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US EPA Office of Air Quality  
Planning and Standards (OAQPS)  
Raleigh, NC  
By email: [oilandgas.whitepapers@epa.gov](mailto:oilandgas.whitepapers@epa.gov)

**Re: IPANM comments to OAQPS Oil and Natural Gas Sector Pneumatic Devices  
Whitepaper**

Dear Sir or Madam;

The Independent Petroleum Association of New Mexico ('IPANM') appreciates this opportunity to comment to the EPA Office of Air Quality Planning & Standards (hereinafter 'EPA') whitepaper on Oil and Gas Sector Pneumatic Devices of April 2014.

Preliminary matters:

Without adequate research and an expert understanding of the issues, it would be unethical for the EPA to move forward with promulgating methane reductions policy or rules at this time. The whitepapers and studies cited therein do not appreciate that the issues around methane reductions are complex and very dynamic. In fact, since the introduction of the First Assessment Report (FAR) of the Intergovernmental Panel of Climate Change (IPCC 1990), there has been vigorous discussion about whether global warming potential (GWP) to compare different gases on a CO2 equivalent scale should be

the accepted methodology to understand the true impacts of methane.<sup>1 2</sup> As recently as last month, MIT researchers published a letter, titled, "*Climate impacts of energy technologies depend on emissions timing*" in *Nature Climate Change* stating that the static nature of GWP to compare gases with differing radiative efficiencies and atmospheric lifetimes has led to 'major shortcomings' in understanding energy technology valuations<sup>3</sup>. However, in the urgency to complete methane reductions regulations by the end of 2016, the Whitehouse has directed the EPA draft whitepapers and convene peer review panels to give the agency a 'robust understanding' of the issues. IPANM would contend that these whitepapers were obviously rushed, had a limited and biased selection of studies and we question the efficacy of the peer review process. We hope that the agency would proceed with this process in a manner that allows for true stakeholder involvement and opportunity for comment as required in the federal Administrative Procedures Act. Finally, we would urge the agency to use the resources and expertise available at the New Mexico Petroleum Recovery Research Center to learn about the unique characteristics of oil and gas operations in the San Juan and Permian basins. Within the PRRC is the Research Partnership to Secure Energy for America (RPSEA), Small Producer Program which is a public/private partnership funded by the U.S. DOE through the National Energy Technology Laboratory. The Small Producer Program aims to develop and apply technology that enhances small producer production, and thereby contributes to the nation's energy supply. The PRRC/New Mexico Tech was

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<sup>1</sup> Shine, K. "*The global warming potential – the need for an interdisciplinary retrieval*" *Climatic Change Journal*, Oct. 2009, vol. 96, issue 4, p. 467-472.

<sup>2</sup> Even as one of the lead authors of one of the chapters of the first IPCC report, Dr. Shine questions whether using the 'simple approach' of global warming potential metrics improperly influenced a 'major piece of environmental legislation' (Kyoto Protocol) that could impact 'big investment and policy.'

<sup>3</sup> Edwards, M. & Trancik, J., "*Climate Change of energy technologies depend on emissions timing*", *Nature Clim. Change Letter*, May 2014,

chosen to lead the SP program because of their track record of research and actions on behalf of small oil and gas producers, for whose benefit our organization was established. IPANM would also be happy to provide additional input to the EPA in the development of policy, rules and regulation on methane reduction strategies.

Who is IPANM:

The Independent Petroleum Association of New Mexico, IPANM, represents several hundred independent oil and gas producers who live, work and employ New Mexicans. We are small, with, on average, 25 employees who often wear multiple proverbial hats, but we provide enough revenue to the State of New Mexico to support 31% of the General Fund<sup>4</sup>. We strive to be stewards of the land in a state where nearly 41.8% of the land is federally owned. The Bureau of Land Management New Mexico office manages one of the largest oil and gas programs in the agency controlling 13.4 million acres of public lands and 26 million subsurface acres of federal oil, natural gas, and minerals. There are currently 30,561 active wells on federal lands<sup>5</sup> ranking New Mexico sixth in crude oil production in the nation in 2013<sup>6</sup>. New Mexico's marketed production of natural gas accounted for 4.8% of U.S. marketed natural gas production in 2012, despite a decline in production of 20% between 2007 and 2012<sup>7</sup>. According to the Office of Natural Resources Revenue, in FY 2013 the Federal Government disbursed \$478,732,193.90 in revenues to New Mexico<sup>8</sup>, which is only 48% of the total royalty revenues collected for oil and gas operations on NM federal lands.

