

**STATE OF NEW MEXICO
BEFORE THE ENVIRONMENTAL IMPROVEMENT BOARD**

IN THE MATTER OF:

**PROPOSED NEW REGULATION,
20.2.50 NMAC – OIL AND GAS
SECTOR –OZONE PRECURSOR POLLUTANTS**

No. EIB 21-27 (R)

**DIRECT TESTIMONY OF JEFFREY “RYAN” DAVIS
ON BEHALF OF THE INDEPENDENT PETROLEUM
ASSOCIATION OF NEW MEXICO**

July 28, 2021

IPANM EXHIBIT 2

IPANM_0018

**Direct Testimony of Ryan Davis
No. EIB 21-27 (R)**

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jeffrey Ryan Davis. My business address is 610 Reilly Ave., Farmington, New Mexico 87401.

Q. ON WHOSE BEHALF ARE YOU SUBMITTING DIRECT TESTIMONY?

A. The Independent Petroleum Association of New Mexico ("IPANM"). I am currently the President of IPANM.

Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

A. I am employed by Merrion Oil & Gas Corporation in Farmington, New Mexico. At Merrion, I am the Operations Manager.

Q. PLEASE DESCRIBE YOUR PAST EMPLOYMENT HISTORY.

A. I have been employed by Merrion since July 2008. From 2008 until December 2012, I was a production engineer at Merrion. In January 2013, I became Operations Manager.

Q. WHAT ARE YOUR RESPONSIBILITIES AS OPERATIONS MANAGER?

A. I manage all of our operated properties throughout the Rockies, including our New Mexico assets in the San Juan Basin. My responsibilities include overseeing all of field operations, engineering, production reporting, and regulatory compliance.

Q. PLEASE DESCRIBE YOUR EXPERIENCE WITH THE OZONE PRECURSOR POLLUTANTS OF THE OIL AND GAS SECTOR PROPOSED FOR REGULATION UNDER 20.2.50 NMAC.

A. I participated in the stakeholder engagement process as a member of the Methane Advisory Panel (MAP) and provided oral and written comments on behalf of IPANM to the NMED regarding the proposed regulation under 20.2.50 NMAC.

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL EXPERIENCE.

A. In 2008, I received a Bachelor of Science degree in Mechanical Engineering from the New Mexico Institute of Mining and Technology. A copy of my resume is attached as **IPANM Exhibit 3**.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN STATE OR FEDERAL REGULATORY PROCEEDINGS, INCLUDING TESTIMONY ON OZONE PRECURSOR POLLUTANTS?

A. No, not specifically on NOx or VOC, ozone precursor pollutants. I provided testimony to the Office of Management and Budget on the 2016 Bureau of Land Management Venting and Flaring Rule in 2018. I also testify on the NMOCD Waste Rule Hearing January 2021

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide IPANM's perspective on NMED's proposed regulations, including their applicability, and to specifically address requirements in the proposal for natural gas liquids unloading, pneumatic controllers and pumps, well workovers, and impacts on small operators/businesses.

III. IPANM'S EVALUATION OF NMED'S PROPOSED REGULATIONS

Q. PLEASE IDENTIFY THE REGULATIONS PROPOSED BY NMED THAT YOU ARE ADDRESSING IN THIS TESTIMONY.

A. I will be addressing the following sections:

- 20.2.50.2 NMAC -- Scope
- 20.2.50.7 NMAC – Definitions of “Pneumatic controller” and “Small business facility”
- 20.2.50.111 NMAC – Applicability;

**Direct Testimony of Ryan Davis
No. EIB 21-27 (R)**

- 20.2.50.117 NMAC – Natural Gas Liquid Unloading
- 20.2.50.122 NMAC – Pneumatic Controllers and Pumps;
- 20.2.50.124 NMAC – Well Workovers
- 20.2.50.125 NMAC – Small Business Facilities

Q. HAVE YOU REVIEWED NMED’S PROPOSED REGULATIONS AND STATEMENT OF REASONS FOR THESE PROPOSED REGULATIONS, FILED AS ATTACHMENTS 2 AND 3 TO NMED’S PETITION FOR REGULATORY CHANGE?

