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Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
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Attention: Docket ID Number: EPA-HQ-OAR-2010-0505
Submitted via www.regulations.gov

Chevron U.S.A. Inc. ("Chevron") is an integrated energy enterprise involved in all aspects of the energy business: exploration, production, manufacturing, transportation, marketing, and research. We are committed to conducting our operations safely and in a manner that protects the environment. Chevron is an active operator in the United States, with exploration and production operations in Alabama, California, Colorado, Gulf of Mexico, Louisiana, Michigan, New Mexico, Ohio, Oklahoma, Pennsylvania, Texas, Utah, West Virginia, and Wyoming.

We appreciate the opportunity to provide comments on the proposed New Source Performance Standard Subpart OOOOa published September 18, 2015. We believe it is crucial that the EPA and other interested agencies work closely and collaboratively with industry stakeholders who bring real world expertise and experience to these very complex issues. We appreciate your efforts to work with industry on this rule.

As a member of the American Petroleum Institute (API), we strongly support and adopt the comments submitted by API. We would like to reinforce API's position that, for the exploration and production sector, there are no emissions reduction benefits from regulating methane in addition to volatile organic compounds (VOCs). We recommend expanding on the existing VOC regulations with a methane co-benefit by including VOC based provisions for the additional sources included in Subpart OOOOa that were not included in Subpart OOOO. We believe that the agency can achieve greater emissions reductions through a combination of new source VOC regulations and voluntary actions by industry on existing sources.

One overarching concern with the Subpart OOOOa rule is the recordkeeping provisions. We believe there are several ways to improve the effectiveness of this rulemaking by reducing the recordkeeping requirements for each of the source areas. We support the detailed recommendations provided in API's comments.

In addition to those detailed comments, we would like to highlight several items for your consideration regarding the fugitive emission program and the reduced emissions completions proposal.

Chevron's recommendations for improving the fugitive emissions (Leak Detection and Repair) program are as follow:

- Alternative Compliance Mechanism: We support the development of an alternative compliance mechanism that results in greater emissions reductions at a lower cost. The broad scope, complicated frequency, recordkeeping burden, and prescriptive timeframes for inspections will result in inefficient inspection program, likely diverting resources from current existing source programs which are not required by regulation.

    - Currently, Chevron conducts inspection programs in each of our onshore production business units. We do so via a voluntary risk-based approach or due to regulatory requirements. We recommend inclusion of an alternative compliance mechanism that allows operators, particularly those with a demonstrable track record for well controlled operations, to continue to survey new and existing sources using a risk based program to determine the scope and frequency for surveys and utilizing existing programs for recordkeeping and reporting.

    - Under such an alternative program, recordkeeping that includes an inspection date, estimated number of components, number of components leaking and any repairs not made within 60 days would provide all the information essential to the agency to assure compliance, without requiring companies to buy, test and assure new recordkeeping systems. Companies with systems for tracking inspections should be allowed to continue to utilize them, and make them available to inspectors as requested, instead of developing entirely new systems. These systems would also track site location, date, and number of leaks. Under this alternative compliance program companies would not be subject to other Subpart OOOOa fugitive emissions requirements such as site specific plans, weather tracking, and photos.

    - A company-wide plan detailing training requirements and standards for surveys could be provided to EPA. An annual report outlining the total number of sites inspected and the number of leaks found (total and as a proportion of estimated components) could also be submitted. We believe the frequency, scope, and recordkeeping contained in the 9/18 proposal would be a major disincentive to companies to continue voluntary programs that cover both new and existing sources, ultimately resulting in fewer emissions reductions and more resources dedicated to recordkeeping.

    - Please see ATTACHMENT A for suggested mechanisms for an alternative compliance approach.

- Alignment with States: Several jurisdictions, including Colorado, Pennsylvania, Ohio, Wyoming and California Air Districts have existing leak detection and repair programs. This rule does not provide a clear mechanism for alignment with these existing programs. In some areas, such as the San Joaquin Valley, a company could be required to conduct a Method 21 inspection under local requirements, and an entirely separate OGI inspection of the same facilities under Subpart OOOOa/the control technique guidelines (CTGs). In Colorado and Pennsylvania, the methods and frequencies are more flexible, but still do not align with the proposed federal program and will require some duplicative inspection work and significant additional recordkeeping for no additional benefit. One option for alignment would be to make all operations that are covered by a state program not affected sources, similar to the tank provisions in Subpart OOOO. Another option would be to allow state programs to qualify as an alternative compliance mechanism.

