling to be primarily nitrogen oxide (NOx)-limited rather than VOC-limited, the CTG-recommended controls are unlikely to provide a net ozone reduction benefit at the design value monitor and will not help contribute to attainment of the ozone NAAQS. Requiring states to implement the CTG recommendations in areas demonstrated to have low sensitivity to VOC emissions reductions in terms of ozone formation is inconsistent with the mandate in §172(c)(1) to provide for attainment of the NAAQS. Furthermore, while the EPA claims that the CTG is only guidance, the EPA’s policy is that CTGs establish presumptive RACT. Once the EPA adopts a CTG, states have very little flexibility and are required to implement the CTG recommendations regardless of whether the CTG will actually result in ozone reductions in their nonattainment areas. Not finalizing this CTG would eliminate the unnecessary burden imposed by adopting regulations for the abundance of smaller area sources comprising the oil and gas industry that will not contribute to attaining the ozone NAAQS. States would continue the FCAA, §182(b)(2) obligation to conduct VOC major source RACT determinations for this emission source category. As an alternative, the EPA could elect to limit the applicability of the CTG recommendations to major sources only, allowing states to implement the recommendations at lower thresholds as a RACM strategy in areas where VOC reductions would effectively contribute toward attainment of the ozone NAAQS.

**The FCAA intended for the EPA to develop CTG documents to reduce VOC emissions to help areas attain the ozone NAAQS. The EPA should not be exercising authority granted expressly regarding the ozone NAAQS for the purposes of greenhouse gas reductions.**

This CTG is part of the EPA’s Climate Action Plan to reduce greenhouse gas emissions, indicating that this CTG is not targeting VOC emission reductions, but serves to reduce methane emissions. Methane is not defined as a VOC under 40 Code of Federal Regulations (CFR) 51.100(s). The EPA’s use of a CTG as the avenue to impose controls reducing greenhouse gas methane emissions is inconsistent with the intent of FCAA, §172(c)(1) and §182(b)(2), which requires that all RACM, including RACT, must be implemented to provide for attainment of the NAAQS for areas in which sources exist that are covered by a VOC CTG document and for all other VOC non-CTG major sources. CTG recommendations constituting RACT should hinge on the benefit of VOC emissions reductions and the potential for ozone reduction, not on the reductions of other pollutants for which the FCAA does not prescribe CTG obligations. While FCAA, §183 grants the EPA the authority to issue additional CTGs at the Administrator’s discretion, the purpose of FCAA, §183 is limited to federal ozone measures. Additionally, FCAA, §183(b)(2) gives the EPA clear direction regarding the agency’s priorities when issuing CTGs, stating that “the Administrator shall give priority to those categories which the Administrator considers to make the most significant contribution to the formation of ozone air pollution in ozone nonattainment areas…” The EPA should not use VOC RACT requirements under the FCAA to achieve greenhouse gas reductions.

**In light of the upcoming implementation of the 2015 ozone NAAQS, the due date to submit SIP revisions in response to the final CTG should be flexible to account for ozone planning in nonattainment areas that are simultaneously subject to multiple ozone standards.**

Rather than setting a two-year deadline to submit SIP revisions to address the final CTG, the EPA should allow states to consider ongoing ozone planning when making these revisions. These SIP revisions could be included along with the SIP submittals that are already planned for the 1997 and 2008 eight-hour ozone standards. Similarly, when new areas are designated under the 2015 ozone NAAQS, the SIP revisions to address the final CTG could be included with the RACT submittal under the FCAA-mandated timeline. In addition to conserving state resources by reducing the number of separate SIP revisions required, this approach to addressing the final CTG would also ensure that the revisions in response to the CTG are considered as part of the overall RACT analysis and attainment demonstration for nonattainment areas rather than being treated as a completely separate requirement.

### Model Rule Language

**The EPA should make clear that the model rule language includes example rule requirements but that only emission control levels established in the CTG are presumptive RACT.**

The EPA has defined RACT as “the lowest emission limitation that a particular source is capable of meeting by the application of control technology…” Since RACT is an emission limitation established for control technologies, presumptive RACT recommended in this CTG should be limited to those emission limitations and not extend to other portions of the rule requirements, such as reporting and testing provisions. These other provisions contained in the model rules of the draft CTG should be clearly identified as recommendations and not implied as presumptive RACT. Although the EPA explains in the beginning of its CTG that states are free to implement technically sound approaches other than the CTG recommendations that are consistent with the FCAA, states could be compelled to adopt the model rule language under the misconception that all of the model rule language is presumptive RACT. To avoid confusion, the EPA should clearly state that the model rules are solely examples that may be helpful for states during potential rule development in response to this draft CTG.