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<sup>4</sup> "Fiscal Impacts of Oil and Natural Gas Production in New Mexico: Preliminary report", New Mexico Tax Research Institute, Jan 2014.

<sup>5</sup> <http://www.emnrd.state.nm.us/OCD/documents/OCD%20Well%20Statistics03272014.pdf>

<sup>6</sup> <http://www.eia.gov/state/?sid=NM>

<sup>7</sup> Id.

<sup>8</sup> <http://statistics.onrr.gov/ReportTool.aspx>

The process by which these whitepapers were developed was flawed and requires more study and expert understanding of the issues.

Regulation in the air quality arena is not new, however, IPANM would contend that the process by which the Whitehouse, through the EPA and the BLM, is seeking to implement new or substantially expanded methane reduction strategies, is not tenable<sup>9</sup>. Note that IPANM does not contest the authority of the EPA to regulate Greenhouse Gas emissions<sup>10</sup>, of which methane is a part of those emissions<sup>11</sup>. The authority under the Clean Air Act and a growing body of case law, grants the complex balancing of “national and international policy against environmental benefit, our nation’s energy needs and the possibility of economic disruption” solely on the Environmental Protection Agency. *See, American Electric Power v. Connecticut*, 131 S.Ct. 2527, 564 U.S. \_\_\_\_ ,slip op. 10-174 at 13 (2011). Indeed, through out the *American Electric* decision, the US Supreme Court justices refer to the EPA as the “experts”<sup>12</sup> in greenhouse gas and air quality matters. In the Administration’s “2014 Climate Action Plan: Strategy to reduce methane emissions<sup>13</sup>”, the President orders the BLM, the EPA, USDA, DOE and even international agencies to target key sources including landfills, coalmines, agriculture and the oil and gas sector and to

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<sup>9</sup> IPANM does contend that the statutory jurisdiction to regulate methane reductions lies exclusively with the EPA and not the BLM which is attempting to regulate methane emissions under the guise of a prevention of waste legal theory.

<sup>10</sup> In *Massachusetts v. EPA*, 549 U. S. 497 (2007), the US Supreme Court held that the Clean Air Act, 42 U. S. C. §7401 et seq., authorizes federal regulation of emissions of carbon dioxide and other greenhouse gases, including methane.

<sup>11</sup> IPANM does, however, contest the science behind the policy for reducing human caused methane sources. Several of our members pointed out in response to this exercise that the science of global warming and impacts of human activities have not been settled yet. In 2012, CH<sub>4</sub> accounted for about 9% of all U.S. greenhouse gas emissions from human activities. But water vapor in the atmosphere is responsible for 95 percent of the greenhouse effect and CO<sub>2</sub> is responsible for 3.6 percent. A study from MIT reported on 5/30/07 said that 97% of all greenhouse gases are naturally occurring, and the remaining 3% are caused by man. So methane is only 3% of the 9%. Insignificant.

<sup>12</sup> *American Electric Power v. Connecticut*, 563 US \_\_\_\_, slip op. at p. 3, 16,17,18

<sup>13</sup> March 2014 Climate Change Strategy: Reduction of Methane Emissions, found at [http://www.whitehouse.gov/sites/default/files/strategy\\_to\\_reduce\\_methane\\_emissions\\_2014-03-28\\_final.pdf](http://www.whitehouse.gov/sites/default/files/strategy_to_reduce_methane_emissions_2014-03-28_final.pdf),

promulgate rules to reduce methane emissions. The White House specifically directs<sup>14</sup> the BLM to propose updated standards to reduce venting and flaring<sup>15</sup>, and mandated the EPA to draft white papers focusing on technical issues relating to methane emissions from “oil and co-producing wells, liquids unloading, leaks, pneumatic devices and compressors” to “solicit input from independent experts<sup>16</sup>” (hereinafter referred to as the EPA methane papers). The EPA was further ordered to use these documents to “solidify its understanding of these potentially significant sources of methane.”

