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October 31, 2016

By Electronic Submission

EPA Docket  
Center (EPA/DC), Environmental  
Protection Agency, Mail Code 28221T,  
1200 Pennsylvania Ave. NW.  
Washington, DC 20460

**Information Collection Request Submitted to OMB for Review and Approval; Comment  
Request; Information Collection Effort for Oil and Gas Facilities**

**[EPA-HQ-OAR-2016-0204; FRL-9953-31-OEI]**

These comments are filed on behalf of the Independent Petroleum Association of America (IPAA) and the American Exploration and Production Council (AXPC) (collectively, IPAA/AXPC).

IPAA represents the thousands of independent oil and natural gas explorers and producers, as well as the service and supply industries that support their efforts, that will most directly be impacted by the U.S. Environmental Protection Agency (EPA) policy decisions to regulate methane directly from the oil and natural gas sector. Independent producers develop about 95 percent of American oil and natural gas wells, produce 54 percent of American oil, and produce 85 percent of American natural gas. Historically, independent producers have invested over 150 percent of their cash flow back into American oil and natural gas development to find and produce more American energy. IPAA is dedicated to ensuring a strong, viable American oil and natural gas industry, recognizing that an adequate and secure supply of energy is essential to the national economy.

AXPC is a national trade association representing 30 of America's largest and most active independent oil and natural gas exploration and production companies. AXPC members are "independent" in that their operations are limited to exploration for and production of oil and natural gas. Moreover, AXPC members operate autonomously, unlike their fully integrated counterparts, which operate in additional segments of the energy business, such as downstream refining and marketing. AXPC members are leaders in developing and applying innovative and advanced technologies necessary to explore for and produce oil and natural gas, both offshore and onshore, from non-conventional sources.

Additionally, they are joined by the American Association of Professional Landmen (AAPL), the Association of Energy Service Companies (AESC), the Domestic Energy Producers Alliance (DEPA), the International Association of Drilling Contractors (IADC), the International Association of Geophysical Contractors (IAGC), the National Stripper Well Association

(NSWA), the Petroleum Equipment & Services Association (PESA), and the following organizations:

Arkansas Independent Producers and Royalty Owners Association  
California Independent Petroleum Association  
Coalbed Methane Association of Alabama  
Colorado Oil & Gas Association  
East Texas Producers & Royalty Owners Association  
Eastern Kansas Oil & Gas Association  
Florida Independent Petroleum Association  
Idaho Petroleum Council  
Illinois Oil & Gas Association  
Independent Oil & Gas Association of New York  
Independent Oil & Gas Association of West Virginia  
Independent Oil Producers' Agency  
Independent Oil Producers Association Tri-State  
Independent Petroleum Association of New Mexico  
Indiana Oil & Gas Association  
Kansas Independent Oil & Gas Association  
Kentucky Oil & Gas Association  
Louisiana Oil & Gas Association  
Michigan Oil & Gas Association  
Mississippi Independent Producers & Royalty Association  
Montana Petroleum Association  
National Association of Royalty Owners  
New Mexico Oil & Gas Association  
New York State Oil Producers Association  
North Dakota Petroleum Council  
Northern Montana Oil and Gas Association  
Ohio Oil & Gas Association  
Oklahoma Independent Petroleum Association  
Panhandle Producers & Royalty Owners Association  
Pennsylvania Independent Oil & Gas Association  
Permian Basin Petroleum Association  
Petroleum Association of Wyoming  
Southeastern Ohio Oil & Gas Association  
Tennessee Oil & Gas Association  
Texas Alliance of Energy Producers  
Texas Oil and Gas Association  
Texas Independent Producers and Royalty Owners Association  
Utah Petroleum Association  
Virginia Oil and Gas Association  
West Slope Colorado Oil & Gas Association  
West Virginia Oil and Natural Gas Association

Collectively, these groups represent the thousands of independent oil and natural gas explorers and producers, as well as the service and supply industries that support their efforts that will be most significantly affected by the actions resulting from these regulatory proposals. In addition

to the specific comments made herein, we support those comments submitted separately by the participants in these comments. IPAA/AXPC also endorses and supports the comments of the Western Energy Alliance (WEA) and the American Petroleum Institute (API) submitted on the proposed Information Collection Request (ICR) referenced above.

IPAA/AXPC submitted extensive comments on the initial ICR proposal (Attachment 1). Many of the issues raised in those comments have been dismissed in the Agency's rush to distribute this costly and poorly structured ICR. A number of these issues remain a significant concern and will be addressed below.

However, because the current element of this ICR proposal is its pending review by the Office of Information and Regulatory Affairs (OIRA), the initial comments will address the proposal in the context of its conformance with the principal purposes of the Paperwork Reduction Act (PRA).

Among the purposes of the PRA are the following:

- It must be necessary for the proper performance of the functions of the agency, including whether the information has practical utility;
- It must minimize the federal information collection burden, with particular emphasis on those individuals and entities most adversely affected;
- It must maximize the practical utility of and public benefit from information collected by or for the federal government;
- It must not duplicate other agency information collection efforts.

Using these tests, the proposed ICR wholly fails for numerous reasons. To assess the context of these failures, understanding the construct of the ICR is essential. EPA divides the ICR into two phases – Part 1 sent to thousands of recipients and Part 2 sent to an estimated 3818 recipients requesting detailed and extensive information. Part 1 presents significant challenges and burdens because of its scope and deadlines. Much of this burden is unnecessary and fails to conform to the purposes of the PRA.

The principle function of Part 1 is to provide information on oil and natural gas production to assure that the detailed information from Part 2 can be properly scaled to assure that EPA has an adequate understanding of the industry to develop appropriate regulations, including creating subcategories to reflect differences in the industry. Consequently, a fundamental issue involves the amount of information that needs to be gathered – and the appropriate burden of that effort.

### **Part 1**

There are over one million operating oil and natural gas wells in the United States. As will be discussed subsequently, EPA egregiously understates the cost of providing Part 1 information. And, significantly in the context of the PRA, EPA makes no effort to utilize federally held or publicly available information from State permitting agencies to “...minimize the federal information collection burden, with particular emphasis on those individuals and entities most adversely affected” and to “...maximize the practical utility of and public benefit from information collected by or for the federal government.”

For example, the federal government regularly utilizes data on oil and natural gas production from DrillingInfo. The Energy Information Administration use DrillingInfo to develop analyses of American production. EPA has referenced DrillingInfo in its regulatory actions. Clearly,

EPA has access not only to the DrillingInfo data but also to experts in the Energy Information Administration who could assist in analyzing the nuances of the production data.

Similarly, much of the Part 1 information relates to data that is regularly supplied to State oil and natural gas permitting agencies. This information is publicly available and can be retrieved without cost to EPA. Like the DrillingInfo data, this information is familiar to experts at the Energy Information Administration.

For example, the majority of information requested under ICR Part 1, Question 4 could be developed using information available to the Agency from the DrillingInfo data. Similarly, air permits, such as those required by the Texas Commission on Environmental Quality, provide a substantial portion of the information required in ICR Part 1, Questions 1, 2 and 3.

Collectively, these resources should be mined and analyzed by EPA before it imposes its excessive demands on the private sector – particularly on the small business component of the oil and natural gas production industry. And, make no mistake about it, small businesses are the largest component of independent producers. IPAA’s survey of independent producers indicates there are about 9,000 independent oil and natural gas producers in the United States. These companies operate in 33 states and the offshore and employ an average of just 12 people.

Using this approach would be entirely consistent with the purposes of the PRA. It would substantially define the shape of the industry. It would not excessively burden the industry. And, yet, it would provide EPA with the scope of understanding of the industry that it needs for determining if its Part 2 component of the ICR provides an appropriate scope of information to broadly characterize the industry. EPA may argue that the information it is requesting has been submitted to other agencies, but it has not been submitted in the form that EPA requests and reclaiming the information merely to recast it for EPA is at the heart of the burden that the purposes of the PRA state should not be borne by the private sector.

The initial IPAA/AXPC comments urged EPA to look to these data sources, first, to develop a reasonable understanding of the industry and, second, to utilize the information to meet its PRA responsibilities. In its superficial “Oil and Gas ICR Comment Summary”, EPA provided its recurring response to most of the substantive comments in the Docket:

EPA has considered and evaluated the impacts of this comment and has decided not to pursue any further action.

This disdainful response demonstrates that EPA has little interest in finding any alternatives to its original ICR proposal to alleviate its burdens.. Now, it is essential that OIRA maintain the integrity to the PRA by compelling EPA to seriously revise its ICR approach.

EPA’s failure to consider recommendations in the initial ICR comments is further demonstrated in its characterization of the scope of its ICR and the cost of compliance. In the *Federal Register*, EPA states:

Estimated number of respondents: The estimated number of respondents for Part 1 is 15,000 operators representing approximately 698,800 facilities (total). The estimated number of respondents for Part 2 is 3,818.  
and

Total estimated burden: 245,481 hours. Burden is defined at 5 CFR 1320.03(b).

Total estimated cost: \$37,692,625, which includes \$6,987,000 in operating and maintenance (O&M) costs.

In supporting statements, EPA provides a breakdown of these estimates by Parts. It states in its INFORMATION COLLECTION REQUEST SUPPORTING STATEMENT:

The reporting and recordkeeping burden and cost to production operators for the Part 1 information collection is 116,438 hours and \$16,468,682, which includes \$15,000 in O&M costs to mail the hard copies of the responses (see Attachment 3B). The reporting and recordkeeping burden and cost to the industry for the Part 2 information collection for facilities selected for the detailed Part 2 survey is 129,043 hours and \$21,223,943, which includes \$6,972,000 in O&M costs for contracted storage vessel feed material flashing analyses (see Attachment 3B).

Based on these statements, EPA believes that the average operator would have about 47 wells, that the time to complete would be about 16 hours per operator and that the cost would be about \$2500 per operator. For Part 1 only, EPA believes the time would be about 8 hours per operator and cost about \$1100 per operator.

Remarkably, after all of the comments submitted on the ICR proposal, EPA found that it only needed to change the cost of mailing costs in its estimates, perhaps because it reduced the estimated number of respondents from 22,500 to 15,000:

The reporting and recordkeeping burden and cost to production operators for the Part 1 information collection is 116,438 hours and \$16,476,182, which includes \$22,500 in O&M costs to mail the hard copies of the responses (see Attachment 3B).

However, as stunningly impressive as this evaluation may be, it flies in the face of the overwhelming number of comments by industry experts – who actually have to complete the ICR – that these costs are absurdly low.

For example, in the comments submitted by API, it stated:

An operator is likely to require approximately 5 hours per facility to complete and submit the Part 1 ICR form, as proposed, based on a pilot attempt to complete the Part 1 survey. Across all onshore production facilities in the U.S., that translates to an industry burden of over \$511 million, or more than 30 times higher than EPA's estimate, to complete Part 1 of the ICR.

Similarly, in comments submitted by Pioneer Natural Resources, it analyzed the completion challenges of ICR Part 1 as follows:

**PART 1:** EPA states that the potential respondent universe consists of 22,500 operators representing approximately 698,800 facilities (based on total well counts assuming 2 wells per facility). Thus, the burden estimate for each operator is based on reporting information for 30 facilities on average, with 2 wells per facility. Pioneer appreciates that EPA is attempting to account for all producers in the U.S. but even if statistically true (a point we do not here concede), 30 facilities/operator is an extremely low and nonsensical estimate for a large independent such as Pioneer not to mention the majors. Pioneer, the 4th

largest independent oil and gas exploration and production company in the U.S., currently operates approximately 2,000 facilities, including all tank batteries, disposal well facilities and gathering and boosting stations, and approximately 11,000 wells that tie into these facilities (and this is not including the current and historical P&A wells EPA is irrationally asking operators to include in Part 1 as well). Further, Pioneer's older wells may only have 2 wells/facility but many of Pioneer's larger horizontal battery facilities can contain up to 12 wells/facility.

Although EPA based these estimates on an average, this does not apply to the reality of oil and gas operators in the U.S and the very significant discrepancy between very small v. large operators. Pioneer strongly urges EPA to account for this discrepancy in their estimates to demonstrate a more realistic burden on larger operators such as Pioneer.

Considering the time and cost estimates are directly tied to this 30 well/operator average, Pioneer strongly urges EPA to reconsider this figure and account for the many operators on the larger side of this average in an alternate, more representative manner.

Next, EPA assumes an operator will complete an average of 30 surveys for Part 1 spending a total of 5.2 hours (i.e. 10.35 minutes/facility) and \$732 per respondent (i.e. \$24.38/facility and \$141.31/hour).

1. ***First scenario:*** Applying these estimates to Pioneer, first keeping EPA's time estimate of 10.35 minutes/facility constant (although this is an unrealistically low estimate) and multiplying this time estimate by 2,000 Pioneer's total number of facilities company-wide, Part 1 would take 345 total hours to complete (as opposed to EPA's estimate of 5.2 hours) costing a total of \$48,752 (as opposed to EPA's estimate of \$732). This cost to Pioneer would be 66 times greater than EPA's estimate! This would be an undue cost burden to Pioneer and one that has clearly not been accounted for in the proposed ICR.

Further, in order to complete Part 1 in the mere 30 days EPA has proposed, it would take ***approximately*** 1.5 people working 40 hours/week, assuming these individuals could abandon their current responsibilities for this period of time and devote full time attention on completing this ICR.

2. ***Second scenario:*** In order to determine and verify all of the information called for in Part 1, including mapping the distance to nearest field office and gathering line and manually entering each facility and wells that tie into each facility, etc...) 30 minutes/facility is a more realistic timeframe. Therefore, adjusting the time frame to complete Part 1 for each facility from 10.35 minutes to 30 minutes, it would take 15 hours to complete EPA's estimated 30 facilities at a cost of \$2,120. Applying this more accurate 30 min/facility timeframe to all of Pioneer 2,000 facilities, it would take a total of 1,000 hours and cost approximately \$141,309. This cost to Pioneer would be approximately 193 times greater than EPA's estimate! Further, as currently constructed, this would require greater than 6 full time individuals (working 5 days/week)

devoted to completing Part 1 of this ICR in the 30 day timeframe proposed.

Another company reports that it ran a pilot project and calculates that it will require approximately 60 mins per facility with a range between 30 mins and 90 mins. Using 60 mins rather than EPA's analysis, this company will need approximately 24,000 man-hours to comply with the Part 1 requirements. Another company determined that it would take 280 hours for it to complete Part 1 for its 1550 wells.

Similarly, a larger company with over 13,000 wells concluded that its time to complete Part 1 would be approximately 2,200 hours and, using EPA's \$141.50/hour estimated costs, the cost would be over \$300,000. It also tried to look to a contractor for completion of the Part 1 information and received an estimate of over \$1,500,000.

A mid-size production company that operates more than 3,400 well sites with thousands of production wells use the EPA estimated 7.76 hours per respondent with a breakdown of 6 hours to compile data and 0.3 hours for manager's review to complete Part 1 to assess its reporting. It concluded that the respondent would need to read, analyze, compile, review, and submit within 0.13 minutes for each wellsite, i.e., "facility". As we have stated earlier, EPA has failed to recognize that the data may reside in multiple information sources. That is, the data is not from one database and substantial efforts are required in data extraction and compilation to ensure data integrity. This producer concluded that in its efforts to estimate industry's burden to complete Parts 1 and 2, it is expected that, not including field verification and third party contractor, the data components will need to be extracted from eight different data sources. Additionally, there are data components which will require manual inputs, i.e., applicability to regulations. With regard to Part 1, using 8 minutes per well site, with more than 3400 well sites, it would take 520 hours or 13 weeks (8 hours/day and 5 days/week) to complete Part 1. This estimation is significantly more than EPA's estimated 7.76 hours per respondent.

In response to these comments, EPA states in its "Oil and Gas ICR Comment Summary":

EPA has revised the burden estimate to reflect all changes to the ICR.

Thus, after all of the questions raised about the costs associated with complying with the burden of Part 1, OIRA is asked to believe that reducing EPA's cost estimate by \$7,500 – the \$1 per operator mailing costs – represents a serious effort by EPA to conform to the requirements of the PRA.