- Frequency: Data from Chevron's existing leak detection/find and fix programs shows that there is already a very low leak rate, even will annual surveys. So little gas is recovered that it is likely there will be more greenhouse gas emissions from driving to remote sites than will be recovered through leak detection and repair. In states where Chevron implements regulatorily required leak detection and repair programs, we currently find leak rates that range from 0.04% to 0.16% of

components leaking. Increasing the inspection frequency to semi-annual is likely to result in little to no additional leak reduction, but will result in greenhouse gas emissions from vehicles being driven to sites for inspections. We recommend surveys be conducted annually at well sites.

- Scope: Data from Chevron's existing leak detection/find and fix programs indicates that leaks are concentrated at compressors and vapor recovery units, with minimal leaks at wellhead. It will be more cost effective to focus the scope of requirements to surveys only on sites with compressors or vapor recovery units. Additionally, the definition of a well site for this provision of the rule is expansive, and beyond a rational understanding of "site." For example, hydraulically fracturing a well and then including a production system or tank battery that receive the gas/liquids from the well that could be hundreds of feet away in the survey program as a new source does not meet a commonly understood definition of a new or modified wellsite. The addition of a well's production to a tank battery does not increase the number of components or opportunities for leakage at the tank battery or production system, and therefore should not result in requiring surveys beyond the well pad.

- Recordkeeping: Recordkeeping for this rule is overly burdensome and drastically increases the cost of compliance with no emissions reduction benefit. The site specific plans are unnecessary as the standards for key inspection criteria (e.g. wind speed) would be outlined in the corporate wide plan. Additionally, the site specific plan could limit the opportunity for experienced operators to use the optical gas imagers in the most effective way possible as this could require deviating from the pre-defined walking path to account for wind, weather or background site conditions on the day of the survey. Companies would require significant additional recordkeeping, QA/QC and compliance assurance staff to comply with this rule. All of this additional cost will result in no additional emissions reductions. This requirement also provides a disincentive for companies to participate in EPA's voluntary Natural Gas STAR Methane Challenge as the paperwork burden and time spent surveying sites with little to no leaks could divert resources dedicated to programs at existing sources. Additionally, it is not clear whether EPA has the resources to review these reports. Please see ATTACHMENT B for suggestions on appropriate recordkeeping and camera use guidelines.

- Timing for new sources: 30 days to survey each new and modified site will result in inefficient travel patterns. For example, on a multi-well pad, if 30 days pass between the completion of the first and last wells, the surveyor will have to revisit the same well pad twice for initial inspections. The provision to require four months to pass between inspections could result in this double survey issue persisting for the life of the wellsite. We recommend the initial review period be 180 days from the start of production to provide opportunities to reduce travel time by grouping several initial inspections. Additionally, we request greater flexibility on the time between inspections by eliminating the provision requiring four months to pass between surveys.

- Definition of a leak: There are places on a well pad that are designed to release pressure for safety purposes or for tank gauging (for example, thief hatches). Typically programs in states, in recognition of this fact, do not consider emissions from properly operating devices as leaks. We understand the agency would like to limit emissions from malfunctioning devices, and Chevron is aligned and want to fix malfunctioning devices. We ask the agency to reconsider listing functioning devices as leaks and consider instead listing malfunctioning only.

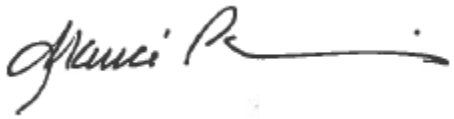
Chevron's recommendations for improving the completions provisions are as follows:

- Exceptions: When general knowledge of field characteristics indicates a Reduced Emissions Completion (REC) is not feasible due to lack or quality of gas, operators should not be required to bring a separator out on site and record every attempt to connect. This will needlessly increase cost and compliance burden without reducing emissions.

- Recordkeeping: The paperwork and recordkeeping burden on the existing REC gas well program has proven expensive, and it does not appear that EPA has examined or utilized any of the REC reports. Instead of the REC-PIX program and extensive records regarding hourly flows, the Greenhouse Gas Reporting Program should be the tool for reporting emissions from RECs.

In closing, we see multiple opportunities to improve the effectiveness of this rule by streamlining the leak detection provisions and hydraulically fractured oil well completions requirements. We greatly appreciate your attention and are happy to meet at your convenience to further discuss these comments. If you have any questions, please contact Vanessa Ryan at (925) 790-3803 or vanessa.ryan@chevron.com

Sincerely,



ATTACHMENT A

Set forth below are three of the potential options for supporting an alternative compliance approach under the terms of the Clean Air Act. We urge EPA to include one or more of these options in the final rule. As EPA acknowledges in the preamble to the proposed rule, many owners and operators have already implemented state and corporate-wide fugitive emissions reduction programs, which evolved based on either state regulatory requirements or programs that companies have developed as responsible corporate citizens to use innovative and often cutting-edge approaches to reduce leaks.