A. Yes.

Q. HAVE YOU REVIEWED IPANM’S COMMENTS TO NMED’S INITIAL PROPOSED OIL AND GAS SECTOR REGULATIONS?

A. Yes. The comments highlighted that the pre-proposal draft of the regulations had a much more balanced approach to the impacts on smaller operators. The pre-proposal draft had a stripper well and low potential to emit provision that provided necessary flexibility for operators with marginal production. The pneumatics provisions considered whether a site had access to line power and focused on securing reduction on sites without line power through the elimination of high bleed controllers. Overall, the pre-proposal draft reflected the input from industry during the Methane Advisory Committee (MAP) stakeholder engagement process.

1. NMED’S PROPOSED REGULATIONS SCOPE SECTION (20.2.50.2 NMAC)

Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF NMED’S PROPOSED SCOPE OF THE REGULATIONS?

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

1 A. My understanding is that the regulations are intended to regulate NO_x and VOC
2 emissions, ozone precursors, in New Mexico counties with an ozone design value greater
3 than 95 percent of the federal ozone NAAQS, or 65.5 ppb. I have been advised that
4 NMED ozone monitors in Dona Ana, Eddy, Lea, Sandoval, San Juan, and Valencia
5 Counties have a design value that currently exceeds 95 percent of the federal Ozone
6 NAAQS.

7 **Q. WHAT IS YOUR POSITION ON NMED'S PROPOSAL OF 20.2.50.2 NMAC?**

8 A. IPANM opposes 20.2.50.2 NMAC as currently written. IPANM does not oppose
9 regulations necessary to assure that areas with a design value greater than 95 percent of the
10 federal ozone NAAQS do not exceed the NAAQS. However, it does not believe that the
11 regulation of VOC emissions from the oil and gas sector alone is necessary or appropriate
12 to accomplish that task. We understand that ozone in Southeast New Mexico (Eddy and
13 Lea Counties) and Northwest New Mexico (San Juan) are mostly NO_x limited. That is,
14 the reduction of ozone formation in those areas is controlled by reducing NO_x emissions,
15 not VOCs. Our review of the proposed regulations indicates that the regulations are
16 primarily directed at reducing VOC emissions. We do not believe that a reduction in VOC
17 emissions will lower ozone concentrations in the Southeast and Northwest or assure that
18 the areas do not become nonattainment areas for Ozone.

19 We also point out that NMED has not produced a plan to control ozone beyond the
20 proposed regulations at issue in this matter. Without understanding NMED's plan for
21 control, it is impossible to effectively evaluate the need for the proposed regulations and
22 recommend action by the Environmental Improvement Board ("EIB"), the body charged
23 under the New Mexico Air Quality Control Act, Section 74-2-5.C (2021), with adopting

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

1 “a plan, including rules, to control emissions of oxides of nitrogen and volatile organic
2 compounds to provide for attainment and maintenance of the [ozone] standard.”

3 **Q. ARE YOU RECOMMENDING CHANGES TO NMED’S PROPOSAL?**

4 **A.** Yes.

5 **Q. PLEASE EXPLAIN THE BASIS FOR THIS PROPOSED CHANGE.**

6 **A.** If the proposed regulations (or amendments to the regulations) are to be adopted by the
7 Board, IPANM believes that the scope should be limited to those areas with a design value
8 of greater than 95 percent of the federal ozone NAAQS and that it should be the Board’s
9 responsibility to add or delete areas subject to the regulations, based on future monitored
10 ozone concentrations.

11 **2. NMED’S PROPOSED REGULATIONS APPLICABILITY SECTION (20.2.50.111**
12 **NMAC)**
13

14 **Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF NMED’S PROPOSAL OF**
15 **20.2.50.111 NMAC.**

16 **A.** As drafted, 20.2.50.111 NMAC states that the regulations apply “to crude oil and natural
17 gas production and processing equipment and operations that extract, collect, separate,
18 dehydrate, store, process, transport, transmit, or handle hydrocarbon liquid or produced
19 water in the areas specified in 20.2.50.2 NMAC and are located at wellhead sites, tank
20 batteries, gathering and boosting sites, natural gas processing plants, and transmission
21 compressor stations, up to the point of the local distribution company custody transfer
22 station.” Additionally, the section requires that sources subject to the rules, “calculate the
23 Potential to Emit (PTE) of such sources” and have the calculations “certified by a qualified
24 professional engineer.” The rule requires the calculation be kept on file for at least 5 years
25 and be provided to NMED “upon request.”