By dismissing these comments so cavalierly, EPA fails to meet its requirements under the PRA. Under the PRA, an agency is required to objectively evaluate and objectively support its paperwork burden estimates. Specifically, under 5 CFR 1320.8(a)(4) the agency review of its information collection must include "[a] specific, objectively supported estimate of burden". The PRA does not merely require that the agency have in its possession a record of such objective support and evaluation of burdens, it requires that the agency "provide a record supporting [its] certification" regarding the information collection burdens<sup>1</sup>. EPA has an obligation to provide upfront supporting information in its ICR by identifying the sources and methods of obtaining EPA's numerical estimates. How EPA's estimates can be so egregiously understating the ICR burden while it fails to present an iota of rebuttal to the submitted

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<sup>1</sup> 44 U.S.C. § 3506(c)(3)

comments mocks the entire concept of paperwork reduction. OIRA must require EPA to address and resolve these differences.

Certainly, part of the cost difference reflects EPA's astonishingly low time estimates for completing its ICR requirements. But, it is equally unlikely that EPA bothers to recognize that industry must excessively spend time to assure the accuracy of its data. Because EPA is using the authority of Section 114 of the Clean Air Act to acquire its ICR information, all of the information submitted therefore exposes the operator to future enforcement actions. EPA has not indicated that it will not use the information for future enforcement actions; consequently, no operator can act without a careful legal review of the information.

EPA's proposed 30 day response time for its Part 1 questionnaire makes this part of the ICR untenably difficult. The burden it creates is unreasonable for both large and small producers. Because EPA has so completely failed to understand the makeup of the industry, its estimates are wholly unrealistic. At the heart of the matter is EPA's misperception that producers average about 50 wells.

Instead, large producers will need to acquire and validate data on 10,000, 20,000 or more wells. This burden – despite a larger staff – will overwhelm them. The task is no less problematic for small operators. Many of these producers operate several hundred wells but will only have a few management staff to collect and validate the well information. They will be similarly overwhelmed.

For example, the Kentucky Oil & Gas Association assessed the time needed to complete the questionnaire and made this analysis:

EPA's estimated time to fill out the questionnaires is significantly too short. For Part 1, the estimate is less than 10 minutes per facility. EPA's estimate of an average of 2 wells per facility is much too low for small operators. Small stripper-well operators with very limited staff, especially in these times of low prices, may have thousands of low production wells, each being defined by EPA as a "Surface Site". Typical oil producing "facilities" may include twenty or more wells on a lease producing into a common tank battery. Each of those tank batteries would qualify as a facility under EPA's definitions and each well on the lease would have to be listed in Section 4 of Part 1 individually. A gas producing "Facility" would be a small compressor site that gathers gas from hundreds of low producing gas wells. Again each well would have to be listed in Section 4.

Additionally, many of Kentucky's currently-producing wells are of an age when well locations were never surveyed and were not permitted with the state. Location information for these individual wells would be rough estimates at best.

Not all operators, especially the small operators, have all the data for their wells electronically available to them. It could take one to three hours, or even longer per Facility to fill out the questionnaire as it is currently written. This could take up to eighteen times more time than EPA's estimate. EPA's assumption that small entities/operators will have fewer wells is simply wrong and demonstrates that EPA does not understand the nature of smaller, conventional operators.

**With the much larger number of wells small operators operate and their limited staff, Part 1 of the information collection request is a much larger**

**burden on small operators from both a financial and resource standpoint.**

We suggest Part 1 questions may be more easily answered by eliminating the request for individual well information for facilities producing less than 100 BOPD or 300 Mcf/d, and only requesting the statistics for each facility, such as number of gas wells, number of oil wells, how many wells produce both oil and gas, and how many wells have flares. Typical of stripper well operations, most oil wells on a lease are equipped similarly and all gas wells behind a compressor have the same wellhead equipment. This type of simplification of data collected could dramatically reduce EPA's efforts to compile the data for use once collected.

A small business producer analyzed its time and cost for compliance with Part 1 and concluded that, for its 126 wells encompassing 6000 acres in four counties with well records ranging in age from 1964 to the present, it would take 480 hours to complete and cost \$19,200.

In its comments to the docket, Laredo Petroleum made the following observation:

Laredo has approximately 1300 wells, 300 batteries, 100 compressor locations, and 60 intermediate pads that are connected in various ways. At 10 min per site that equates to 50 hours for batteries, 17 hours for compressors, 10 hours for intermediate pads. Assuming that wells would take just 5 minutes adds an additional 109 hours. This equates to an estimated burden of 186 hours or 4.6 weeks for our staff. This is significantly more than the estimated 7.76 hours that EPA estimates it will take to respond. Additionally, the Part 1 request will compete for time required for other regulatory reporting (e.g. GHG reporting, NSPS OOOO reporting, annual emissions inventories...). Can EPA explain how the response can be completed in 7.76 hours?

Another small producer operating around 200 wells estimated that it will take a minimum of 1 hour per facility to gather the required information and complete the ICR spreadsheet. If travel is involved, this could easily expand to more than 3 hours per facility.

It is blatantly unfair to these companies under the framework of a Paperwork Reduction Act to compel responses that will be subject to future federal enforcement actions in this completely unrealistic time frame. Moreover, for some small operators the efforts that are required to complete the ICR in the time frames required will compel them to shut in their wells until they complete the information. For example, a review of the recipient data base for Ohio found 623 operators listed. For those 623 operators, over 90 percent of those offices are very lean offices consisting of less than 5 employees including secretarial services. The amount of time and expertise needed to complete the ICR questionnaires in a timely manner is simply not there. Given the current state of the industry, these small independent operators have cut down to essential staff only. While possibly operating several hundred to several thousand wells, many of Ohio's operators are only equipped to currently service and monitor wells. There is basically no capacity available to have a staff allocated to filling out ICR questionnaires in a timely manner.

If these questionnaires were required for every single well that a company owns in the state, the producer would have to mover staff from monitoring and servicing wells effectively shutting down operations, just to comply with the ICR and most likely would still not meet the 30 day timeframe set out by the EPA.

Part of EPA's failure reflects its lack of industry understanding reflected in its facility concept. EPA has historically used a facility concept that assumes two to four wells being connected to a centralized production operation. While this concept can be a model for regulation theories for conventional oil and natural gas production, it does not reflect the emerging nature of facilities for the unconventional production that dominates recent production. These facilities include 5, 10, perhaps 20 wells linked to central production operations. As a result of its lack of understanding, EPA creates a false assessment of the burden of its ICR. Most significantly, EPA uses this misperception to understate the magnitude of the task it compels. Regardless of how EPA frames its rhetoric about facilities, the clear reality is that producers must acquire and validate their information on a well-by-well basis. And, well-by-well information is not readily available and not quickly validated. EPA's experience with other petroleum operations like refineries leads it to presume a comparable capacity to develop data in the exploration and production sector that is simply not comparable.

Since EPA is unwilling to consider and recognize the impracticability and excessive burden its 30 day Part 1 response requirements poses because of the political pressures of Keep It in the Ground environmental activists that has so colored this entire ICR process, OIRA should consider creating a segmented schedule for the Part 1 responses. For example, it could impose a schedule as follows:

- Up to 25 wells to be reported within 60 days (60-day deadline)
- Additional 100 more wells in next 30 days (90-day deadline)
- Additional 250 wells in next 30 days (120-day deadline)
- All remaining wells in next 60 days (180-day deadline)

This would require extending the compliance date for Part 2 of the ICR to 180 days – an action that is also necessary because of the combined burdens in the ICR.

## **Part 2**

The ICR Part 2 questionnaire raises both similar and separate concerns. Since the primary purpose of Part 2 relates to getting detailed information on a limited number of facilities in order to understand the intricacies of oil and natural gas production, we recommended that Part 1 be completed before Part 2 was distributed. EPA ignored this recommendation, but it remains appropriate in the context of the PRA. If EPA misjudges the facilities targeted for receipt of Part 2 questionnaires, it will generate unnecessary reporting burdens.

Regardless of the sequence of the questionnaires, EPA's estimates of costs and time are as inaccurate for Part 2 as they are for Part 1. These issues are well stated in comments submitted to the docket.

For example, in its comments on the first proposal, API stated:

For the Part 2 ICR burden, EPA estimated a total cost to industry of around \$24 million across applicable industry sectors. Calculation errors identified in EPA's estimated cost table (Attachment 3B in the ICR supporting statement) result in an understatement of the costs based on EPA's assumptions by \$3.3 million. In addition, EPA underestimated the cost of tank flash gas sampling and analysis at \$1,000 per sample. In contrast, API estimates that the cost of tank liquid sampling

and analysis is \$2,500 per sample, on average, to collect and analyze each sample. Only correcting EPA's calculation errors and the cost for tank samples, the estimated cost burden increases by \$20 million, or nearly doubles, using EPA's proposed sample size and other assumptions.

In other comments, when Pioneer Natural Resources evaluated the costs of Part 2, it concluded:

**PART 2:** Although it is impossible to determine the impact of Part 2 at this time since it will be different for each operator based on the number of Part 2 questionnaires an operator receives, if any, it is without question, as in Part 1 as well, that EPA has made significant underestimations in their time and cost estimates per facility. These assumptions must be analyzed differently than Part 2, first assessing EPA's time estimates, then extrapolating upwards assuming an estimated number of facilities subject to Part 2 questionnaires.

For one facility, EPA has estimated it will take 39.96 hours to complete Part 2, costing \$8,473 per facility.

1. *First scenario:* In regard to the time and cost estimates, as also explained below in Section IV., completing a Part 2 response on a facility, including gathering data that is not currently available in company records, such as equipment component counts, and verifying the accuracy of other information will undoubtedly require visits to the field and this will require travel time en route to and from these often remote facilities that must be accounted for. In Pioneer's case, the majority of desktop information will be gathered at the headquarters in Dallas and Pioneer's operating locations are in West and South TX as well as Colorado. Potentially being required to identify every different type of pneumatic controller, taking equipment leak component counts, taking pressurized samples for separator/storage vessel flash analysis will take at least one day in the field at a particular site if not more. Therefore, between one and three days will be the least amount of time required to acquire the data to be gathered in the field. The additional time must be allocated to manually enter this data in to EPA's system.

Next, significant time will need to be spent digging through records kept in numerous different physical locations and databases and talking with many different employees in charge of different disciplines within the company in order to obtain the voluminous granularity of data required in Part 2, then manually entering it into the system. This process will be extremely time consuming. As noted in II. F., time should be allocated for QAQC so data can be verified. This entire process to complete Part 2 for one facility may realistically take much more than EPA's estimated 39.96 hours. For example, if this process takes 60 or 80 hours, the cost for completing Part 2 for one facility increases to \$10,716 and \$12,955 respectively.

However, these cost estimates are extremely low. One variable that is incorrect is EPA's estimate on the cost to perform a flash gas analysis. This analysis performed by a certified lab costs approximately \$2,500, as opposed to the \$1,000/sample that EPA estimated in the Proposed ICR. This will impose an undue cost burden on operators. Further, based on information from a local certified lab, it will take 6-8 (i.e. 42-56 days) weeks to perform this analysis, and this is not taking into account the influx of samples they would receive, especially in an area near the active Permian Basin, if this request moved forward with this requirement. Pioneer understands from conversations with personnel from a Texas area lab who performs these types of analysis that an influx of work in a short turnaround will be a challenge as the lab likely needs to staff up with qualified technicians in order to meet the demand. Based on this time lag that could be significantly longer than the current estimated 6-8 weeks, EPA's 120 day allowance to respond to Part 2 would for this purpose among other reasons explained in these comments, need to be substantially extended if this requirement remains. Pioneer therefore strongly urges EPA to modify this request to accept representative samples for example and/or modify its cost estimates for sample and analysis in this ICR.

2. *Second Scenario:* Keeping EPA's time and cost per facility estimates constant at 39.96 hours and underestimated \$111.93/hour but assuming this applied to 100 facilities subject to Part 2 questionnaires: it would take a total of 3.996 hours and cost \$451,316 to complete Part 2. Further, it would require approximately 6.2 full-time employees working 40 hours/week (5 days/week) for the 120 days proposed assuming these individuals could abandon their current environmental and compliance responsibilities for this period of time and devote full time attention on completing Part 2 of this ICR. This assumption is unreasonable.

3. *Third Scenario:* Even assuming a more conservative estimate of 50 facilities chosen for Part 2 questionnaires: it would take a total of 1998 hours and cost \$227,658 to complete Part 2. Further, it would require approximately 3 full-time employees working 40 hours/week (5 days/week) for the 120 days proposed assuming these individuals could abandon their current responsibilities, again, an unsupportable assumption, for this period of time and devote full time attention on completing Part 2 of this ICR.

A mid-size producer concluded – using a hypothetical and most typical facility consisting of 6 wells, 16 tanks, 12 controllers, 1 dehydrator, and 2 engines – that it will take 78.54 hours to complete. This estimate is inclusive of data gathering, compilation, review of data for each emission source, quality assurance review, as well as flash gas sampling and analyses. The EPA

estimated 33.8 hours per response. Under the assumption that each respondent will receive data solicitation for only one site, the EPA has underestimated the completion time by more than 100 percent.

When the Kentucky Oil & Gas Association considered Part 2 implications for small operators, it concluded:

Part 2 is estimated to take 33 hours per “respondent”. The technical questions that are in Part 2 will be difficult for small operators to answer without technical help. For many questions, the data will not be available without special testing like gas and oil analysis. While EPA has made certain assumptions regarding contracting out some of the work associated with Part 2 surveys, EPA has failed to account for the fact larger operators will likely tie up the limited number of qualified consultants thus exacerbating the time limits to answer Part 2. Many small operators will likely be unable to respond within 120 days through no fault of their own.

With the current economic landscape of the oil and gas industry, the time necessary to complete Part 1 questionnaires is not insignificant, and will be a burden felt most acutely by the small operators. Part 2 questionnaires for small operators will not only take more time than estimated but will require expensive scientific expertise not readily available to small operators. **We suggest that selected facilities for Part 2 that produce less than 100 BOPD or 300 Mcf/d, typical of small operators, not be required to fill out the Questionnaire.**

The time allotted to fill out the questionnaires is too short. With the reductions in staff for many, if not most operators, trying to allocate time to complete the Part 1 questionnaire and maintain production operations will be difficult. With the likely need for outside technical help to fill out Part 2 questionnaires, operators will inevitably need more than 120 days. **It is our suggestion that time allotted to complete the questionnaires be doubled.**

EPA dismissed these concerns with the same disdain as it ignored those raised about Part 1. Nevertheless, the issues are both real and significant. Driving these actions in the time frame proposed with the costs they create cannot be credibly asserted within the purposes of the PRA. EPA needs to extend the compliance date for Part 2 to reflect the need to develop its information and to reflect competing demands to develop Part 1 information. We recommend at least 180 days but would prefer a deadline of June 30, 2017. OIRA should insist on these more realistic deadlines.

### **Scope Exceeds Justification**

#### *ICR Seeks Unrelated Information*

The scope of EPA’s requests in the ICR demonstrates that its demands exceed its justification. EPA characterizes the need for the ICR as follows:

While a great deal of information is available on the oil and gas industry and has to date provided a strong technical foundation to support the Agency’s recent actions, the EPA is now seeking more specific information that would be of critical use in addressing existing source emissions pursuant to Clean Air Act (CAA) section 111(d).

Clearly, EPA has shown its hand regarding the type and nature of its oil and natural gas production regulations when it developed Subpart OOOO and Subpart OOOOa for new sources and modified sources and when it proposed its Control Techniques Guidelines for existing sources in Ozone National Ambient Air Quality Standards (NAAQS) nonattainment areas. These regulations address pneumatic controllers, pneumatic pumps, storage vessels, compressors and fugitive emissions. The purpose of the ICR should be to develop the data to establish whether regulations on this equipment and these emissions can be justified for existing sources nationwide or whether they should be discarded or altered. Moreover, the CAA section 111(d) regulation is justified for regulation of methane.

Instead, EPA is using the ICR as a fishing expedition to gather information that is both inconsistent with stated regulatory objectives and unrelated to methane emissions.

In the first case, EPA seeks information on liquids unloading operations which it has indicated is not a regulatory option. Following is the text of the *Federal Register* liquids unloading statement when Subpart OOOOa was published:

The EPA stated in the proposal that we did not have sufficient information to propose a national standard for liquids unloading. However, the EPA requested comment on nationally applicable technologies and techniques that reduce GHG and VOC emissions from these events. Although the EPA received valuable information from the public comment process, the information was not sufficient to finalize a national standard representing BSER for liquids unloading.