The EPA methane papers came out for peer review and comment one month after the release of the Whitehouse report with only 60 days<sup>17</sup> to comment on nearly 300 pages of technical data. The Whitehouse report also directed the agency to convene peer review panels, which was done, but those panels only consist of 5 persons per panel, and not one single small independent was included on any panel. It is interesting to note that the Environmental Defense Fund, however, was included on every panel thereby giving that group a significant voice in this process.

From a detailed review of the EPA methane papers, it is obvious that the authors were clearly limited, probably due to time constraints, to a small subset of studies that were often out of date, had poor sampling criteria, had wildly inaccurate extrapolation factors or cite to each other as ‘science’. Of the few studies the EPA relied upon, every

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<sup>14</sup> President’s Methane Reduction Strategy, page 2, 9.

<sup>15</sup> The BLM Venting and Flaring public outreach sessions were conducted in North Dakota, New Mexico and Washington DC. IPANM has submitted substantive comments to the BLM on their May 2014 Venting & Flaring proposal and would urge both the BLM and this agency to include IPANM, PRRC or RPSEA (see discussion above) in future stakeholder discussions.

<sup>16</sup> Id. at 8 par. 2.

<sup>17</sup> 60 days to read and digest nearly 300 pages of technical information was very difficult. To require industry to commission, prepare and present data to augment the very weak studies relied upon by the EPA was impossible. In addition, the timeframe set did not avail IPANM the ability to structure studies with the New Mexico Petroleum Research Recovery Center or RPSEA who are the entities often commissioned for such work.

whitepaper referenced a study commissioned by the Environmental Defense Fund that reviewed only 22 sources of emissions. IPANM strongly contests the use of this paper as the assumptions used are wildly inaccurate. First, the average \$4mcf value is high, particularly for smaller operators who received much less on average during most of 2012 and 2013<sup>18</sup>. Second, the base assumption that the cost of flaring is only \$3523 per well ignores the true costs which, by IPANM member review, were well in excess of \$10,000 per well because of the equipment rental, mileage, time and personnel time to operate the equipment. As noted earlier in this comment, the small producer has significantly different economics than major companies who employ personnel versus hiring consultants or contractors at market rate to conduct a test or an emergency procedure such as a flare or venting during liquids offloading. The misuse of the cost figures which ICF then extrapolated to estimate savings on a nationwide basis renders the EDF study close to meaningless as a foundation for a Whitehouse methane reduction strategy. Clearly, the manner in which the EPA researched the issues raised in the whitepapers was nothing more than a 'data dump' that could not be considered an adequate learning process to establish expertise on these very complex matters. IPANM contends that based on the inadequate information reviewed, that the EPA does not have any sort of a 'robust understanding'<sup>19</sup> of these sources of methane thus, moving forward with policy or rule promulgation is premature at this time.

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<sup>18</sup> [http://gotech.nmt.edu/gotech/Marketplace/year\\_prices.aspx?year=2013](http://gotech.nmt.edu/gotech/Marketplace/year_prices.aspx?year=2013)

<sup>19</sup> In the President's Climate report ordering EPA to complete the whitepapers, the Whitehouse assumes that completion of the papers would result in 'robust technical understanding' of the issues. IPANM contends that in every instance that the studies used and the lack of data does not give EPA regulators the required understanding of the issues to establish policy.