### Pneumatic Controllers and Pumps

**The EPA should clearly define the scope of applicability for pneumatic controllers and pneumatic pumps in the CTG preamble discussion and in the model rule language.**

The EPA should clarify the intended scope of the pneumatic controller and pneumatic pump applicability currently specified in model rules B and H, respectively. Both model rules state that the control requirements apply to uncontrolled pneumatic controllers and pumps that emit natural gas. The initial compliance demonstration portion of the model rules achieves reductions in natural gas emissions from the pneumatic components by prescribing requirements to significantly limit emissions via a control device or by completely eliminating the use of natural gas, with few exceptions. However, once an owner or operator satisfies the initial compliance demonstration, depending on the option chosen, a given pneumatic controller or pump could appear to no longer meet the applicability criteria subjecting it to the regulation and therefore would not need to continue complying with the associated monitoring, reporting, and recordkeeping requirements. For example, if an owner or operator of a controller at a natural gas processing plant installs an instrument air system in lieu of a natural gas-driven pneumatic system to demonstrate initial compliance under model rule section B.3, the controller would no longer be considered a single continuous bleed natural gas-driven pneumatic controller and would therefore no longer meet the applicability in model rule section B.1 as it is currently written. It is unclear under such circumstances whether the pneumatic controller and pump rules are intended to continue to apply.

### Closed Vent Systems

**The EPA should clarify the intent of the closed vent systems model rule D.1(b)(2) requiring closed vent systems routing to a process to be ‘operational’ 95% of the year but have ‘no detectable emissions.’**

**It is unclear how a closed vent system would be able to simultaneously meet the ‘no detectable emissions’ requirement while being operational at least 95%of the year and demonstrating continuous compliance. For 5% of the year, a closed vent system could bypass the process and release emissions into the atmosphere, as is described in paragraph D.1(b)(3), which would produce detectable emissions and not meet the conditions of (2) during that time. However, as written in the draft, there is no relief from the ‘no detectable emissions’ provision even in these limited situations, and it remains unclear whether providing such an exception would be RACT-approvable.**

### **Equipment Leaks from Natural Gas Processing Plants**

**The EPA should clarify whether the requirements for equipment leaks at natural gas processing plants apply to compressors.**

The applicability of these requirements as described in both section 8.1 of the draft CTG preamble and in section G.1 of the model rule language explicitly excludes compressors. However, in model rule section G.5.3, control requirements for compressors are prescribed. The EPA should clarify the intent of including the compressor control requirements in section G.5.3 and update the model rule language in G.5.3, as necessary, to reflect the intended applicability of the leaking components for compressors at natural gas processing plants.

### **Fugitive Emissions from Well Sites and Compressor Stations**

**In addition to the use of Optical Gas Imaging (OGI), Method 21 should be recommended as RACT and be provided as a compliance option to detect leaking components at well sites and compressor stations.**

Based on the preamble discussion in the draft CTG, the EPA appears to accept both Method 21 and OGI as acceptable mechanisms for identifying fugitives with a leak definition of 10,000 parts per million (ppm) at well sites and compressor stations. The EPA acknowledges that Method 21 is a current monitoring program in use by industry and lists Method 21 as a recommended RACT level of control in section 9.4 of the draft CTG. The corresponding model rule language also prescribes Method 21 as a resurveying option, along with an OGI resurvey option, for owners and operators to choose after repairing or replacing a leaking component.

The EPA revised its existing leak detection and repair (LDAR) program to allow the use of an OGI inspection as an alternative compliance option. This revision was subsequently incorporated as RACT by Texas to add compliance flexibility while maintaining a control level consistent with Method 21. Consistent with the EPA’s existing LDAR regulations, the EPA recommends both Method 21 and OGI inspections as RACT at natural gas processing plants in the draft CTG but limits this flexibility for well sites and compressor stations.

As proposed in the draft CTG, affected owners and operators would be required to implement an OGI inspection plan and have no Method 21 initial survey option. The TCEQ supports the use of OGI technology, but has reservations supporting OGI as the sole compliance tool for the proposed LDAR program. The TCEQ’s reservations include the limited availability and high cost of OGI instruments, and the inability to quantify leaks detected with OGI technology. In addition to the use of OGI, Method 21 should be recommended as an alternate compliance option to detect leaking components. Potentially affected sites may prefer the Method 21 monitoring option as opposed to the OGI inspection method for cost-effective purposes or for survey efficiency due to the low number of fugitive components at a given site. Both monitoring mechanisms have been technologically and economically demonstrated. The TCEQ supports inclusion of an annual or semiannual Method 21 inspection with a 10,000 ppm leak detection level, which is the same detection level prescribed for the OGI inspection method, to provide affected owners’ and operators’ flexibility and a cost-effective alternative to the OGI inspection monitoring survey recommended in the draft CTG and model rule language.