Specifically, we requested data and information on the level of GHG and VOC emissions per unloading event, the number of unloading events per year, and the number of wells that perform liquids unloading. In addition, we requested comment on (1) characteristics of the well that play a role in the frequency of liquids unloading events and the level of emissions; (2) demonstrated techniques to reduce the emissions from liquids unloading events, including the use of smart automation and the effectiveness and cost of these techniques; (3) whether there are demonstrated techniques that can be employed on new wells that will reduce the emissions from liquids unloading events in the future; and (4) whether emissions from liquids unloading can be captured and routed to a control device and whether this has been demonstrated in practice.

The EPA received some information pertaining to our request for information. Specifically, the EPA received information on the frequency of unloading and on techniques to reduce emissions through capture or flaring and learned of some operators that have been able to achieve capture in practice. While we have gained better understanding of the practice of liquids unloading, the EPA did not receive the necessary information to identify an emission reduction technology that can be applied across the category of sources. We also considered the possibility of subcategorization. However, according to the information received, the differences in liquids unloading events (with respect to both frequency and emission level) are not due to differences in well size or type of wells at which liquids unloading is performed, but rather the specific conditions of a given well at the time the operator determines that well production is impaired such that unloading must be done. Operators select the technique to perform liquids

unloading operations based on the conditions of the well each time production is impaired. Because well conditions change over time, each to propose a national standard for iteration of unloading may require repeating a single technique or attempting a different technique that may not have been appropriate under prior conditions. Given the differences in conditions at different wells when liquids unloading must be performed, the EPA did not receive information about techniques, individually or as a group, that helped us to identify a BSER under our CAA section 111(b) authority. The EPA continues to search for better means to address emissions associated with liquids unloading and is including this emissions source in the upcoming information gathering effort.

This statement is crystal clear: EPA has tried for several years to evaluate whether there is a BSER technology that would apply to liquids unloading operations and it cannot find one. If there is no BSER liquids unloading technology, there is no reason to believe that somewhere hidden in the half million existing natural gas wells is a magic technology that no one has realized would be nationally applicable. Consequently, there is no reason for EPA to continue fishing for one.

In the second case, EPA seeks information related to hazardous air pollutants and acid gas recovery units (AGRU) and requires samples that seek more than methane information. The primary approach to acid gas recovery is amine recovery. In this process natural gas with acid gas components flows through an amine solution in a tower; the acid gas reacts with the amine and is removed. The amine solution is taken to a second tower and regenerated releasing the acid gas. Any methane would be incidentally entrained in the amine solution and then vented when the concentrated acid gas is transported to further processing. EPA addressed this issue in its GREENHOUSE GAS EMISSIONS REPORTING FROM THE PETROLEUM AND NATURAL GAS INDUSTRY Background Technical Support Document when it stated:

AGR vents consist of both CO<sub>2</sub> and CH<sub>4</sub> emissions. CO<sub>2</sub> emissions from AGR units can be reliably estimated using mass balance approach or one of the standard simulation software packages. CH<sub>4</sub> emissions can only be estimated using simulation software packages. It must be noted, however, that CH<sub>4</sub> emissions from AGR vents are insignificant, 0.06 percent of the total volume of CO<sub>2</sub> and CH<sub>4</sub> emissions.

EPA has not regulated AGRU under Section 111(b) as a methane source. Like the liquids unloading agenda, EPA already knows that AGRU operations are insignificant sources of methane. AGRU inclusion in the ICR is clearly another effort to acquire information that it has not justified.

One of the most detailed and burdensome requests EPA included in Part 2 of the ICR is the requirement for actual measurements of tank and separator feed material composition. The issue here is whether this information would meaningfully add to EPA's understanding of oil and natural gas production operations. We believe it would not.

Feed material composition analysis (flash gas analysis) is unnecessary and should not be included in the ICR. EPA has flash gas composition data at its disposal through Subpart W reporting at the sub-basin level. This data could easily satisfy EPA's needs for understanding representative trends in flash gas composition across the industry. Indeed, it is unclear how

surveying 3,000 additional facilities under Part 2 would substantially improve EPA's existing dataset, but the data collection itself would be highly problematic for operators.

Should EPA decide to move forward with this request despite its overall lack of utility for the ICR, it should be modified significantly. EPA's selected method for direct measurement of feed material composition for storage tank flash gas analysis, known as the CARB method, is overly prescriptive and not suitable for use in this ICR. This issue is addressed more fully in other submitted comments.

Compelling oil and natural gas production operators to develop the information related to its Section 111(d) methane agenda – using its grossly understated cost and time estimates – already mocks the purposes of the PRA, but these fishing expedition questions wholly distort the rationale of the PRA. OIRA must reign in EPA's inappropriate and excessive use of its Section 114 authority to scour the industry for information that EPA has not justified as having any relationship to its regulatory agenda under Section 111(d).

#### *Equipment Leak Information Burdensome and Excessive*

We are also concerned that EPA has drastically underestimated both the difficulty and the cost of collecting the equipment leak information required under Part 2 of the ICR. As EPA is aware, it currently allows one year of implementation for a Leak Detection and Repair (LDAR) program under its recently finalized Subpart OOOOa. Yet, despite the fact that the proposed equipment leak ICR requirements are more complex, including the time-consuming task of supplying actual component counts, EPA is only allowing 120 days for operators to complete this task.

We question the practical utility of requiring actual component counts. The Greenhouse Gas Reporting Program (GHGRP) provides fugitive component estimates based on numbers and types of equipment at the facility, in lieu of exact component counts, and the recently finalized Subpart OOOOa LDAR requirements deleted the proposed requirement to take component counts in order to calculate percentage of leaking components. As a result, no EPA programs require exact component counts. Therefore, the vast majority of operators will need to create a reporting process. This includes possibly hiring and training contractors. Completing this ICR will require redeploying personnel, and it appears EPA has not accounted for these costs anywhere in its analysis.

Exact counts to this granularity have no added value when analyzing existing oil and natural gas production operations across the country. Such burdensome reporting will not help EPA to understand this industry better in order to develop future regulation of oil and natural gas air emissions.

We strongly recommended EPA allow estimated component counts to decrease the time and cost burden on respondents for a requirement that has limited practical utility. We also urged that if the EPA finalized actual component counts, EPA re-evaluate its costs and time burden estimates and ultimately allow extra time for respondents to complete equipment leak survey work. It did neither.

Additionally, with regard to the questions requiring "Total Number of Components Found Leaking", we submitted that this information may not be available. Since the compliance period has not begun for the LDAR program under Subpart OOOOa for which detailed records will be meticulously kept, prior efforts to find and address leaking equipment took place promptly, with

the leaks fixed right away or tagged and fixed as soon as possible. However, companies would not have maintained records for LDAR at all sites visited. EPA failed to address these concerns.

#### *Control Device Cost Data Inaccurate*

Part 2 continues to request control device information. We remain concerned that the information requested may not be available to operators or useful to EPA. For example, the historical costs of control devices are largely irrelevant for the purposes of evaluating the cost of new control devices on existing facilities. Using historical costs to make assumptions about current or future costs is not an appropriate comparison. Many new control devices, such as vapor recovery units (VRUs), have improved significantly in terms of their design but have also increased in cost. For example, current VRUs come with variable motors which are more effective but also more expensive. Older VRUs will not reflect those increased costs. At the same time, other control devices may have decreased in cost over time. Consequently, historical data may not reflect current economics. Instead of focusing on historical data, we encourage EPA to focus on current control device costs.

Additionally, cost data is not necessarily useful for making basin-to-basin comparisons. A control device that may cost \$30,000 with installation in one area, may cost \$50,000 in another area due to significant differences in the availability (or lack thereof) of roustabout crews, manpower, equipment needed for the installation, etc. As a result, cost data cannot be reliably compared across different basins and states. In some cases, a control device may be moved from one field to another because there happens to be one available. This will drive down cost, but having an extra control device available is unlikely to be planned, and it is impractical to assume control devices are readily lying around.

As with many other elements of the ICR, asset sales and trades will complicate the collection of control device cost data. Operators who own assets that have changed hands one or multiple times may not have access to data about what previous operators spent on control technology.

Similarly, without proper context around whether a control device was added as a retrofit or part of new construction, or the approximate date of when controls were installed, it is difficult to make any useful conclusions about this cost data. This is yet another reason why the focus on historical data is inappropriate.

We urged EPA to be aware that economic impacts on a well are often considered on a well-by-well basis. A high producing well may withstand a \$25,000 control equipment upgrade cost; however, a low producing well may not. In this case, an operator may choose to plug and abandon the well rather than incur the additional cost, greatly adding to the cost to control for that particular well. In addition, the economic impact analysis fluctuates with commodity prices and localized price differentials to benchmark commodity prices.

#### **Recipient Data Base**

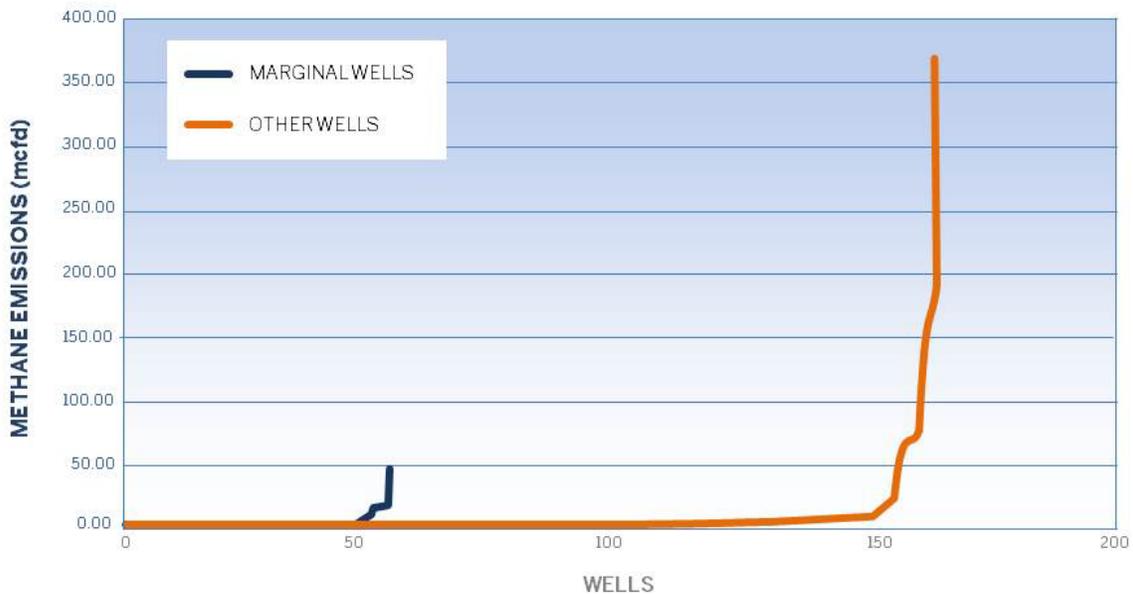
We commend EPA for its intent in making public a data base of entities that will be recipients of the ICR – apparently for use regarding both Part 1 and Part 2. We also appreciate the opportunity for possible recipients to correct duplications and incorrect addresses. Nevertheless, EPA needs to recognize that there are significant flaws in the information. At the simplest level, oil and natural gas production is a constantly changing industry. Wells are sold. Partnerships are created; partnerships are ended. These ownership changes will make any data base outdated rapidly.

Additionally, there are recipients in the data base that are inappropriate. Following a cursory review of the names listed in the data base, there are over 200 private landowners that are listed as operators. These landowners are not operators and their wells are for domestic use only, meaning the natural gas produced from these wells is only providing natural gas to their domiciles.

If these landowners receive a questionnaire, they would have absolutely no understanding of the questionnaire. Most likely, they would ignore it because they would think they are receiving the questionnaire in error. In addition, EPA would be burdening the general public for information that is simply not consequential to the ICR. If they receive the Part 2 questionnaire, there is simply no way these landowners would give the EPA any of the correct information because they have simply bought a well at the end of its life to provide heating for their family.

### Small Business Issues

A substantial burden from this ICR will fall on small businesses. America's low production oil and natural gas wells are largely operated by small business producers. As we have described above, the burden on these companies to complete just the Part 1 portion of the ICR will be excessive. Given the breadth of information on oil and natural gas production otherwise available to EPA to provide the framework of production distribution, there is little additional value to compel reporting of this information by small business companies. Similarly, the emissions profiles of low production wells compared to larger wells are shown in the following graph.



These emissions are a composite of several analyzes, but even they would likely overstate emissions. First, the studies are not based on data taken at operating facilities; they come from drive-by emissions collections on nearby public roads that seek out methane plumes that may include permitted releases. Second, the data are based on samples that range from less than 10 minutes to about 50 minutes, which can include short term maintenance operations. The samples are then scaled up to daily numbers. Some of the low production well calculations would

suggest that half of the natural gas extracted from the well is emitted. No producer would allow that loss of income for any extended period of time.

Consequently, in the context of Part 2 of the ICR, EPA should defer detailed data collection on small business producers until it can truly assess whether emissions from low production wells make a significant contribution to the oil and natural gas production emissions total and whether cost effective regulation can be designed for those operations.

## **Conclusions**

EPA has presented OIRA with an ICR that miserably fails to comply with the purposes of the PRA. OIRA must now decide whether to allow this ICR to proceed. We believe that OIRA must reject the current structure of the ICR and require EPA to modify it. Following are a number of key issues that must be altered.

1. EPA needs to utilize information available to it through federal government resources, such as DrillingInfo, and from state permit programs to gather as much information as possible – information that would largely cover the Part 1 request and significant components of the Part 2 request – before requiring businesses to effectively duplicate this information.
2. EPA needs to develop accurate completion times and costs for OIRA to determine whether they are in compliance with the PRA. This action must also recognize that EPA's use of the CAA Section 114 enforcement authority to collect information compels a higher standard of review for any submitted information because of EPA's history of using Section 114 to threaten oil and natural gas production operations.
3. EPA should be required to utilize a segmented reporting schedule that reflects the complexity of its ICR.
4. EPA should extend the completion time for Part 2 to be consistent with a segmented Part 1 schedule.
5. EPA must limit the ICR to issues associated with its justification for the ICR – namely the development of a nationwide existing source methane regulation under Section 111(d). The ICR should not be a fishing expedition for anything EPA wants to identify. For example, EPA needs to eliminate questions on liquids unloading operations where it has explained it cannot identify a BSER for a Section 111(b) NSPS regulation. This precludes regulation under Section 111(d) and there is no likelihood of identifying new information on a generally applicable existing source technology. Similarly, EPA needs to eliminate questions on emissions and technology that are not related to methane emissions, like acid gas recovery units.
6. EPA needs to eliminate burdensome requirements that add little value. These include: (1) equipment counts that it ultimately rejected in its own fugitive emissions program and (2) cost information on control devices that are not nationally consistent and vary over time as technology has changed.
7. EPA needs to clean up its recipient data base to exclude obvious non-producers
8. EPA needs to defer submission of the ICR by small businesses. Given that the primary purpose of Part 1 is its value in scaling up Part 2 information to assess whether the ICR provides a representative perspective of the industry, there is ample available information that provides an understanding of the distribution of oil and natural gas production, including analyses by EIA. With the costs and time demands on small business as excessive as they will be, this burden should be lifted. Similarly, Part 2 responses should

be deferred until EPA determines that regulatory action on low production wells is necessary and it needs additional small business information to determine the structure of such regulation. EPA should then work with the Small Business Administration to determine a cost effective method to gather necessary information.

When EPA announced its intent to develop a nationwide Information Collection Request for oil and natural gas production, industry endorsed the concept because we thought it would provide an opportunity for EPA to understand the complexities of oil and natural gas production and the diversity of the industry. After all, in February 2016, EPA Administrator Gina McCarthy had stated:

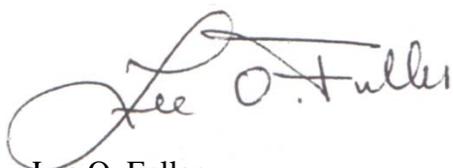
EPA's learning this industry right now because it is not an industry we regulate. We've just gotten into regulation of this so there's a lot of hundreds of thousands of small sources and EPA does not generally have a relationship with this industry as we do other sectors that we've regulated for frankly decades. But we are learning.