Corporate programs efficiently target and detect leaks based on owner or operator experience and, at the same time, achieve equal or greater emissions reductions than would be achieved through this rulemaking without the complex, administratively burdensome, and very costly compliance program set forth in the proposal. As it stands, we anticipate that the administrative burden imposed through the federal LDAR provisions will drastically impact the cost of maintaining our fugitive emissions program without providing any additional emissions reductions.

There is considerable precedent for inclusion of alternative compliance mechanisms in EPA rules. For example, in some instances, EPA has adopted as an "alternative standard" similar state or local rules.[1] In other instances, EPA has adopted an "alternative means of emission limitation" that allows sources or even equipment manufacturers to apply for an equivalency—based on emissions—for an alternate standard.[2] In other instances, EPA has created a regulatory "off-ramp" for sources that implement pollution control requirements that would be required by a rule and allow them to document the controls, but not be subject to burdensome recordkeeping and reporting requirements.[3] Still in other cases, EPA has allowed compliance with other federal rules to satisfy a particular rule's obligations in order to avoid duplicative reporting and recordkeeping regimes.[4]

We appreciate EPA's recognition of these concerns by soliciting comment on such an approach in the preamble to the proposal. We understand the need for any alternative standard to be enforceable and welcome the opportunity to engage in a dialogue with EPA regarding the appropriate mechanisms for monitoring, reporting, recordkeeping, and enforceability of any of these alternative compliance options.

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[1] 40 C.F.R. § 60.103a(g) ("An affected flare subject to this subpart located in the Bay Area Air Quality Management District (BAAQMD) may elect to comply with both BAAQMD Regulation 12, Rule 11 and BAAQMD Regulation 12, Rule 12 as an alternative to complying with the requirements of paragraphs (a) through (e) of this section. An affected flare subject to this subpart located in the South Coast Air Quality Management District (SCAQMD) may elect to comply with SCAQMD Rule 1118 as an alternative to complying with the requirements of paragraphs (a) through (e) of this section.").

[2] 40 C.F.R. § 60.103a(j) ("Each owner or operator subject to the provisions of this section may apply to the Administrator for a determination of equivalence for any means of emission limitation that achieves a reduction in emissions of a specified pollutant at least equivalent to the reduction in emissions of that pollutant achieved by the controls required in this section."); 40 C.F.R. § 60.114a ("If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112a, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement."); 40 C.F.R. §60.114b (same); 40 C.F.R. § 60.634 (same); 40 C.F.R. § 60.694 (same); 40 C.F.R. § 60.746 (same); 40 C.F.R. § 60.5402 (same); 40 C.F.R. § 60.480(e).

[3] 40 C.F.R. § 60.5365(h)(1) (providing that gas wells that undergo a green completion following refracturing are not considered modified and therefore are not affected facilities under the NSPS).

[4] 40 C.F.R. § 60.480(e) (As an alternative means of compliance, "[o]wners or operators may choose to comply with the provisions of 40 CFR part 65, subpart F, to satisfy the requirements of §§60.482 through 60.487 for an affected facility."); 40 C.F.R. 480a(e) (same); 40 C.F.R. § 60.110a(c) (same); 40 C.F.R. § 60.110b(e) (same); 40 C.F.R. § 60.560(j) (same). Note that this compilation of examples is not comprehensive and merely represents a sampling of the many alternative compliance options provided in the regulations.

1. Alternative Standard Relying on State and Voluntary Programs Pursuant EPA's Authority Under Clean Air Act Section 111(h)(1)

Section 111(h)(1) of the Clean Air Act allows EPA to prescribe a performance standard that reflects the best technological system of continuous emission reduction if it is "not feasible to prescribe or enforce a standard of performance."[5] Relying on Section 111(h)(1), EPA could designate an alternative standard by which owners and operators could comply with the requirements in the rule. This approach would avoid the inefficiencies associated with overlapping state and voluntary programs by designating them as alternative standards. Moreover, owners and operators could maintain existing programs and ensure that resources are focused primarily on emissions reduction.

We suggest that EPA benchmark the standard against the 1.18% baseline leak rate assumed in EPA's analysis.[6] For purposes of this proposal, EPA estimates that its fugitive emissions program will achieve an 80 percent reduction level with a quarterly monitoring program, 60 percent reduction level with a semi-annual monitoring program, and a 40 percent reduction level with an annual monitoring program.[7] We anticipate the EPA can make the appropriate finding of efficacy for those programs that achieve or exceed emissions reductions from this benchmark.

The efficacy of this program can be adequately demonstrated. Chevron's emissions program has already achieved leak rates far below those anticipated through implementation of the federal LDAR requirements: At present, measured leak rates range from 0.04 to 0.16 percent of components leaking.