In addition, IPANM would urge the EPA to review and completely understand the information included in the National emissions inventory and information submitted pursuant to the recently promulgated NSPS SubPart 0000 amendments<sup>20</sup>. This data will provide a large amount of information about emissions at oil and natural gas facilities but experts who understand industry must study and understand the information prior to establishing policy.<sup>21</sup> NSPS SubPart 0000 requires federal air standards for new natural gas wells that are hydraulically fractured, along with requirements for several other sources of volatile organic compound (VOC) emissions from new storage vessels, newly installed compressors, pneumatic controllers and equipment leaks at natural gas facilities. Although the New Source Performance Standards directly regulate VOC emissions, in a Government Accounting Office report issued May 16, 2014, the EPA reports that the control requirements of NSPS SubPart 0000 substantially reduces methane emissions<sup>22</sup>. Concurrent with the NSPS, in April 2012, EPA published final National Emission Standards for Hazardous Air Pollutants, updating its air toxics standards for oil and natural gas<sup>23</sup>. These standards cover hazardous air pollutants emitted from glycol dehydrators—used to remove water from gas—and storage vessels, and equipment leaks at natural gas processing plants. Use of actual measurement from locations is obviously better towards

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<sup>20</sup> U.S. EPA, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews Final Rule, 77 Fed.Reg. 49490 (Aug. 16, 2012) (codified at 40 C.F.R. Parts 60 and 63).

<sup>21</sup> IPANM would urge the reviewers to look at the UT study that clearly explains differences in modeling based numbers used in the National Emissions Inventory versus actual measurements on location. We would caution against exclusive use of this study, however, since the measurements used were from shale formations only. See, Proceeding of the National Academy of Sciences of the United States of America (PNAS). 2013. Measurement of Methane Emissions at Natural Gas Production Sites in the United States. August 19, 2013. Available at <http://www.pnas.org/content/early/2013/09/10/1304880110.abstract>.

<sup>22</sup> GAO-14-238; Oil and Gas, Updated Guidance, Increased Coordination, and Comprehensive Data Could Improve BLM's Management and Oversight, page 23

<sup>23</sup> 77 Fed. Reg. 49490 (Aug. 16, 2012) (codified at 40 C.F.R. Parts 60 and 63).

building an understanding of the issue of methane emissions, which is what we believe the agency is attempting with the recent implementation of the NSPS regulations. We would urge the EPA not to rush to creating regulations for all new and existing oil and gas locations to reduce methane emissions without a solid understanding of the actual impacts<sup>24</sup> of methane emissions on human health and the environment or the actual levels emitted from all types of oil and gas sources.

Specific Comments BY IPANM Members to April 2014 Whitepaper, “Oil and Natural Gas Sector Pneumatic Devices”

Pg. 3	Definitions for low bleed controller ( $\leq$ to 6 scfh) versus high bleed ( $>$ 6 scfh) are arbitrary which vary based on volume, pressure, throughput rate, operating characteristics, ambient conditions, etc.
Pg. 7-28	Discussion of Data Sources (Studies):  General Comments: Most of the studies in this whitepaper rely on 20+ year old data and conclusions from a study conducted by the Gas Research Institute and EPA as to controller emission factors and emission volumes (GRI/EPA study). This 1996 study is almost statistically meaningless when considering policy in 2014, meaning that all the future studies that rely on it are also useless. None of the studies consider the probable reductions that have occurred since the implementation of NSPS subpart OOOO. Most of the studies use small regional sample sizes and then attempt to extrapolate the small amount of regional data to national levels. There is no indication that any of these studies have been peer reviewed.

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<sup>24</sup> Edwards, M. & Trancik, J., “*Climate Change of energy technologies depend on emissions timing*”, Nature Clim. Change Letter, May 2014. The actual impact of methane from different energy sources is substantially different than previously believed using the very simplistic GWP modeling. The MIT researchers advocate the use of dynamic modeling that better accounts for the differing radiative efficiencies and atmospheric lifetimes of different gases. In essence, the comparison of gases must be dependent on the timing of the emissions. The researchers note that while it might be in vogue to tout the disastrous health effects of emissions from coal-fired plants as a policy determination to support natural gas plants, three decades from now, the emissions advantages of natural gas as compared to coal would be half of the levels claimed in the GWP modeling.