Sadly, the Administration's subsequent actions have demonstrated little interest in developing a rational approach to understanding the industry – the key to a sound regulatory framework. Instead, every action has been characterized by a single-minded focus to act in an arbitrary time frame – by the end of the current Administration in January 2017 – and with a complete disregard for any facts that dispute its predefined schedule for action.

OIRA has a responsibility to maintain the integrity of the Paperwork Reduction Act. This draft ICR falls so miserably short of meeting the purposes of that law that OIRA must reject it and must send it back for major revision.

Nevertheless, we appreciate the opportunity to submit these comments and participate in the regulatory development process. If there are questions, please contact Lee Fuller at [lfuller@ipaa.org](mailto:lfuller@ipaa.org) or at 202-857-4731.

Sincerely,

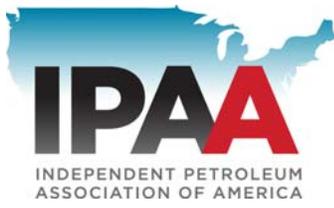


Lee O. Fuller  
Executive Vice President  
Independent Petroleum Association of America



Bruce Thompson  
President  
American Exploration and Production Council

Attachment



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August 2, 2016

By Electronic Submission

EPA Docket  
Center (EPA/DC), Environmental  
Protection Agency, Mail Code 28221T,  
1200 Pennsylvania Ave. NW.  
Washington, DC 20460

**Proposed Information Collection Request; Comment Request; Information Collection  
Effort for Oil and Gas Facilities [EPA-HQ-OAR-2016-0204; FRL-9946-70-OAR]**

These comments are filed on behalf of the Independent Petroleum Association of America (IPAA) and the American Exploration and Production Council (AXPC) (collectively, IPAA/AXPC).

IPAA represents the thousands of independent oil and natural gas explorers and producers, as well as the service and supply industries that support their efforts, that will most directly be impacted by the U.S. Environmental Protection Agency (EPA) policy decisions to regulate methane directly from the oil and natural gas sector. Independent producers develop about 95 percent of American oil and natural gas wells, produce 54 percent of American oil, and produce 85 percent of American natural gas. Historically, independent producers have invested over 150 percent of their cash flow back into domestic oil and natural gas development to find and produce more American energy. IPAA is dedicated to ensuring a strong, viable domestic oil and natural gas industry, recognizing that an adequate and secure supply of energy is essential to the national economy.

AXPC is a national trade association representing 30 of America's largest and most active independent oil and natural gas exploration and production companies. AXPC members are "independent" in that their operations are limited to exploration for and production of oil and natural gas. Moreover, our members operate autonomously, unlike their fully integrated counterparts, which operate in additional segments of the energy business, such as downstream refining and marketing. AXPC members are leaders in developing and applying innovative and advanced technologies necessary to explore for and produce oil and natural gas, both offshore and onshore, from non-conventional sources.

Additionally, they are joined by the American Association of Professional Landmen (AAPL), the Association of Energy Service Companies (AESC), the International Association of Drilling Contractors (IADC), the International Association of Geophysical Contractors (IAGC), the National Stripper Well Association (NSWA), the Petroleum Equipment & Services Association (PESA), and the following organizations:

Arkansas Independent Producers and Royalty Owners Association  
California Independent Petroleum Association  
Coalbed Methane Association of Alabama  
Colorado Oil & Gas Association  
East Texas Producers & Royalty Owners Association  
Eastern Kansas Oil & Gas Association  
Florida Independent Petroleum Association  
Idaho Petroleum Council  
Illinois Oil & Gas Association  
Independent Oil & Gas Association of New York  
Independent Oil & Gas Association of West Virginia  
Independent Oil Producers' Agency  
Independent Oil Producers Association Tri-State  
Independent Petroleum Association of New Mexico  
Indiana Oil & Gas Association  
Kansas Independent Oil & Gas Association  
Kentucky Oil & Gas Association  
Louisiana Oil & Gas Association  
Michigan Oil & Gas Association  
Mississippi Independent Producers & Royalty Association  
Montana Petroleum Association  
National Association of Royalty Owners  
New Mexico Oil & Gas Association  
New York State Oil Producers Association  
North Dakota Petroleum Council  
Northern Montana Oil and Gas Association  
Ohio Oil & Gas Association  
Oklahoma Independent Petroleum Association  
Panhandle Producers & Royalty Owners Association  
Pennsylvania Independent Oil & Gas Association  
Permian Basin Petroleum Association  
Petroleum Association of Wyoming  
Southeastern Ohio Oil & Gas Association  
Tennessee Oil & Gas Association  
Texas Alliance of Energy Producers  
Texas Oil and Gas Association  
Texas Independent Producers and Royalty Owners Association  
Utah Petroleum Association  
Virginia Oil and Gas Association  
West Slope Colorado Oil & Gas Association  
West Virginia Oil and Natural Gas Association

Collectively, these groups represent the thousands of independent oil and natural gas explorers and producers, as well as the service and supply industries that support their efforts that will be most significantly affected by the actions resulting from these regulatory proposals. In addition to the specific comments made herein, we support those comments submitted separately by the participants in these comments. IPAA/AXPC also endorses and supports the comments of the

Western Energy Alliance (WEA) and the American Petroleum Institute (API) submitted on the proposed ICR referenced above.

## **General Comments**

### *EPA Needs to Improve Its Understanding of the Oil and Natural Gas Production Industry*

EPA is embarking on a regulatory action that has the potential to end the production of 10 to 20 percent of American oil and 13 percent of American natural gas. This production results from the operation of America's marginal oil and natural gas wells. These low production wells represent 80 percent of American oil wells and two-thirds of American natural gas wells; they average about 2.5 barrels/day of oil and about 22 mcf/d of natural gas, respectively. In current economic conditions, these wells are at an economic tipping point and additional regulation would cause their failure if that regulation does not recognize this reality.

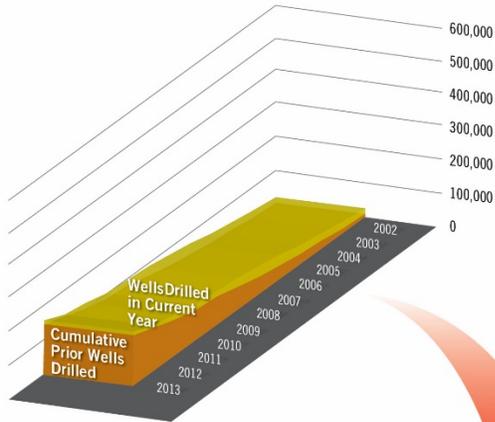
More broadly, EPA is embarking on regulations in an industry that it does not understand. As EPA Administrator Gina McCarthy was quoted as saying, “EPA’s learning this industry right now because it is not an industry we regulate. We’ve just gotten into regulation of this so there’s a lot of hundreds of thousands of small sources and EPA does not generally have a relationship with this industry as we do other sectors that we’ve regulated for frankly decades. But we are learning.” The use of the Information Collection Request (ICR) process can provide EPA with the understanding it needs to be a fair and effective regulator. However, the pathway that is currently being taken in the ICR development will thwart rather than improve EPA’s understanding of the industry.

Not only must EPA understand the impact of its regulations on America's marginal wells, it must also recognize that the universe of existing oil and natural gas wells and facilities is populated by a mixture of wells. There will be variability of oil and natural gas reservoir characteristics and production methods – e.g., primary, secondary recovery, enhanced oil recovery (EOR) – the presence of artificial lift technologies, future production dynamics, and numerous facility and pipeline configurations.

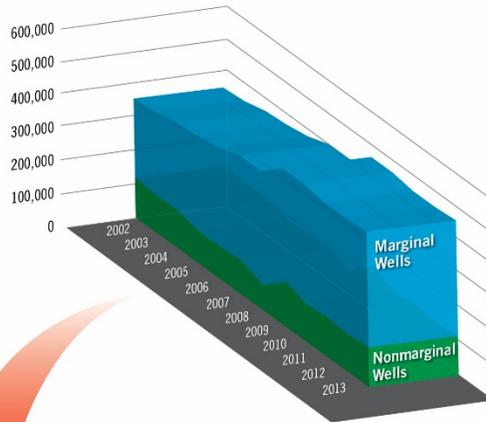
There will be a mixture of regulatory driven technologies and voluntarily applied technologies that must be taken into account. For example, by the time EPA completes its action on an existing source regulation under CAA Section 111(d), thousands of wells completed after 2012 will have implemented technology requirements under Subpart OOOO, and thousands more will have applied these same technologies under voluntary programs such as Gas STAR prior to the promulgation of Subpart OOOO. The graphs below demonstrate that, by the time this regulatory initiative is implemented, the universe of American oil and natural gas wells that are neither subject to Subpart OOOO nor marginal wells will be small and rapidly moving to marginal well status.

# Natural Gas Wells

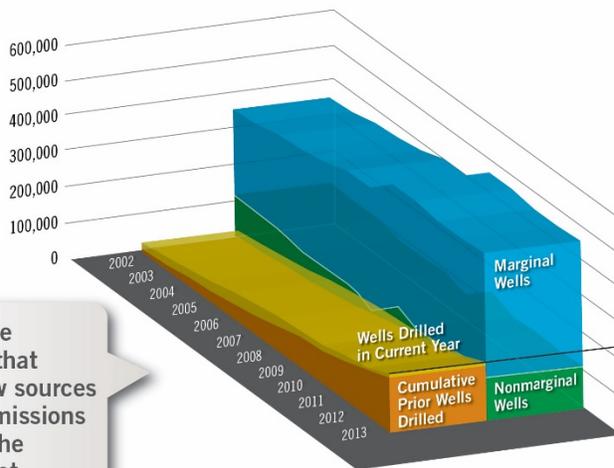
Natural Gas Wells Drilled in 12-Year Period



Natural Gas Producing Wells 2002-2013



Natural Gas Well Composition Change — 12-Year Period

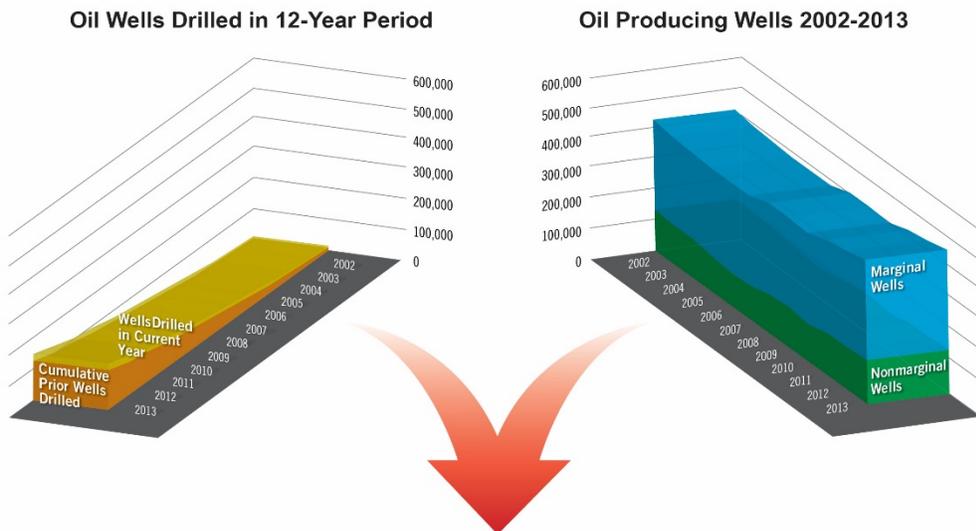


Past experience demonstrates that controlling new sources will manage emissions because over the regulatory target timeframe, these wells will represent the significant emission sources.

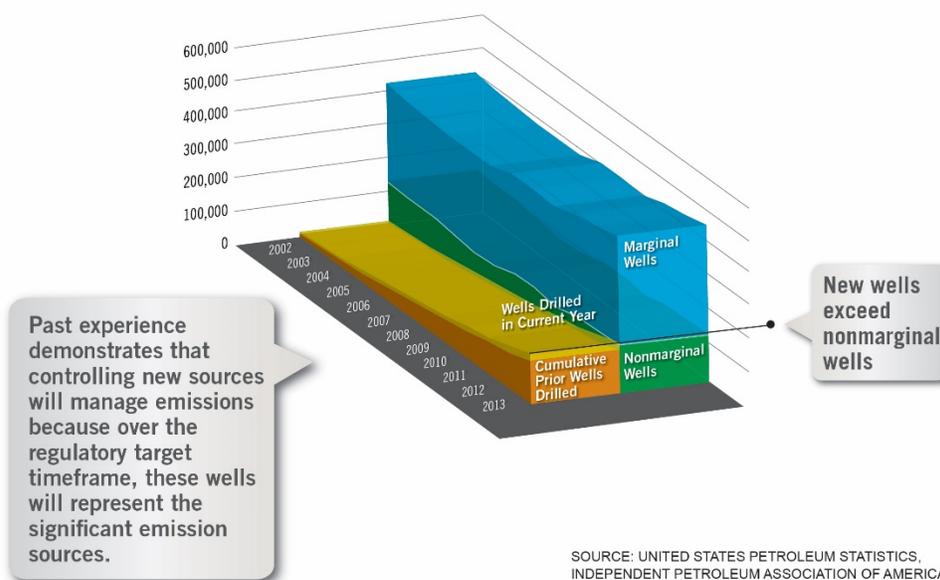
New wells exceed nonmarginal wells

SOURCE: UNITED STATES PETROLEUM STATISTICS, INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

# Oil Wells



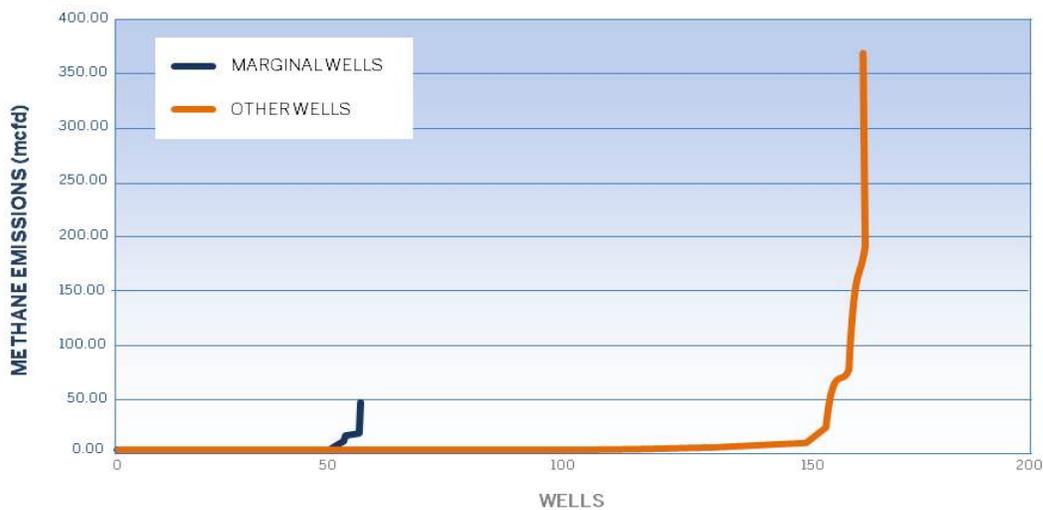
**Oil Well Composition Change — 12-Year Period**



SOURCE: UNITED STATES PETROLEUM STATISTICS, INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

Similarly important, EPA’s existing source regulatory initiative under CAA Section 111(d) falls within the regulatory requirements of Section 111. These include adequate demonstration of the technology in the industry regulated, consideration of cost, consideration of energy implications, and – specifically for Section 111(d) – consideration of the regulations’ impacts on the remaining useful life of the facility. Equally important, under Section 111 EPA may distinguish among classes, types, and sizes within categories of sources for the purpose of establishing such standards. Determining the remaining useful lives of U.S. oil and natural gas fields will be variable, will be based on economics, and will be field specific (e.g., type of fluids, shifting of fluid parameters, type of equipment, current operations, etc.). Enhanced oil recovery operations are very sensitive to regulatory costs.