2. Alternative Compliance Relying on State and Voluntary Programs Pursuant to EPA's Authority Under Clean Air Act Section 111(h)(3)

Clean Air Act Section 111(h)(3) provides that EPA may authorize the use of an "alternative means of emission limitation" that will achieve an equivalent reduction in emissions "after notice and opportunity for public hearing."[8] Pursuant to Section 111(h)(3), the agency could include a provision that would allow owners and operators to petition EPA to designate their state or corporate fugitive emissions programs as alternative means of emission limitation, conditioned on a finding of equivalency.

As discussed above, EPA could base the finding of equivalency on the 1.18% leak rate assumed in EPA's analysis and the anticipated emissions reductions EPA expects to achieve through this rulemaking.
We note that this approach can be combined with the other approaches included in this Attachment (just as EPA did in Subpart Ja of the NSPS rules for refinery flares) to provide the greatest flexibility for owners and operators to demonstrate the equivalency of existing programs, thus streamlining compliance while achieving the same ends EPA seeks in the proposed rule.

3. Applicability Criteria Pursuant to EPA's Authority Under Clean Air Act Section 111(h)(1)

A third option available to EPA is to include a provision similar to the approach used in Subpart OOOO regarding hydraulic fracturing, in which EPA created a regulatory off-ramp for sources that were doing

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[5] 42 U.S.C. § 7411(h)(1).

[6] *See* EPA, *Control Technique Guidelines for the Oil and Natural Gas Industry (Draft)* at 8-6, 9-19 (Aug. 2015) (cost estimates based on the "assum[ption] that 1.18 percent of the components leak").

[7] "[U]sing engineering judgement and experience obtained through our existing programs for finding and repairing leaking components, we selected 80 percent as an emission reduction level that can reasonably be expected to be achieved with a quarterly monitoring program. Due to the increased amount of time between each monitoring survey and subsequent repair, we believe that the level of emissions reduction achieved by less frequent monitoring surveys will be reduced from this level. Therefore, we assigned an emission reduction of 60 percent to semiannual monitoring survey and repair frequency and 40 percent to annual frequency, consistent with the reduction levels used by the Colorado Air Quality Control Commission in their initial and final economic impacts analyses. We solicit comment on the appropriateness of the percentage of emission reduction level that can be reasonably expected to be achieved with quarterly, semiannual, and annual monitoring program frequencies." 80 Fed. Reg. 56,593, 56,640 (Sept. 18, 2015) (emphasis added); *see also id.* at 56,635.

[8] 42 U.S.C. § 7411(h)(3).

green completions. Here, EPA could find that facilities that have implemented and are complying with state or corporate fugitive emissions programs that achieve the same emission reductions as the federal program are not affected facilities. As with the other options outlined above, this provision would allow owners and operators with successful existing LDAR programs in place to continue to advance these programs and, at the same time, achieve the emission reductions EPA anticipates will be achieved through the federal LDAR program.

Here again, EPA could benchmark the performance standard by which applicability of the LDAR provisions would be determined according to the 1.18% leak rate assumed in EPA's analysis and the anticipated leak rates EPA expects to achieve through this rulemaking.

ATTACHMENT B

Upon reviewing the proposal for fugitive emissions monitoring and repair, and as noted in our comment letter, Chevron does not see any value in developing site specific plans. A corporate or area-wide plan can achieve equal emission reductions in a manner that is responsible, transparent and verifiable. Elements that could be included in such a plan are outlined below.

- Overall Procedure
  - Safety considerations for camera usage.
    - Plan should include manufacturer recommendations for usage

- Camera Use and Training
  - Requirements for training on the proper use of an optical gas imager or a hand held device
    - Equipment specific operating parameters: background, temperature differences and wind speeds

- Leak Identification Procedure
  - Ways to mark leaks that cannot be fixed during survey
  - Standard method to identify leak locations (tagging or photo, as appropriate)

- Monitoring Frequency
  - Frequency determined by prior experience of leak likelihood, OR required state/local regulation or permit condition.
  - Weather and other safety related travel restrictions should be considered when planning frequency

- Repair Procedures (example procedures that could be tailored for company-specific needs)
  - Make initial attempt to repair on-site if safe, and approved by operations.
    - Resurvey with camera while on-site if possible
  - If leak cannot be repaired during survey, mark leak and log into maintenance system with an initial repair attempt scheduled within 30 days, if shut-in is not required.
    - Resurvey with camera, handheld or soap solution
  - If the leak cannot be fixed with first attempt, tag it and mark it to be fixed during the next shut-in. Note in maintenance system that repair is delayed and the reason.

- Recordkeeping
  - Date leak was detected
  - Date of first attempt to repair
  - Date of successful repair of leak
  - Part type (valve, flange) and service (compression, wellhead)