Pg. 8	The main study upon which most of the other studies referenced in this whitepapers was based upon was conducted by the Gas Research Institute and EPA in 1996. The conclusions of this study relative to emission factors and emission volumes are used as the basis for most of the later studies referenced, therefore, the later studies are only as good as this GRI/EPA 1996 study - and it has significant problems (see below).
Pg. 8	This data and the conclusions of the study are 18 years old
Pg. 8	In order to determine an "emission factor", this GRI/EPA 1996 study relied on the data from another study conducted by the Canadian Petroleum Association in 1992 - over 20 years ago. This CPA 1992 study apparently only analyzed 37 controllers in Alberta.
Pg. 8	GRI/EPA 1996 uses the data on 37 controllers in CPA 1992 study in order to extrapolate an overall "emission factor" to apply nationally. This sample size from the CPA 1992 study is statistically insignificant.
Pg. 8 & 15	Table 2-4 purports to <u>estimate</u> the pneumatic controller population nationally at 892,403 (not 892,400 - but 892,403!) based on arbitrary "activity factors" from the GRI/EPA 1996 study. The data set from the CPA 1992 study (37 controllers) was used to extrapolate a "generic emission factor" to apply nationally for 892,403 controllers. Therefore, the sample size is about 4/10,000 of 1 percent ( $37/892,403=0.000042461$ ).
Pg. 8	In addition, GRI/EPA 1996 also used some "measured emission rates" from a 20 year old study from Tenneco Transportation with no consideration for age, design, size, maintenance, operating conditions, sampling time, etc. for the controllers.
Pg. 9	For intermediate bleed devices, only 7 measurements were performed to determine an emission factor that was applied nationally.
Pg. 9	For "activity factors" and projected controller population, only 22 sites were visited and this became the basis for a national estimate.
Pg. 10	All of the above was thrown into a bucket and out comes a very scientific

	sounding "'generic' pneumatic controller emission factor".
Pg. 4	Other problems with such a flimsy extrapolation, bleed rates are dependent on the design and operating characteristics of the specific device, and devices that do vent continuously, do so at varying rates over time. Neither of these facts were apparently considered in the EPA's extrapolation for a nationally applicable emission factor and volume.
Pg. 16	Even the EPA's GHG Inventory Report recognizes that the emission factors from the GRI/EPA 1996 Study would lead to overestimating actual emissions, but they also claim that they have no better data to use.
Pg. 8	To determine the amount of methane that is supposedly being emitted, EPA relied on these erroneous emission factors along with "literature data for methane composition". This demonstrates a lack of understanding by the EPA as each gas stream is unique in its composition thus a one-size fits all methane composition number is impossible. Only direct, specific analysis can determine methane composition.
Pg. 20	Table 2-7 references a "global warming potential (GWP) of methane". It quantifies this as "21". However, there is no discussion as to where this number comes from, how it is derived, calculated, etc. Recent MIT researchers have stated that even using a factor of 30 to compare impacts of methane to carbon dioxide is 'simplistic'. (See Fn. 1 – 3, 24 referencing a 2014 MIT study on static versus dynamic modeling to determine impact of methane emissions from energy technologies).
Pg. 20	The Allen 2013 study actually conducted regional measurements of pneumatic devices, however, this study only measured sources from shale plays, not traditional non-shale plays like the Permian or the San Juan basin with shallower wells and coal-bed methane wells.
Pg. 21 & 15	The numbers of controllers measured (305) were very limited compared to the supposed population of controllers nation-wide (892,403) - sample size of about 3/1000 of 1% - statistically insignificant PARTICULARLY considering the margin of error reported in the results (see next remark)

Pg. 21	Results show significant margin of error, e.g., Rocky Mountain Region results reports a margin of error of +/- over 100%!
Pg. 21& 22	Results also indicate significant differences between regions - up to a factor of 10. The study attempts to address this very obvious difference between regions by stating, in essence, they have no explanation.
Pg. 22	Even with all the obvious problems with the data and results of this Allen 2013 study, EPA still attempts to extrapolate the meaningless data to national levels.
Pg. 23 & 24	The Prasino 2013 Study looked at devices in British Columbia (doesn't say how many) and attempted to develop a relationship between bleed rate and the pressure of the supply gas.
Pg. 24	They used improper regression analysis to try to determine a relationship between these factors and found what they called a "positive correlation" strong enough to be able to use for estimating emission factors for pneumatic controllers.
Pg. 24	However, the reported R2 value for their regression analysis was only 0.41 - 0.35. Stated another way, this means that their regression analysis failed to explain 60-65% of the data - hardly what one could call a strong positive correlation!
Pg. 26	The ICF International 2014 study was commissioned by the Environmental Defense Fund which is very concerning – especially given their completely incorrect base assumptions. They only studies 22 locations but then use EPA numbers from the Bakken, Eagleford and Wattenberg – not New Mexico basins, and extrapolate to estimate nationwide savings. \$3500 as the estimated cost of doing a flare is extremely low, it is well over \$10,000.
Pgs. 36-55	Discussion of Alternative Mitigation Techniques
<p>1. Install Zero Bleed Pneumatic Controllers - Not realistic for most situations due to an inability of these devices to handle anything <u>except</u> very low volume/ low pressure situations. Forcing installation of zero bleeds will result in safety issues.</p>	