To date, EPA’s regulatory actions relating to oil and natural gas production operations fail to reflect the understanding of the industry that is needed to create a regulatory framework to provide acceptable environmental management while providing a structure to assure that American oil and natural gas resources are developed and maintained. Both Subpart OOOO and Subpart OOOOa were developed using available information on both emissions levels and technical applicability. While some of these requirements were based on widely used technologies in oil and natural gas production, others were not – such as the fugitive emissions requirements that were based on limited information and then crafted into a system that differed from those that were used in states with fugitive emissions management programs. EPA’s efforts to address existing source emissions in the Volatile Organic Compound (VOC) Control Technique Guidelines (CTG) in Ozone National Ambient Air Quality Standards (NAAQS) nonattainment areas fell completely short of any plausible analysis of whether these requirements constituted Reasonably Available Control Measures (RACM). EPA merely duplicated the New Source Performance Standards (NSPS) from Section 111(b), applying them to existing sources. Similarly, when EPA acted to reflect distinctions based on the size of a facility in recognizing that “low production wells” – the marginal wells described above – should be excluded from the Subpart OOOOa fugitive emissions requirements, it later withdrew this distinction in the final regulation, apparently based on a specious analysis by the Environmental Defense Fund, *Toward a Functional Definition of Methane Super-Emitters: Application to Natural Gas Production Sites*. This analysis purports to create a new analytical approach to define super-emitters and show that these low production wells result in significant emissions. However, analysis of the underlying data used in the study demonstrates that marginal wells emit as one would logically expect – at a much lower rate than larger wells. As the following graph of the data shows, marginal wells are minor emissions contributor.



### *EPA Needs to Understand the Declining Nature of Oil and Natural Gas Production*

EPA's task, now, is to develop a nationwide existing facility regulation for an industry that is complex and diverse. Regulating oil and natural gas production is a different task than regulating other segments of oil and natural gas processing. When an oil refinery is constructed, it is designed to process petroleum volumes within a specific range. It operates more or less at a constant feed rate, and its air emissions are predictably constant. Oil and natural gas production starts at an initial production rate and then begins to decline as the resource is extracted from its reservoir. Consequently, its potential to emit methane and volatile organic compounds is highest when production begins and then declines over time. Think of an inflated balloon that releases a strong flow of air when pressure on its neck is relaxed but as the balloon deflates, the air release dramatically slows. The physics of oil and natural gas production emissions suggests that equipment designed to manage gas flow when the well is producing 5000 mcf/d will not be stressed to release gases when the well has declined to the average marginal natural gas well rate of 22 mcf/d. Certainly, these are issues that EPA must understand to craft an appropriate national regulatory program, including the creation of subcategories of operations. At issue, then, is whether the ICR provides the information needed to create this level of understanding.

### *EPA Needs to Utilize Existing Agency Resources and Resources Publicly Available at State Agencies*

Similarly, in addition to understanding the implications of an industry with inherently declining unit production, EPA needs to understand the scope and diversity of the industry. It needs to understand these aspects to assure that its ICR provides the information it needs to design a regulatory system. It has available to it the resources to better understand the nature of American oil and natural gas production through both free resources held by state permitting agencies and existing information from DrillingInfo that the Agency has used in the past. State permitting agencies have detailed information on every operating well in the State. Information includes details on the depth of the well, its horizontal legs, its producing zones, its well construction, its location, the characterization of its crude oil, and more. Production information is available, including volumes of oil, of natural gas liquids and of natural gas. In some cases, permit agencies have information on gas composition in operating vessels. While some of this information is held by air regulatory agencies, most of it would be posited with oil and natural gas production well permitting agencies. DrillingInfo should have historic production information on a well-by-well basis and include production composition information and well location. By using location information from these multiple data sources, EPA could compile an information grid that would identify areas showing key information on oil production and natural gas production, conventional wells and non-conventional wells (such as shale oil and shale gas), marginal wells and large producing wells, heavy oil and light oil, sour crude and sweet crude, enhanced oil recovery operations (including carbon dioxide injection wells) and secondary recovery operations. By using these resources – and with the assistance of the industry – EPA could create a far better ICR process.

### *EPA Needs to Obtain Information That Reflects Emissions Throughout the Year*

As EPA tries to seek information in an ICR, it must look toward the use of that information in designing regulatory requirements that apply throughout the range of operations at an oil and natural gas production facility. As previously described, the diversity of operations across the nation is extensive. And, within this diversity, industry must cope with challenges that vary from

season to season. Oil and natural gas production operations are conducted in all types of weather. Weather can change the nature of air emissions; weather differs from region to region. Some regions face larger extremes than others. North Dakota, for example, can range from subzero temperatures in the winter to 100° and more in the summer. EPA's past reliance on limited studies that do not reflect the full range of weather in one area or its application of emissions analyses from areas where the predominant weather circumstances do not reflect where it is being applied must be avoided in developing appropriate existing source regulations. At issue, then, is whether the ICR or emissions data that EPA uses fully describes the emissions profile of the facilities to be regulated.

*Section 111(d) Requires EPA to Understand the Implications of Regulations on the Remaining Useful Life of a Facility*

Another key aspect of regulating existing facilities involves assessing the implications of regulations on the remaining useful life of the facility. Oil and natural gas production has often been described as a “food chain” industry. This characterization arises from the historic practice of companies selling wells that are less profitable to them to other companies that can more profitably operate them. Over the long term, this practice has resulted in an extensive network of marginal wells that are operated primarily by small businesses. In the current economic climate, these marginal wells are operated at an economic tipping point where regulations can result in their shutdown. Once shut down, marginal wells are lost to future production because the cost of reopening them – when it might be technically feasible to do so – is too high to justify the expenditure. Past EPA regulatory actions have been NSPS that are directed at new facilities where the cost of control equipment can be considered in the economic determination of whether to drill a well. These determinations did not address consideration of the regulatory costs on the life of the operation. In reality, when EPA changed the Subpart OOOOa fugitive emissions program to cover marginal wells, it adversely affected the life of all future oil and natural gas wells. By imbedding in the cost of operating these wells the costly and cost-ineffective Leak Detection and Repair (LDAR) program, EPA's requirements will prematurely end the life of these wells. Marginal wells can produce for years at low levels, adding to the production of American oil and natural gas, but the added LDAR costs will make these well unappealing for purchase by small businesses because of the embedded LDAR costs. EPA's only venture into regulating existing oil and natural gas production operations is its action to create VOC CTG in Ozone NAAQS nonattainment areas. The regulatory standard for a CTG is RACM. In its *Federal Register* notice regarding the Release of Draft Control Technique Guidelines for the Oil and Natural Gas Industry, EPA provides a pertinent description of the RACM process:

Section 172(c)(1) of the Clean Air Act (CAA) provides that State Implementation Plans (SIPs) for nonattainment areas must include “reasonably available control measures”, including “reasonably available control technology” (RACT), for existing sources of emissions. Section 182(b)(2)(A) of the CAA requires that for Moderate Ozone nonattainment areas, states must revise their SIPs to include RACT for each category of VOC sources covered by a CTG document issued between November 15, 1990, and the date of attainment. CAA section 182(c) through (e) applies this requirement to States with ozone nonattainment areas classified as Serious, Severe and Extreme.

The CAA also imposes the same requirement on States in ozone transport regions (OTR). Specifically, CAA Section 184(b) provides that states in the Ozone

Transport Region (OTR) must revise their SIPs to implement RACT with respect to all sources of VOCs in the state covered by a CTG issued before or after November 15, 1990. CAA section 184(a) establishes a single OTR comprised of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and the Consolidated Metropolitan Statistical Area (CMSA) that includes the District of Columbia.

The EPA defines RACT as “the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility” (44 FR 53761, September 17, 1979).<sup>1</sup>

While this description is accurate, EPA wholly failed to meet the test of identifying “control technology that is reasonably available considering technological and economic feasibility.”<sup>2</sup> Instead, EPA merely duplicated the NSPS requirements from Subpart OOOO and the then-proposed Subpart OOOOa as CTG. In using Section 111(d) as the basis for its possible national emissions standard, EPA must look to still other technology tests. As stated above, it must consider the impact of the regulatory requirements on the remaining useful life of the facilities.

#### *EPA Needs to Utilize Its Authority to Create Subcategories*

Under Section 111, EPA has the authority to create and use subcategorization to focus regulations that are suited to appropriate elements of the industry. EPA needs to utilize this authority in the context of existing source regulation under Section 111(d) because of the significant diversity of the American oil and natural gas production industry.

Subcategorization issues arise when EPA must consider the need to distinguish the variable types of oil and natural gas production operations. Most of EPA’s recent focus has been on NSPS regulations primarily directed at the nonconventional production that has dominated recent American oil and natural gas development. But, in moving to existing sources, EPA must recognize that the overwhelming majority of wells will be conventional production, principally marginal well operations. The variety of these wells will range from the non-conventional shale oil and shale gas wells that have emerged over the past decade, to historic conventional crude oil production, to coal bed methane wells, to EOR production operations that by themselves utilize different technologies from steam to carbon dioxide. Emissions profiles for these operations will differ; their economic capability to absorb additional regulatory requirements will be a key factor in assessing the BSER requirements that can be applied.

For example, adding controls to reduce or eliminate methane emission from existing EOR production operations is not a “one-size-fits-all” proposition due to the wide variability in oil reservoir characteristics, production dynamics, and numerous facility-specific equipment configurations across the United States. For retrofit designs, an accurate estimation of the cost to install and operate methane controls must include consideration of many direct and indirect factors, which are site-specific in nature. Indirect costs factors consist of current equipment

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<sup>1</sup> Release of Draft Control Techniques Guidelines for the Oil and Natural Gas Industry, 80 Fed. Reg. 56,577, 56,578 (Sept. 18, 2015).

<sup>2</sup> *Id.*

design and operation, piping size, mechanical integrity, pressure relief controls, equipment cleanout, etc. Determining these indirect costs can add substantial capital and operating costs to the controls.

These are reasons for EPA to devote the time and effort to fully understand the different aspects of the industry. It also argues that EPA needs to fully understand the economics of existing operations of the industry because – unlike new sources – existing sources must operate in the situations where they are. At issue, then, is whether the ICR is designed to generate the information that is needed to understand these facts.

In the draft ICR – both Part 1 and Part 2 – EPA solicits virtually no economic information. The only cost data it seeks is in Part 2 with regard to control devices. Compare this to EPA’s DETAILED QUESTIONNAIRE FOR THE COALBED METHANE EXTRACTION SECTOR with regard to Effluent Limitations Guidelines that had 37 pages devoted to acquiring information on the economics of coal bed methane operations. While we would not suggest that the scope of that questionnaire should be duplicated in this ICR, we are certain that EPA cannot fully assess the implications of existing source regulations in the absence of any economic information. EPA may argue that the issue of economics is not the driving force to determine the level of regulation under Section 111(d), but we believe that the BSER analysis and requirements to consider the remaining useful life of facilities require EPA to understand the consequences of its regulatory options. It cannot do so with the questions it includes in the draft ICR.

*EPA Needs to Assure That the Information It Collects Accurately Describes the Industry and Can Be Acquired at a Reasonable Cost*

As EPA crafts the ICR, another challenge relates to gathering the statistically significant information to accurately characterize the industry in order to design a regulatory structure that meets the criteria of Section 111. The oil and natural gas production industry spans the breadth of American businesses. IPAA periodically assesses the profile of independent producers. The most recent profile suggests that the median size for an independent producer is 12 full-time employees. Clearly, the industry ranges from some of the largest companies in the world to numerous small companies. Correspondingly, larger-production wells tend to be operated by larger companies, and smaller companies operate marginal wells. To understand the implications of regulatory options on this scope of operations requires that adequate data be collected across the breadth of the industry. But ICRs have a history of requiring substantial expenditures by companies to complete them. Under current conditions, small business operators do not have the resources to fully respond to the depth of questions that EPA likely needs to ask to properly understand the industry. Therein lies the dilemma – how to acquire the statistically significant information that EPA needs at a cost that the small business component of the industry can afford.

*EPA’s Current Actions Are Undermining Its Ability to Develop Sound, Cost Effective, Fair Regulations*

Set against the multiple challenges that EPA must manage to develop a sound, cost effective and fair regulatory program is EPA’s rush to develop an ICR – actually two ICRs. While detailed observations on the ICRs will be presented subsequently, the broader process demonstrates that the EPA actions will prevent it from developing an effective regulatory system.

Because EPA has not spent the effort to understand the breadth of the oil and natural gas production industry, it has created draft ICRs that fail to ask the right questions. EPA's information requests appear driven to ask questions only about issues that EPA has hypothesized are significant based on the regulations it produced in Subpart OOOO and Subpart OOOOa and anecdotally understand to be important. Wholly absent from the draft ICRs are questions addressed to the operating costs of these wells.

EPA is presenting two ICRs for approval. The first would capture hundreds of thousands of wells, and the second would be targeted to obtain detailed information on a smaller number of wells. It is wholly unclear how the two ICRs work together. More significantly, there is no basis to assume that EPA can identify recipients for the detailed ICR without obtaining information from the first ICR. As stated above, EPA will need to categorize the industry extensively based on type of production (crude oil, natural gas, natural gas liquids and combinations), on specific crude characteristics (heavy or light, sweet or sour), on size of well (large or marginal), on specific well conditions (Gas to Oil Ratio – GOR), on date of initial operation (before or after Subpart OOOO, for example), on location (basin of operation, rural or urban, state), and other factors to achieve a statistically significant sample that reflects these diverse factors.

EPA raises this issue in its *Federal Register* Notice stating:

Developing an appropriate sampling size for the onshore production industry is complicated by the number of factors that could impact the types of processes or equipment present at the site and the magnitude of emissions from these sources. Therefore, the Agency considered further stratification of the production industry segment into separate populations based on differences in the type of well (oil or natural gas, vertical or horizontal drilling, or further distinctions based on gas-to-oil ratio), the type of formation, and the production basin. At this time, the Agency has limited information on means to characterize individual facilities or wells by formation type or well drilling type (vertical versus horizontal wells). However, the Agency does have estimates of the number of wells in a given basin and has estimates of the gas-to-oil ratio (GOR), from which we designate well type for nearly all wells. Therefore, the Agency considered two options for establishing different populations within the production segment: Option 1, which is based on the well type using GOR ranges, and Option 2, which is based on regional groupings of basins.

Option 1, which considers populations based on well types, defines the following five populations based on GOR:

1. Heavy Oil (GOR  $\leq$  300 standard cubic feet per barrel, scf/bbl)
2. Light Oil (300 < GOR  $\leq$  100,000 scf/bbl)
3. Wet Gas (100,000 < GOR  $\leq$  1,000,000 scf/bbl)
4. Dry Gas (GOR > 1,000,000 scf/bbl)
5. Coal Bed Methane

Most of these well type categories have historical significance, such as the GOR of 300 scf/bbl included in the applicability of the Oil and Gas NSPS requirements

for well completions (40 CFR part 60, subpart OOOOa) and the GOR of 100,000 scf/bbl delineation between oil and gas wells used in the U.S. Emissions Inventory for GHG Sources and Sinks. The delineation between “wet” and “dry” gas wells was developed for this ICR to gain information on “wet” gas wells because these gas wells have been found to have higher VOC content and, as such, are of particular interest in this information collection effort.

Option 2, which considers regional groupings of basins, defines the following five populations based on basins (geological provinces) defined by the American Association of Petroleum Geologists:

1. East: Basins 100 to 190
2. South: Basins 200 to 290 and Basin 400
3. Midwest: Basins 300 to 395
4. West Texas: Basins 405 to 440
5. West: Basins 445 to 895

Option 1 (populations based on well type) will ensure that a statistically significant number of each well type is sampled. This is important because there are fewer wet gas wells and coal bed methane gas wells than heavy oil, light oil, or dry gas wells. However, because of the differences in the number of wells within each population, analyses using the data must use these classifications (or weighting factors) to develop nationwide assessments. The regional populations are more similar to each other in terms of the number of wells in each region, but weighting factors would still be required to perform nationwide assessments separate from these defined regions.

Based on a desire to have no more than a 10-percent error (*i.e.*, +/-10 percent) in the estimate of an average value at a 95-percent confidence interval and 90-percent power to differentiate an effect size of 0.2, the target number of samples required for large populations was determined to be 385 (additional detail regarding the determination of the target sample size using the statistical sampling approach is provided in Part B of the Supporting Statement for this ICR, which is included in Docket ID No. EPA-HQ-OAR-2016-0204 at

<http://www.regulations.gov>). Consequently, because the number of production facilities in each population is relatively large compared to the target sample size, the overall costs of the two survey options for production facilities are nearly identical. We are specifically requesting comment on these two options for developing population categories within the production industry. We recognize that other alternatives may be viable, such as defining the entire production industry as one population and developing sampling requirements based on the accuracy and precision needed to characterize any subcategory of the production population that represents, for example, 20 percent of the total production wells. In this example, 1,925 ( $5 \times 385$ ) samples from the production population would be required. All respondents would have equal weight, so analyses could be conducted without having to consider weighting factors, but analyses for categories of wells with less than 20 percent of the population would have less

accuracy and precision. As there are many potential factors to consider for the production population, we also request comment on other potential methods to define populations of production wells in order to adequately characterize the various potentially important differences in production facilities.

While each of these options has some merit regarding categorizing wells – Option 1 by type, Option 2 by location – neither gets to key significant factors. For example, production rate and ownership are factors that have a far more compelling role in determining emissions profiles and ability to absorb regulatory costs. As stated above, despite allegations from professional “Keep It in the Ground” environmental groups, marginal wells will not have the emissions profile that justifies regulations comparable to those imposed on new sources. Clearly, EPA needs to better understand this reality and needs to categorize information to allow such analysis. Similarly, most of these marginal wells will be owned by small businesses, and the combined reality of their financial capacity and the nature of marginal well production will have a significant bearing on assessing the impact of regulation on their remaining useful life. The date of initial production can be an important factor to categorize wells because it will identify wells that are subject to Subpart OOOO and will have a different emissions profile.

EPA states that “At this time, the Agency has limited information on means to characterize individual facilities or wells by formation type or well drilling type (vertical versus horizontal wells).” EPA does not describe the nature of its limitations. It mentions that it “collects information on the greenhouse gas (GHG) emissions from oil and gas facilities under 40 CFR part 98, subpart W, of the Greenhouse Gas Reporting Program (GHGRP).” But, it does not indicate whether it plans to use this information in some format. As described previously, EPA also has access to well data through DrillingInfo, and it could access information publicly available from state permitting agencies. Without finalizing the ICR, these resources can provide EPA with a framework of information on location, size, and type of well – including formation type and well drilling type. Using that information, EPA can far better categorize oil and natural gas production facilities and better frame its ICR to validate that information while focusing on key information that is not reflected in the current draft proposals. It would also define more granular information on location than the inferred information in the Option 2 presentation. That is, there are many basins that can have significantly different well operations. For example, the Permian Basin in Texas and New Mexico is now an active shale oil production region but it also contains significant conventional wells, many of which are marginal wells. Categorizing wells using broad location areas will fail to give the Agency the depth of understanding it needs to understand the factors needed to write regulations.

EPA needs to structure the framework described above and then use that material to fashion its initial broadly distributed ICR to fill out the composition of categories that reflect location, size, type of well (oil or natural gas, conventional or non-conventional), and ownership. This approach would permit EPA to create its narrower, more detailed ICR to assure that it obtains statistically significant information on the various categories and includes the more extensive information needed to address the range of issues needed for regulation.

The current proposed ICRs will not provide such information.

## Specific Issues

Before presenting specific issues regarding the elements of the draft ICR, it is essential to address the serious questions related to the time to complete the ICR elements and EPA's perception of its cost.

We believe that the time allowed for industry to complete both Part 1 and Part 2 is inadequate and should be revised. Allowing extra time to complete this ICR will not materially affect EPA's ability to evaluate the survey results, but it will reduce the burden for industry in several important ways.

There are two different scenarios to consider here. As we have recommended above, the first scenario would have EPA send ICR Part 1, have it completed, analyze it, and use it to provide a better framework for ICR Part 2. Then, ICR Part 2 would be sent to a subset of producers. The second scenario is based on EPA sending both Parts concurrently. If that path is chosen, EPA would not use Part 1 to inform its Part 2 requests. While we encourage EPA to release Part 1, evaluate it, and make necessary changes before it releases Part 2 based on what it learns, we recognize that EPA could choose the second scenario. Therefore, if that scenario is chosen, it makes little sense to have Part 1 due within 30 days.

Since any analysis of the ICR will incorporate both Part 1 and Part 2 data, EPA will not be able to fully analyze its data until both Parts have been completed. While EPA could gain some time by inputting data from Part 1, pending submission of Part 2, this slight administrative advantage is outweighed by the burden on industry to comply with the unreasonable 30-day deadline. EPA would gain greater insight if it began analyzing data already available from state agencies and DrillingInfo, while allowing for both Parts 1 and 2 to be submitted concurrently.

It adds little value to have an overly-aggressive timeline on Part 1 when EPA will ultimately need to wait until Part 2 results are in before completing its analysis. Additionally, the amount of data EPA is requesting from Part 1 is significantly higher than for Part 2 in terms of number of sources and companies impacted, so it would be logical to allow additional time for that request. We are also concerned that 30 days may also prove inadequate for Part 1 given that it intends to mail its ICR. It may take several days or even weeks to get the requests to the proper contacts within every company. Thus, the 30 days allowed by EPA may be effectively even less for many companies.

For Part 2 of the ICR, EPA appears to have grossly underestimated the sheer volume of data it is seeking. Its proposed timeframe of 120 days is inadequate. We urge the EPA group leading the ICR effort to reach out to the EPA's enforcement group currently working on CAA Section 114 requests in North Dakota for oil and natural gas facility and emissions information. Given the similar nature of the ICR and these 114 requests, the enforcement group can likely give the ICR team a more accurate understanding of the magnitude of this undertaking and the amount of time that will likely be required.

In addition to the burden on agency resources to conduct Part 2, the burden on industry will be similarly daunting. Part 2 contains a remarkable breadth and depth of data that will likely not be readily available for many facilities. For example, EPA is including isolation valve activation emissions estimates in its request but this information is not currently collected in the GHGRP or under New Source Performance Standards (NSPS) Subpart OOOO or Subpart OOOOa. This will

be a particularly time-consuming request to fulfill, and EPA does not appear to have fully accounted for these types of burdens in its timing estimates.

Completing EPA's request may also require respondents to commit to significant field and travel time. Given EPA's intent to release this ICR during the wintertime, travel logistics to remote field locations may be further complicated by the holiday season, inclement weather, and seasonal closures. Moving into the spring, there can be issues with wildlife impacts to consider. The request will also overlap with many annual reporting requirements, including for EPA's GHGRP and state reports. This is especially problematic because many company greenhouse gas experts who will be working on GHGRP reporting will also be responsible for the ICR. Instead, we recommend EPA target the end of the third or fourth quarter for its reporting deadline.

The compressed timeframe may also impact the overall accuracy of the data collected. For example, emissions data collected during a short span of the year may not accurately reflect emissions around the country on a year-round basis. In places like Wyoming, Utah, and North Dakota there can be extensive use of heat trace pumping equipment during winter months. Extrapolating year-round usage trends about this equipment based on single measurements of emissions during the winter would be inappropriate. Similarly, emission rates may differ greatly during the summer in places like New Mexico and Texas, where high temperatures will significantly affect the performance of field equipment. The most sensible way to address these many different considerations is to allow operators additional time to complete EPA's request. That way, they can plan for the unique regulatory and operational demands of each facility surveyed. A longer timeframe to conduct the survey will also give EPA a more accurate snapshot of industry operations throughout the year.

Both Part 1 and Part 2 of the ICR will be significant burdens for industry with numerous factors that will likely add time and expense, so we encourage EPA to maximize flexibility in its timeline. Since there is no clear added value in receiving Part 1 surveys within 30 days, we urge EPA to allow the same deadlines for both Part 1 and Part 2. And since Part 2 requirements may be extremely difficult and time-consuming, requiring field trips that could be delayed by seasonal or weather-related issues, we recommend EPA allow a minimum of 180 days to respond to its ICR.

We believe EPA's perception of the industry leads it to underestimate the complexity of its requests. For example, EPA looks at the number of wells in operation and perceives that a facility is comprised of two wells. However, there are many formulations of operations, and the development of the technologies to produce shale oil and shale natural gas has dramatically shifted the nature of operations. Horizontal drilling has allowed the industry to alter its footprint by consolidating a number of wells on one well pad. Consequently, it is commonplace for shale wells to have 10 or 12 wells on the same site. Perhaps, these changes in the industry influence EPA's underestimation of the time and cost for completion of the draft ICR. For example, one of the larger member companies would significantly differ from EPA's estimate of 30 facilities (60 wells); it would have more like 2,000 facilities (with 11,000 wells). Correspondingly, in assessing realistic times to complete the information EPA is seeking, the number of hours is far above those estimated by EPA, and the costs for Part 1 would be close to 200 percent of EPA's estimates – around \$150,000 – and for Part 2, the costs would be between \$225,000 and \$450,000 depending on the number of Part 2 questionnaires received.

There are similarities in requested data collection under ICR Part 2 when compared with EPA's ongoing Section 114 requests. Specifically, for Sections 2A - Facility Information, 2B - Well Sites, On-Site Tasks 3A and 3B (Pneumatic and Equipment Counts, respectively), these Items do not adequately account for additional travel time/costs. Items 3C and 4 - Tank Feed Sampling and Analysis/Results, respectively, do not adequately account for vendor sampling costs (too low by a factor of 1.5), for protocol review and preparation, sampling preparation and oversight and company travel time and costs. Lastly, Item 5 - Information Submittal, does not take into account preparation of data for e-GGRT entry, registration of personnel in e-GGRT, and overall report review by corporate legal and EHS staff which increases time and costs substantially. On the basis of comparison with similar 114 items listed above, an IPAA member calculated that its Part 2 costs would be 2.3 times EPA's estimate.

A portion of the differences in assessing costs and time relates to EPA's perception of the industry and of a facility. This impact is more clearly seen in the detailed information required in Part 2. EPA wants data framed in its image of a facility, but industry collects data to report for other purposes such as well data for state permitting and tax reporting. Reframing the data for the ICR report is more than a simple exercise; it is essentially the creation of new information.

All of this is further complicated by EPA's stated intent to distribute the ICRs by October 30, 2016. Given the August 2 deadline for these comments and the 30-day comment period for the Office of Management and Budget (OMB) review of the ICR, EPA and OMB would have approximately 60 days to analyze all of the submitted comments. Sadly, this suggests that EPA has little interest in addressing any information other than minor changes to its proposed ICRs. Assuming that EPA meets its October 30 objective, ICR compliance would then compete with industry efforts to initiate its compliance with Subpart OOOOa and, in early 2017, with the preparation of data for Subpart W submission. Independent producers' staff available to respond to the ICR is limited, particularly in the current economically constrained circumstances. For small business marginal well operators the challenge will be larger.

The issue of small business participation in the ICR is a significantly larger one than EPA perceives. In its "SUPPORTING STATEMENT FOR PUBLIC COMMENT INFORMATION COLLECTION EFFORT FOR OIL AND GAS FACILITIES" document, EPA casually states with regard to small entities:

The Part 1 survey is required for all operators of oil and gas production facilities and all respondents to the Part 1 survey will be subject to the same requirements. The Part 2 survey employs a sampling approach of facilities in each industry segment, and facilities selected to complete the Part 2 survey will be subject to the same requirements. The EPA expects that a portion of the respondents to both Parts 1 and 2 may be small entities; however, any individual small entity would be expected to have fewer sources so its response burden will be minimized.

While EPA may be correct that "any individual small entity would be expected to have fewer sources...", this may not be the case. Regardless, small entities have limited ability to devote resources to complete the ICRs, particularly ICR Part 2. And, therein lays the dilemma. With the overwhelming majority of American oil and natural gas wells being marginal wells, EPA needs to fully grasp the nature of that component of the industry - particularly to address the impacts of regulations on the remaining useful life of the facility. Yet, this component of the industry has the least capacity to have the resources to manage completion of the ICR.

Following are specific issues related to the draft ICR.

## **1. ICR Part 1 Data Collection**

### *a. General Facility Information*

The Part 1 request contains several pieces of facility data that may be problematic or confusing to report. Oil and natural gas production wells are frequently owned by multiple parties with one designated as the operator. Consequently, as a general comment for both Part 1 and Part 2, we believe that EPA clarify that only wells and equipment operated by the company are included in the company's response to EPA. This will avoid duplicative reporting by the non-operating owners.

However, the definition of "onshore petroleum and natural gas production facility" and "facility" in Part 1 needs to be removed to avoid confusion and inconsistencies in information received. EPA defines several terms that make it confusing for operators to interpret the data requested by facility in Part 1. Specifically, EPA defines "facility", "well site", and "onshore petroleum and natural gas production facility" in Part 1, but these definitions are not consistent and could lead operators to inconsistently report Part 1 data due to the conflicting definitions. We are concerned that these terms will cause confusion over which pieces of equipment are intended to be included, and where the boundary should be drawn for reporting. For example, if there are two adjacent wellheads under common control but feeding into different central tank batteries, it is unclear how an operator should group the wellheads and equipment. EPA's definition of 'facility' in Part 1 that specifies "...located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or common control..." could result in grouping two wells that feed into separate tank batteries but happen to be physically adjacent into one facility. Producing wells may be co-located with other facilities, such as a compressor station, central tank battery, or gas processing plant that processes crude oil and natural gas from other locations. EPA's definition of "onshore petroleum and natural gas production facility" indicates that any production facility co-located with a well would be included as part of a facility, but a central tank battery that processes production from wells but has no wells on the surface site would be excluded completely from Part 1. If it is EPA's intent to collect data from the wellhead and any associated production equipment, these proposed revisions will accomplish that goal without introducing complicated common control and adjacency analyses. This approach would facilitate appropriate extrapolation of the model plant data collected in Part 2. Further, we do not believe EPA intends to have daisy-chained facilities that include hundreds of wells. Therefore, we recommend that EPA use only the term "onshore well-site"; it should exclude usage of the terms "facility" and "onshore petroleum and natural gas production facility".

EPA is requesting information on the number of employees. One of the purposes of this question appears to be determination of whether the operator is a small business. EPA could more easily address this question by providing the necessary definition of a small business in the oil and natural gas production industry and have a pull down "yes" or "no" response.

### *b. Plugged and Abandoned Wells*

The facility-wide count for capped or abandoned production wells is a highly problematic request and should be excluded from the survey for several reasons. Oil and natural gas has been developed domestically since the 1850s, and, historically, recordkeeping was scant for old wells.

In many cases, today's large producing basins have legacy oil and natural gas production that dates back decades, along with many abandoned wells. Many of these plugged and abandoned wells are so old that today's operators may have no records of them. Many other wells have been exchanged or sold numerous times over their lives. Records from prior owners or operators can be very difficult to obtain in these situations. While we can appreciate EPA's interest in old plugged and abandoned wells, this ICR is an inappropriate way to gather more information about this population of wells.

In addition to being very difficult to comply with, the collection of plugged and abandoned well data offers virtually no benefit in terms of information to be used to regulate new and existing oil and natural gas production facilities because there are no emission sources related to plugged and abandoned wells. Current state regulatory requirements for well plugging and abandonment procedures are robust, and it would be infeasible for EPA to attempt to regulate wells abandoned decades ago. Since this information will not be necessary for proper performance of EPA functions, it should be removed from the ICR.

### *c. Distance to Gathering Lines*

Distance from facility to the nearest natural gas gathering line is another category that is problematic and requires modification. Distance to natural gas gathering lines, in addition to offering limited utility for improving EPA's understanding of industry, is logistically difficult to determine. Much like distance to the field office, addressed below, calculating distance to natural gas gathering lines creates a burden on respondents that far outweighs the useful benefit of this information. A more appropriate question is whether the facility is connected to a natural gas sales line, rather than distance to the nearest gathering line.

All natural gas wells should be exempted from this requirement. No rational operator would develop a natural gas well without takeaway capacity. For natural gas wells, reporting the distance to gas gathering lines would not be a worthwhile exercise.