2. Install Low Bleed Pneumatic Controllers	
	<ul style="list-style-type: none"> <li>• Could replace High Bleed devices in a limited number of situations</li> </ul>
	<ul style="list-style-type: none"> <li>• Safety issue considerations due to the low bleed device being slower and less precise than higher bleed devices.</li> </ul>
	<ul style="list-style-type: none"> <li>• Not safe to use in situations where gas flow rates fluctuate - can't handle rapid changes</li> </ul>
3. Convert to Instrument Air Systems	
	<ul style="list-style-type: none"> <li>• These alternatives can't be considered in a vacuum - it also needs to be considered in context of other regulatory restrictions regarding power availability, electrical construction restrictions, noise abatement regulations due to the Endangered Species Act<sup>25</sup> et al.</li> </ul>
	<ul style="list-style-type: none"> <li>• More complicated systems mean a substantially greater possibility for failure in the operation, which can lead to safety hazards due to controllers failing to operate. Limiting the possibilities for failures leading to hazards affecting health, safety, and the environment should be a consideration. Small producer ability to maintain more complex systems is also a concern.</li> </ul>
	<ul style="list-style-type: none"> <li>• The cost for this alternative would be prohibitive for smaller operators with a few wells or even with a larger number of marginal wells. This significant incremental cost increase for operations would lead to premature abandonment in many situations.</li> </ul>
	<ul style="list-style-type: none"> <li>• Requires a larger, more intrusive, footprint for operations. Again, this could contradict a number of other regulations and considerations particularly with the BLM as well as Candidate Conservation Agreement conditions agreed upon between companies and the USFWS to protect endangered species.</li> </ul>
4. Replace Pneumatic Controllers with Mechanical and Solar Powered Systems	
	<ul style="list-style-type: none"> <li>• Would require electrical service to have safe reliable operation - solar power is not</li> </ul>

25 In the Permian there has been ongoing discussion and multiple Conservation Agreements signed by companies seeking to work with the USFWS to avoid listing the Sand Dune Lizard or the Lesser Prairie Chicken as endangered. Noise abatement is one of the conditions often required by the Service which would be significantly impacted should the EPA require different pneumatic devices on location.

dependable and could create a safety hazard with failing controllers. Electrical service is not always available in remote operating areas and other regulatory restrictions may not allow for bringing in electrical service.

- Solar powered systems would still require a pneumatic system backup for safety purposes, making this alternative duplicative.
- The cost for this alternative would be prohibitive for smaller operators with a few wells or even with a larger number of marginal wells. This significant incremental cost increase for operations would lead to premature abandonment in many situations.

### Response to Charge Questions

1. *Did the paper appropriately characterize the different studies and data sources that quantify emissions from pneumatic controllers and pneumatic pumps in the oil and gas sector?*

No. The Studies are characterized as authoritative and nationally representative, when in reality they are predominantly small, localized studies that are statistically weak at best.

2. *Please discuss explanations for wide range of emission rates that have been observed in direct measurement studies of pneumatic controller emissions (eg. Allen et al, 2013 and Prasino 2013). Are these differences driven purely by the design of the monitored controllers or are there operational characteristics, such as supply pressure, that play a role in determining emissions?*

Possible factors in addition to controller design would include (i) the operating volume and supply pressure characteristics, (ii) the age and condition of the controller, (iii) ambient operating conditions, (iv) operational needs, e.g., requirement for quick, precise actuation, (v) sample times and methods.