Similarly, an oil well that is connected to gas gathering should simply be able to satisfy EPA with a "yes" or "no" answer. Once the connection to gathering has been made, the distance becomes largely irrelevant.

For other wells, determining distance to gas gathering would be a time-consuming mapping exercise for every facility with questionable benefits. If EPA is trying to use distance to gathering lines as a proxy to assess whether oil wells are emitting methane rather than selling it, it is a poor proxy because of the many other factors that affect that choice. For example, the relative proximity of gas gathering lines is often irrelevant when capacity issues come into play, which is often the primary driver in areas where gas capture rates are lower. Furthermore, existing sources will be connected to gathering lines where it is feasible to do so. The distance to the nearest gathering line is largely irrelevant and may even be unknown.

If an operator has an existing contract with a specific midstream operator to tie in all wells in an area to their pipeline, there may be a closer gathering line that the survey respondent is not going to connect to for contractual or logistical reasons. This could include an operator that may not have rights-of-way to connect to the closest gas gathering line or have gas that is not of sufficient quality to connect to the nearest gathering line.

*d. Distance to Field Office*

Distance from facility to field office is a problematic requirement. Like the distance to natural gas gathering, this will require time-consuming mapping, and, like distance to gas gathering, this information is of limited utility. EPA appears to be using this information as a proxy to assess how an operator services its operations. Distance to the nearest field office is not a useful proxy for several reasons.

First, most operators service their well sites using assigned or contracted personnel who visit sites on a specific schedule depending on its size and production. Typically, these visits are sequential and start, not at the field office, but at the roustabout's home. Trips to the field office would depend on actions that needed to be done there, not at the well site.

Second, if the field office distance is being viewed as a proxy for LDAR actions, EPA needs to understand that, for most companies' LDAR program, companies have trained teams that move through their operations on fixed schedules. They are not deployed from field offices.

Given that calculating the distance to the nearest field office will be a particularly time-consuming request, we strongly recommend EPA strike it. However, if the Agency sees any remaining value to the Distance to Field Office query, it should have a pull down set of ranges that can be more simply answered (e.g., 0-10 miles, 10-25 miles, 25-50 miles, etc.).

*e. Storage Tanks*

We understand that the storage tank information requested in Part 1 will be used to extrapolate information on the more detailed information on tank type and size in Part 2. This should be reasonable if EPA is able to distinguish between different types of operations in Part 2. That is, the Part 2 questionnaires need to be reflective of both the type and size of oil and natural gas production because the storage tanks will differ depending on type and volume of production.

*f. Facility Electrification*

While we can certainly appreciate EPA's interest in the availability of electrification, this request is problematic and inappropriate for the Part 1 survey.

While we believe that EPA's perspective on this question is based on an assumption that it can be readily answered, it is not a simple task. In many cases, the availability of electricity for every facility will not be an easy determination. Instead, it will require industry to review utility bills for entire fields and determine where electricity is being utilized. Although the presence of electricity could be an important consideration for understanding what control technologies could be utilized, the practical reality of how field electrification is billed makes this an extremely time-consuming request that will be difficult to determine with certainty for every facility. We recommend instead that EPA make availability of electricity part of its Part 2 request.

Additionally, we recommend that EPA clarify that facilities using temporary generators but that are not connected to the electrical grid would not be considered electrified. These generators do not necessarily remain onsite and may not have the capacity to operate instrument air pneumatic systems or other electrical systems. It would be inappropriate to deem these sites to be electrified.

*g. Liquids Unloading*

Given the strong evidence based on extensive research that liquids unloading is not suitable for prescriptive one-size-fits-all regulation, we are deeply troubled by EPA's decision to propose it in its ICR. Furthermore, the mere occurrence of liquids unloading reveals little information of use to EPA, as it does not address the timing, frequency, technique, or other pertinent information about the process. EPA recently declined to develop NSPS for liquids unloading in its Subpart OOOOa rulemaking. It would be both illogical and counter to CAA procedures to develop existing source standards in the absence of new source standards.

Notably, EPA's decision to avoid regulation of liquids unloading did not come lightly. EPA conducted an exhaustive examination of liquids unloading practices and concluded:

Data reviewed also show that liquids unloading events are highly variable and often well-specific. Furthermore, questions remain concerning the difficulty of effective control for those high-emitting events in many cases and concerning the applicability and limitations of specific control technologies such as plunger lift systems for supporting a new source performance standard.

As a result of its analysis, EPA declined to regulate liquids unloading in its proposed NSPS Subpart OOOOa. Similarly, the Colorado Department of Public Health and Environment (CDPHE) recognized that operators need flexibility to employ best management practices on a well-by-well basis. CDPHE went on to recognize that automated plunger lifts are not pollution control devices and are not used in the field unless the well design, geologic conditions, and gas content are appropriate for it. Therefore, we encourage EPA to remove liquids unloading from the ICR entirely. Successful approaches to addressing liquids unloading in Colorado and elsewhere have steered away from prescriptive regulation and instead focus on best management practices and reporting requirements.

Moreover, this question is entirely unbounded. Regardless of whether liquids unloading occurred once in the past year or once over the life of the well, respondents will provide the same answer as this section is currently written. The reality is that liquids unloading will be highly variable over the life of the well and can change in response to shut-ins and other events. The liquids unloading questions in ICR Part 1 offer no meaningful insight into the practice and are therefore not necessary.

*h. Focus on Pre-OOOO Facilities*

In order to maximize the utility of the ICR, we recommend that EPA focus on facilities existing prior to Subpart OOOO. This is particularly important for two reasons. First, many of the processes being surveyed are controlled through NSPS Subpart OOOO and Subpart OOOOa, and therefore EPA should have an accurate understanding of the control requirements in place. Subpart OOOO and Subpart OOOOa have clear emission thresholds that indicate how and when facilities will be controlled. Second, for the purpose of developing existing source rules, cost and emissions data on older sources is far more useful than data on new facilities. New control costs are applied very differently to existing facilities. Therefore we recommend that EPA focus on sources constructed prior to the Subpart OOOO applicability date.

*i. Number of Separators*

EPA should be aware that oil and natural gas operations often utilize two-phase separators, three-phase separators, or both at production sites. A simple count of separators may not provide

EPA the information it is seeking. We understand that EPA will be seeking more detailed information in the Part 2 questionnaire; however, as we noted on Storage Tanks, extrapolation of Part 2 information will depend on whether it accurately samples the breadth of the industry.

## **2. ICR Part 2 Data Collection**

### *a. Feed Material Composition Analysis*

One of the most detailed and burdensome requests EPA included in Part 2 of the ICR is the requirement for actual measurements of tank and separator feed material composition. The issue here is whether this information would meaningfully add to EPA's understanding of oil and natural gas production operations. We believe it would not.

Feed material composition analysis (flash gas analysis) is unnecessary and should not be included in the ICR. EPA has flash gas composition data at its disposal through Subpart W reporting at the sub-basin level. This data could easily satisfy EPA's needs for understanding representative trends in flash gas composition across the industry. Indeed, it is unclear how surveying 3,000 additional facilities under Part 2 would substantially improve EPA's existing dataset, but the data collection itself would be highly problematic for operators.

Should EPA decide to move forward with this request despite its overall lack of utility for the ICR, it should be modified significantly. EPA's selected method for direct measurement of feed material composition for storage tank flash gas analysis, known as the CARB method, is overly prescriptive and not suitable for use in this ICR. This issue is addressed more fully in other submitted comments.

### *b. General Well Information*

We are also concerned by several requirements for general well information requested in Part 2. Among the data requested for well sites are well casing inside diameter, well tubing inside diameter, wellbore length, and well configuration. It is unclear what benefit this information provides to EPA, and based on our analysis, it does not appear to substantively enhance EPA's ability to understand facility design or emissions.

Therefore, we recommend EPA remove these extraneous data requirements from the ICR unless it can justify their benefits. We are concerned that EPA may be incorrectly assuming this data will allow for well blowdown emission calculations. If this is the case, we urge EPA to consider that well casing, well tubing, and wellbore length data are unsuitable for calculating well blowdown emissions because there are numerous other factors that can impact emissions.

Information like well depth and well bore length may not be straightforward to obtain. For example, wells may have multilateral designs like tree roots. Others wells may have capillary strings to allow production from multiple zones but not comingle the oil, natural gas, and water from each zone. For capillary string wells, the same well can produce to multiple separators connected to their own tank batteries, with multiple facilities receiving fluids from a single well. While some of the requests in this section may be suitable for single well bores, they can pose problems for other configurations.

Furthermore, for older producing wells, much of the data requested in this section may be non-existent. It is possible to find wells that have been producing for 50 years or longer using the original well completion. It would be very difficult to find data about well casing diameter,

well tubing diameter, and produced gas composition from the first 30 days of production for these older wells.

Where available, much of the data requested by EPA here can be found with state land authorities. For example both Texas and Oklahoma have detailed records that contain much of the information requested here by EPA. Since EPA is obligated to reduce information collection burdens under the Paperwork Reduction Act, we urge EPA to review the appropriate state records rather than place the burden on industry to gather information already reported elsewhere.

For production facilities, EPA requests the quantity of natural gas extracted from all wells. For oil wells, that number can be estimated, but it is important EPA recognize it is a calculation. It is not possible to directly measure associated gas produced at the wellhead. Associated gas that is not sold is most likely directed to a control device from multiple points in the separation process. It is not industry practice to meter gas directed to a control device for many technical reasons, so operators will often use a GOR value to calculate total gas production. GOR values may have been estimated at initial production, but GOR values may change over time as oil production declines. We are concerned that EPA will take this associated gas production data as absolute and make unjustified decisions from the data.

It is unnecessary for EPA to request the volume of oil produced and oil sold from a well. In the oil and natural gas industry, those values are synonymous. This request requires operators to know exactly how much oil is in storage from a previous year's production and how much oil is in storage at the end of the year that was produced, but not yet sold. This is an overly burdensome exercise with no benefit when estimating emissions. We recommend EPA strike the request for quantity of all hydrocarbon liquids leaving the facility (sales).

*c. Land Owned or Leased*

In Part 2 of the request, EPA seeks information on whether the land is leased or owned. This request will require a great deal of effort by operators to research land files to make this determination with no emission estimation benefit. If EPA requires this information, it must make it clear what value this information will provide to justify the time and expense for this determination.

*d. Current Environmental Regulations That Apply*

For clarity, scope, and brevity, we recommend that EPA specify that this request for applicable state rules applies to air quality regulations only. EPA should include in this an option to write in other applicable requirements such as Tribal Federal Implementation Plan (FIP) regulations or requirements from a federal Consent Decree. However, it is inappropriate for EPA to use this effort to gather information on, for example, noise ordinances, road traffic requirements, or stormwater permitting.

*e. Well Completion and Workover Information*

As with much of the general well information, well completion data requested could likely be readily obtained through the appropriate state records. We encourage EPA to work with states to gather its desired well completion information.

In addition to well completion data, EPA is also seeking data on the anticipated date of the next workover. However, gathering this type of information requires clairvoyance on the part of

operators to predict changing reservoir conditions, market conditions, availability of equipment, and availability of capital, among other factors. Well workovers are decided on a case-by-case basis, and information about workovers from one well in a specific field could not necessarily be applied to another well even in the same field.

Information on the date of last workover may not always be available either, particularly as oil and natural gas assets are sold regularly, sometimes changing ownership five or more times over the lifetime of a producing well. EPA likely will be able to find the date of last workover in its GHGRP data, when such data is available. However, availability of records on these older facilities can sometimes be problematic, and therefore this type of information may not be available. We recommend that EPA remove next anticipated workover and date of last workover from the ICR or, where possible, to leverage the GHGRP data already at its disposal.

There have been some indications that EPA perceives a workover as a refracturing activity. Consequently, it may be seeking this information with the mistaken belief that a workover constitutes a modification under the Subpart OOOO and Subpart OOOOa regulations and that this information would indicate that the existing facility would become subject to those requirements after the workover. However, a workover is not a refracturing action.

*f. Control Device Cost Data*

While we appreciate EPA seeking cost data as a part of its request, we are concerned that the information requested may not be available to operators or useful to EPA. For example, the historical costs of control devices are largely irrelevant for the purposes of evaluating the cost of new control devices on existing facilities. Using historical costs to make assumptions about current or future costs is not an appropriate comparison. Many new control devices, such as vapor recovery units (VRUs), have improved significantly in terms of their design but have also increased in cost. For example, current VRUs come with variable motors which are more effective but also more expensive. Older VRUs will not reflect those increased costs. At the same time, other control devices may have decreased in cost over time. Consequently, historical data may not reflect current economics. Instead of focusing on historical data, we encourage EPA to focus on current control device costs.

Additionally, cost data is not necessarily useful for making basin-to-basin comparisons. A control device that may cost \$30,000 with installation in one area, may cost \$50,000 in another area due to significant differences in the availability (or lack thereof) of roustabout crews, manpower, equipment needed for the installation, etc. As a result, cost data cannot be reliably compared across different basins and states. In some cases, a control device may be moved from one field to another because there happens to be one available. This will drive down cost, but having an extra control device available is unlikely to be planned, and it is impractical to assume control devices are readily lying around.

As with many other elements of the ICR, asset sales and trades will complicate the collection of control device cost data. Operators who own assets that have changed hands one or multiple times may not have access to data about what previous operators spent on control technology.

Similarly, without proper context around whether a control device was added as a retrofit or part of new construction, or the approximate date of when controls were installed, it is difficult to make any useful conclusions about this cost data. This is yet another reason why the focus on historical data is inappropriate.

EPA should also be aware that economic impacts on a well are often considered on a well-by-well basis. A high producing well may withstand a \$25,000 control equipment upgrade cost; however, a low producing well may not. In this case, an operator may choose to plug and abandon the well rather than incur the additional cost, greatly adding to the cost to control for that particular well. In addition, the economic impact analysis fluctuates with commodity prices and localized price differentials to benchmark commodity prices.

*g. Pneumatic Controllers*

In its current form, the pneumatic controller survey is inappropriately scoped and should be modified. To begin, the survey should collect pneumatic controller data on high-bleed, low-bleed, and intermittent-bleed devices only. Counting pneumatic controllers by actuation type will be difficult, as many field personnel conducting this portion of the ICR may not have been trained to identify the pneumatic controller types according to EPA's categories. Instead, it will take pneumatic controller experts to collect and review this information, which further adds to the cost burden and feasibility challenges of this request, particularly in light of EPA's unreasonable 120-day timeframe. EPA's request for rotary vane isolation valve actuators, snap-acting vs. throttling intermittent-bleed controllers, and turbine operated isolation valve operators will not meaningfully improve the quality of EPA's data despite adding substantial burden for respondents.

Furthermore, collecting detailed emission information for intermittent vent pneumatic controllers will not be useful because their emissions are highly dependent on operational conditions. It would be inappropriate for EPA to use the Part 2 request to draw industry-wide conclusions about hundreds of thousands of pneumatic controllers. These devices are purpose-built for individual facilities, and it is inappropriate to assume that actuation rates on one facility's controllers are representative of industry operations. This variability is further compounded by the fact that pneumatic controllers will often actuate at different rates seasonally. Therefore, the high-, intermittent-, and low-bleed classifications will give EPA sufficient understanding of pneumatic controller populations.

We also suggest EPA simplify its information request for instrument air pneumatic controllers, electronic controllers, or mechanical controllers. If facilities are able to use instrument air, they will generally do so for all controllers. Therefore it is unnecessary to gather additional information on actuation rates, snap acting versus throttling controllers, etc. for these devices.

We recommend EPA add a section to the Part 2 Pneumatics section to allow operators the ability to designate whether a pump, valve or controller is controlled by a control device. To be consistent with Subpart OOOOa or industry best practices, operators often vent these devices to a control device or re-capture the gas.

Lastly, we support section 3 information collection on work practices and malfunctions, as this will provide EPA with useful context for evaluating work practice standards.

*h. Equipment Leak Information*

We are also concerned that EPA has drastically underestimated both the difficulty and the cost of collecting the equipment leak information required under Part 2 of the ICR. As EPA is aware, it currently allows one year of implementation for an LDAR program under its recently finalized Subpart OOOOa. Yet, despite the fact that the proposed equipment leak ICR requirements are

more complex, including the time-consuming task of supplying actual component counts, EPA is only allowing 120 days for operators to complete this task.

We question the practical utility of requiring actual component counts. The GHGRP provides fugitive component estimates based on numbers and types of equipment at the facility, in lieu of exact component counts, and the recently finalized Subpart OOOOa LDAR requirements deleted the proposed requirement to take component counts in order to calculate percentage of leaking components. As a result, no EPA programs require exact component counts. Therefore, the vast majority of operators will need to create a reporting process. This includes possibly hiring and training contractors. Completing this ICR will require redeploying personnel and it appears EPA has not accounted for these costs anywhere in its analysis.

Exact counts to this granularity have no added value when analyzing existing oil and natural gas production operations across the country. Such burdensome reporting will not help EPA to understand this industry better in order to develop future regulation of oil and natural gas air emissions.

We strongly recommend EPA allow estimated component counts to decrease the time and cost burden on respondents for a requirement that has limited practical utility. If the EPA finalizes actual component counts, EPA must re-evaluate its costs and time burden estimates here and ultimately allow extra time for respondents to complete equipment leak survey work.

With regard to the questions requiring “Total Number of Components Found Leaking”, this information may not be available. Since the compliance period has not begun for the LDAR program under Subpart OOOOa for which detailed records will be meticulously kept, prior efforts to find and address leaking equipment took place promptly, with the leaks fixed right away or tagged and fixed as soon as possible. However, companies would not have maintained records for LDAR at all sites visited.

*i. Produced Gas Composition*

In the Part 2 request, EPA requests produced gas composition from three different time periods. EPA should consider first asking if operators have a produced gas composition for each well. In some cases, operators may not have the gas analyses from the periods being requested by EPA. It is not possible to retroactively collect this information; operators that do not have historic gas analysis should be exempted from this requirement. This may be particularly problematic for facilities that have been sold one or more times, as the current operator may not have access to that historic data.

In oil plays, operators often do not acquire extended gas analyses. Assuming operators will have a produced gas analysis for each of the three time periods is false. If a produced gas analysis is required for other regulating agencies, it is often an analysis that quantifies C1 – C6 hydrocarbons and provides a C6+ number which air quality regulating agencies would not allow for estimating emissions.

Operators do not anticipate significant changes in produced gas composition over time. We recommend EPA ask first if an extended gas analysis has been performed from a particular well. If so, then an operator can provide that analysis.

*j. Gas to Oil Ratio*

In the Part 2 request, EPA requests a GOR value from three different time periods. However, a GOR value often is determined during initial flowback, and GOR values after that time period may be difficult to verify. As stated earlier, it is not industry practice to measure gas volumes sent to control devices. Without this verified volume, GOR values are determined by calculation rather than direct measurement. In an oil play, gas is often broken out in a 2-phase separator at a high pressure and again in a 3-phase separator at a lower pressure. While the majority of the gas breaks out in the 2-phase separator, small bumps in pipeline pressures of short duration can cause the gas from the 3-phase separator to be directed to the flare. As a result, casinghead gas is directed to both the sales gas line and the flare. In these situations, the flared volume cannot be verified. Operators can look to gas sales data during times when they anticipate that all gas is sold; however, this cannot be verified with absolute certainty. We recommend that EPA designate a method based on technical feasibility for determining GOR after flowback or change the verbiage to indicate an “estimated” GOR value for periods after the first 30 days of production.

*k. Tanks Separators*

The Part 2 request contains a worksheet titled Tanks Separators. This is a confusing term not used in the oil and natural gas industry. We ask EPA to clarify if this is referring to Separation Equipment. This worksheet also contains several requests for information regarding continuous monitoring. EPA should be aware that there will be no gaseous flow rate or liquid feed flow rate monitoring on the inlet to a separator as gas and that liquids cannot be individually measured when multiple phases are encountered. Liquid level in a separator vessel also has no bearing on any emission estimates that we are aware of, and those levels often vary continuously depending on how the equipment functions. We recommend EPA strike the request for flow rate monitoring to separation equipment and the request for liquid levels in a separator because it is irrelevant for the purpose of understanding industry emissions.

*l. Blowdown*

EPA is also requesting a variety of information regarding blowdown of equipment in the “Blowdown” worksheet. While most operators will likely certify that blowdowns occurred at some time during 2015, that may be the only information known. We are unaware of any state or federal regulations requiring oil and natural gas operators to keep records of blowdown events or cumulative volumes for oil wells. As a result, operators may or may not keep such records. EPA should ask whether operators keep records of blowdown events for the various equipment types. If the answer is “yes”, then the additionally requested information should switch from black to a cleared cell where the information can be provided.

*m. Control Device*

Part 2 also contains a request for information regarding control devices in the “Control Device” worksheet. In this worksheet, EPA requests “Typical NG Flow to Device”. EPA should define what “typical” means. We recommend revising this request to be average flow rate over the last 30 days.

This section also contains a request for the “Fraction of time control device is operated while NG flow is present”. This is an inappropriate request because operators may not be able to

continuously monitor the flow of natural gas to a control device. We recommend EPA revise the request to “Fraction of time control device is operated and the well is producing”.

### **3. Definitions**

In our review of the proposed ICR’s definitions section, we are concerned by the lack of consistency between both Part 1 and Part 2 definitions, as well as the ICR’s inconsistencies with other regulatory text definitions. We suggest the following changes to clarify the proposed ICR’s definitions:

#### *a. Part 1*

Storage Tank and Vessel are used interchangeably, which could create confusion. We suggest instead using “tank” for storage equipment (e.g., storage tank) and “vessel” reserved for process equipment (e.g., separator).

Crude oil includes “drip gases” in its definition. We ask that EPA clarify whether drip gas is a reference to condensate. If so, it should be removed from the crude oil definition because condensate is defined separately.

The current definition of a facility is unclear and could be a source of confusion. For instance, if an operator has a compressor for boosting pipeline pressure and a tank battery on the same location that does not sell to the pipeline, it is unclear if EPA would consider this one or two distinct locations.

It is unclear if Gas-to-oil Ratio (GOR) is the same GOR that an operator would obtain from a flash analysis after a separator. We suggest EPA clarify this definition to “the ratio of the amount of hydrocarbon gas that is generated by the decrease in pressure or increase in temperature to standard conditions to the amount of hydrocarbon liquid that remains after the gas has been liberated”, which more accurately describes the necessary change in pressure and temperature.

API Well ID and US Well ID are listed twice, despite seemingly being the same thing. We suggest EPA combine these definitions to avoid confusion.

#### *b. Part 2*

Storage Tank and Vessel definition should be amended as suggested in our Part 1 definition comments:

Separator should clarify whether it includes gunbarrel tanks since their primary purpose is to separate water from oil and not gas from liquids.

Heater treater definition should be changed to read “process vessel” instead of “storage vessel” as heater treaters are not storage vessels.

Oil Well/Oil Reservoir and Gas Well/Gas Reservoir definitions are unnecessary for the ICR workbooks and will simply create confusion. EPA has added a gas to oil production threshold of 100,000 scf/bbl to determine reservoir status. However, it does not appear to apply the definition anywhere in the workbook. The closest question about a well or reservoir type is the “Sub-basin Formation Type” question on the “well sites” tab in Part 2 of the request. Even then, the responses are from Subpart W (oil, high permeability gas, shale gas, coal seam, and other tight reservoir rock). Having the EPA define a term regulated by another authority will create confusion and could lead to mismatched regulatory filings and air registrations. If EPA decides

to keep the definition, we suggest it consolidate the “gas well” and “oil well” into “well type” and define it as “The type of well as defined or registered with the respective state or land agency.” The gas to oil production threshold used in both well and reservoir definitions will not be indicative of the well type, as it could be affected by a variety of factors like gas pockets in an oil reservoir. Further confusing matters, different states have different thresholds when assigning well types. For example, Oklahoma sets the threshold at 150,000 scf/bbl, and Louisiana sets the threshold at 2,000 scf/bbl.

The definition of facility should be revised as suggested in our Part 1 definition comments.

The definition of gas-oil-ratio should be changed to be consistent with the Part 1 definition.

Pressure Vessels should be defined as any vessel that operates under pressure and not atmospheric pressure. EPA’s current definition does not reflect this and will create confusion.

#### **4. Recipients**

The EPA ICR is flawed because it appears to contemplate collecting information on wells from both owners and operators in connection with the Part 2 survey. Normally, multiple working-interest owners participate in any given well in the United States as non-operating interest owners. Accordingly, requiring both operators and owners to report on the Part 2 survey could result in numerous filings of duplicate information on each well. This would make the data confusing and difficult to aggregate. It would require much more time to process and evaluate accurately. It would also result in unnecessary burdens on the non-operators. The only sensible way to collect the information is to require the operator for each well, as designated and registered by each state oil and gas commission, to report on behalf of all of the owners of the well. EPA should clarify that any party receiving either Part 1 or Part 2 is only required to respond and provide information for wells where it is the operator.

In addition, the EPA estimate in the Supporting Statement that each operator would only be required to report on approximately 30 facilities, including 60 wells, for Part 1 is erroneous. Many oil and natural gas operators operate hundreds and even thousands of wells. The obligation to respond to the Part 2 survey for these companies will be extremely expensive and require huge amounts of time. The ICR must consider that burden and provide adequate additional time for recipients to respond to the ICR.

Part 2 of the ICR will be a significant burden for any operator that receives a request. Yet EPA does not appear to have made any considerations for companies that may receive multiple Part 2 requests. Given that the same employees may be tasked with completing each request, this burden would be compounded on operators that receive multiple Part 2 requests. We strongly recommend EPA develop a methodology to avoid disproportionately burdening a particular operator with an overwhelming number of requests.

Similarly, operators who have received CAA Section 114 requests for information on facility operations and emissions data in North Dakota and elsewhere should be exempted from Part 2 of the ICR. The benefits of this would be two-fold. First, these Section 114 requests are extremely costly and burdensome and have overloaded resources at affected companies. Adding a Part 2 request on top of that would be needlessly burdensome. Second, since these companies have provided voluminous emission and facility data to EPA already, the Part 2 request would be of limited utility for those operators, since EPA now has access to much of this data. Therefore it would be beneficial to both industry and EPA to not needlessly duplicate that work.

Additionally, we are concerned about how EPA will obtain contact information for operators. It is critical that the surveys are directed to individuals in the appropriate role at each company to avoid losing time to complete the surveys. We urge EPA to provide a way for companies to provide the agency with their preferred contact before the surveys are distributed.

We remain convinced that EPA will not be able to collect an appropriately diverse array of information if it chooses to transmit ICR Part 1 and Part 2 simultaneously. As we described previously, there are many factors that define oil and natural gas production. While a GOR approach creates many distinctions, it does not provide – for example – a characterization of conventional or non-conventional production. Yet, this is a significant issue with regard to existing facilities. The overwhelming majority of marginal wells likely will be conventional production. Similarly, most of these wells will be operated by small businesses. Heavy oil production presents a different picture than shale oil production. Enhanced oil recovery operations are another distinct set. For EPA to transmit Part 2 of the ICR without acquiring key information from Part 1 opens a serious question of whether it will be able to meet the statistically significance test of the Paperwork Reduction Act.

Finally, obtaining adequate information under Part 2 for the large marginal well population poses a different challenge than EPA has faced for other components of the oil and natural gas industry. For example, a small refinery still has a reasonably large technical staff, but because a marginal well is typically operated by a small business, its technical staff is far more limited. Similarly, in the current economic climate, these small business operations are also significantly constrained in their ability to absorb the sizeable costs of ICR Part 2. Yet, without adequate input from these operators, EPA will not be able to appropriately determine a regulatory framework. EPA needs to work with the industry to determine an approach that assures it can meet its responsibilities under Section 111.

## **Conclusions**

America's independent oil and natural gas producers fully recognize the importance and responsibility of managing their impact on the environment. We believe that the ICR process can provide EPA with the information it needs to make sound judgments regarding the need for regulation of existing sources of emissions and, if necessary, the information to craft cost-effective regulations. However, those tasks must be based on acquiring accurate and appropriate information from both industry sources and other information sources.

Industry is ready to work with EPA to achieve its objectives, but the current ICR proposal is seriously flawed, inadequate, and inappropriate. As a proposal under the Paperwork Reduction Act, it immediately fails to meet a key requirement of the Act:

minimize the Federal information collection burden, with particular emphasis on those individuals and entities most adversely affected;

by leaping into a collection approach seeking entity information that can be obtained elsewhere. As we have stated previously, much of the basic information on well location, well construction, well production, even emissions information is available to EPA from sources it already has through DrillingInfo or through publicly available state permits. Before duplicating this information, EPA should first acquire, analyze, and learn about the scope and complexity of the industry – a task in which the industry would be willing participants.

But this ICR proposal does not pursue such a path. Instead, it chooses to drive forward, not based on a sound, rational approach to data collection, but based on having the ICR distributed by October 30, 2016. Further, it envisions submitting both Part 1 and Part 2 simultaneously with 30-day and 120-day response targets. As we previously stated, these time limits are wholly unrealistic for many reasons. First, EPA has seriously underestimated the amount of time – as well as the cost – required to complete its proposed ICR. Second, EPA intends to time the submission of the ICR request when the same industry staff are also tasked with federally mandated compliance actions for its recently released Subpart OOOOa regulations followed closely by development and preparation of Subpart W reports.

We recommended that EPA target a more realistic timeframe – one that would end with Part 2 submissions on June 30, 2017. This realistic schedule would provide for three logical steps. First, it would allow time for EPA to acquire and assess the DrillingInfo and state permit information. Second, it would provide time to send, receive, and analyze the ICR Part 1 and develop an accurate target list for Part 2 to assure that Part 2 would get a statistically significant response that reflects the scope and diversity of the American oil and natural gas production industry. Third, it would give Part 2 participants adequate time to develop the information that would be required.

This Section 111(d) regulatory program will have potentially serious consequences for the future of American oil and natural gas development and production and national security if it is done poorly. An arbitrary clock must not drive such a significant regulatory action.

Time is not the only issue that EPA must address. The Paperwork Reduction Act is also intended to assure that costs are considered. EPA has seriously underestimated the cost of its ICR proposal. IPAA members evaluating EPA's requirements have concluded that its cost estimates are understated by factors from 2 to 10 to 100 and more depending on the nature of the request. EPA must recognize these realities and adjust its request accordingly to be within the spirit of the Paperwork Reduction Act. A significant step in this direction would be to utilize its existing information and state permit information this is duplicated in the ICR

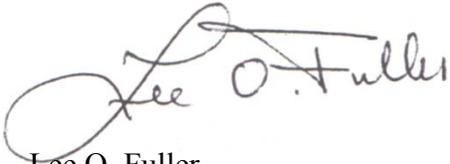
In addition, there is a small business challenge here that EPA has yet to recognize and understand. About 70 percent of existing American oil and natural gas wells are marginal wells – low producing wells typically operated by small businesses. EPA must acquire information from these wells to understand the nature of existing sources. Without the information, EPA risks making regulatory decisions that would be catastrophic to the operation of marginal wells without attendant cost-effective environmental benefits. Yet, these small businesses do not have the resources – either staff or finances – to complete the Part 2 ICR as currently drafted.

In these comments, we seek to recommend numerous changes to improve the draft ICR, to present realistic assessments of its time and costs, to raise the complexities that define the American oil and natural gas production industry that EPA needs to understand, and to propose alternative actions that could provide the type of information that EPA needs. Over the past several years, EPA has produced two major regulations on this industry. The first – Subpart OOOO – was conceived in haste because of a court order. The second – Subpart OOOOa – was a political response to Keep It In The Ground environmental activists. Neither had the benefit of sound technical analyses created for the purpose of regulatory development. Now, EPA has the chance to build the underlying information needed for a sound regulatory evaluation. Industry can be a partner in this information development process. Industry wants to be a partner. But so

far, EPA is blindly driving an overly burdensome questionnaire process that asks the wrong costly questions because of an arbitrary time schedule. This is not the intent of the Paperwork Reduction Act nor should it be the mandate to the Agency. Time should not be the driver of action. Sound regulation built on sound information should be.

We appreciate the opportunity to submit these comments and participate in the regulatory development process. If there are questions, please contact Lee Fuller at [lfuller@ipaa.org](mailto:lfuller@ipaa.org) or at 202-857-4731.

Sincerely,



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