3. *Did this paper capture the full range of technologies available to reduce emissions from pneumatic controllers and pneumatic pumps oil and gas facilities?*

Unknown

4. *Comments on the pros and cons of different emission reduction technologies.*

See above comments on Alternative Mitigation Techniques

5. *Comment on prevalence of the different emission control technologies and the different types of pneumatics in the field. What activities require high bleed pneumatic controllers and how prevalent are they in the field?*

High bleed rate controllers may be necessary when dealing with high volume/high pressure situations and when rapid, precise actuation is required for safety and operation reasons

6. *What are the barriers to installing instrument air systems for converting natural gas-driven pneumatic pumps and controllers to air-driven pumps and controllers?*

Considerations: power supply availability and/or restrictions, contradicts possible noise abatement restrictions, increased operational footprint, marginal cost would have a disproportionate negative impact on smaller operators, complexity of systems introduces additional opportunities for failure that could lead to negative impacts upon health, safety and the environment.

7. *Are there situations where it may be infeasible to use air driven pumps and controllers in place of natural gas-driven pumps and controllers even where it is feasible to install an instrument air system?*

See #6 above

8. *Did this paper characterize the limitations of electric driven pneumatic controllers and pumps? Are these electric devices applicable to a broader range of the oil and gas sector than this paper suggests?*

Unknown

9. *Are there ongoing or planned studies that will substantially improve the current understanding of VOC and methane emissions from pneumatic controllers and pneumatic pumps and available technologies for increased product recovery and emissions reductions?*

Unknown. However, the full impacts of the implementation of NSPS Subpart OOOO should be known and better quantified prior to discussing implementation of additional regulations. Discussions with the New Mexico Petroleum Research Recovery Center or the Research Partnership to Secure Energy for America (RPSEA), Small Producer Program would assist this agency to better understand not only the oil and gas industry in New Mexico but also the limitations and cost pressures on small operators. Without this information, how can one pretend to quantify the degree or

existence of any potential current need for additional regulations?

#### SUMMARY COMMENTS

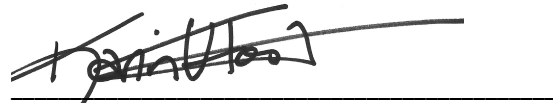
The studies the EPA has relied upon to develop "the Agency's understanding" relative to emissions from pneumatic controllers and pumps are extremely flawed. The majority of the studies rely on outdated data (20+ years old) and give no consideration to recent emission reductions due to the implementation of NSPS subpart OOOO. The studies attempt to make national extrapolations from localized and statistically meaningless data. The studies apparently ignore differences in pneumatic controllers relative to age, design, size, ambient conditions, operating conditions, maintenance, and sampling methods and times. None of the studies have apparently been peer reviewed.

Mitigation alternatives can not be considered in a vacuum, they must be considered in context with other regulatory restrictions, electrical restrictions and power availability, noise abatement regulations, limitations on operational footprint, operational necessity, limiting failure possibilities, and safety and environmental considerations. Further, the incremental cost associated with incorporating complex systems (e.g., compressed air systems, electronically actuated manual controllers, etc.) will be substantial in many cases as well as being disproportionately higher on smaller operators compared to larger operators. These more complex systems will also require duplicative gas powered pneumatic devices as a backup for safety considerations. Additional regulations to address maintenance are unnecessary as a prudent operator is already making the economic decision to maintain and repair equipment in order to limit lost gas and revenue.

IPANM thanks the EPA for the opportunity to comment on the Oil and gas Sector Pneumatic devices whitepaper. We would also be interested in participating in any stakeholder/taskforce/peer review groups convened for the purpose of addressing these policy proposals. We look forward to providing additional comments as the agency drafts of these proposed regulations materialize. Please feel free to contact me at Karin@ipanm.org or at (505) 238-8385 if you have any questions regarding the issues discussed herein.

Respectfully submitted,

INDEPENDENT PETROLEUM ASSOCIATION OF NEW MEXICO



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By: Karin V. Foster, esq.  
Executive Director