**Direct Testimony of Ryan Davis
No. EIB 21-27 (R)**

1 **Q. WHAT IS YOUR POSITION ON NMED’S PROPOSAL OF 20.2.50.111 NMAC?**

2 A. IPANM has two concerns with the applicability section. First, not all sections in the rule
3 require the calculation of PTE. Secondly, it seems unnecessary to require a qualified
4 professional engineer certify the PTE calculation. Most operators have engineers or other
5 staff that conduct these types of PTE evaluations and may not meet the requirements of
6 this section.

7 **Q. ARE YOU RECOMMENDING CHANGES TO NMED’S PROPOSAL?**

8 A. Yes.

9 **Q. PLEASE EXPLAIN THE BASIS FOR THIS PROPOSED CHANGE.**

10 A. The requirement of having certification by a qualified professional engineer is not
11 appropriate and creates an unnecessary burden to operators. In-house engineers are not
12 required to be licensed as a professional engineer. New Mexico Board of Licensure for
13 Professional Engineers and Professional Surveyors states that “An engineer employed by
14 a business entity who performs only the engineering services involved in the operation of
15 the business entity’s business shall be exempt from the provisions of the Engineering and
16 Surveying Practice Act; provided that neither the employee nor the business entity offers
17 engineering services to the public” (Section 61-23-22 of the NM Engineering and Survey
18 Practice Act).

19 **3. NMED’S PROPOSED REGULATIONS NATURAL GAS LIQUID UNLOADING**
20 **SECTION (20.2.50.117 NMAC)**
21

22 **Q: CAN YOU DESCRIBE YOUR WORK EXPERIENCE RELATED TO LIQUIDS**
23 **UNLOADING?**

24 A: The first four years of my time with MOG I worked as the production engineer for the
25 company. My responsibility included artificial lift evaluation and implementation as well

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

1 as the associate field work supervision. I evaluated the economics and procedures for
2 artificial lift installations and supervised the rig work for implementation.

3 **Q. HAVE YOU REVIEWED THE PROVISIONS FOR LIQUIDS UNLOADING IN**
4 **THE NMED PROPOSED OZONE PRECURSOR RULE?**

5 A. Yes

6 **Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF NMED'S PROPOSAL OF**
7 **20.2.50.117 NMAC.**

8 A. As I understand it, the intent of this section is to reduce VOC emissions associated with
9 manual liquids unloading events through the use of best management practices during the
10 life of the well and during the manual liquids unloading activities. The section also has
11 monitoring, recordkeeping and reporting requirements for manual liquids unloading.

12 **Q. WHAT IS YOUR POSITION ON NMED'S PROPOSAL OF 20.2.50.117 NMAC?**

13 A. IPANM is supportive of the use of best management practices to reduce the emissions
14 associated with manual liquids unloading. IPANM is concerned with the prescriptive
15 nature of paragraph 3 of subsection B. IPANM is opposed to the equipment monitoring
16 tracking (EMT) throughout the proposed regulation.

17 **Q. ARE YOU RECOMMENDING CHANGES TO NMED'S PROPOSAL?**

18 A. Yes.

19
20 **Q. PLEASE EXPLAIN THE BASIS FOR THIS PROPOSED CHANGE.**

21 A. The purpose of manual liquids unloading is to maximize the differential pressure on the
22 wellbore to purge accumulated liquids out of the wellbore. The use of a control device
23 would impede the manual liquids process and could create a safety concern. When
24 performing manual liquids unloading the well is opened to the atmosphere through a low

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

pressure (16 ounces or less) storage tank. The flow from the well is a multiphase flow stream and the tank serves to capture the liquids while venting the natural gas to the atmosphere. The sales configuration can be seen below in Figure 5 (Figure 5: Production Scenario with liquids loading. From *Methane Emissions from Process Equipment at Natural Gas Production Sites in the United States: Liquids Unloadings*, by David Allen, 2013. Retrieved from <http://dept.ceer.utexas.edu/methane2/study/> <https://www.youtube.com/watch?v=tup1SICEXGY&feature=youtu.be>)

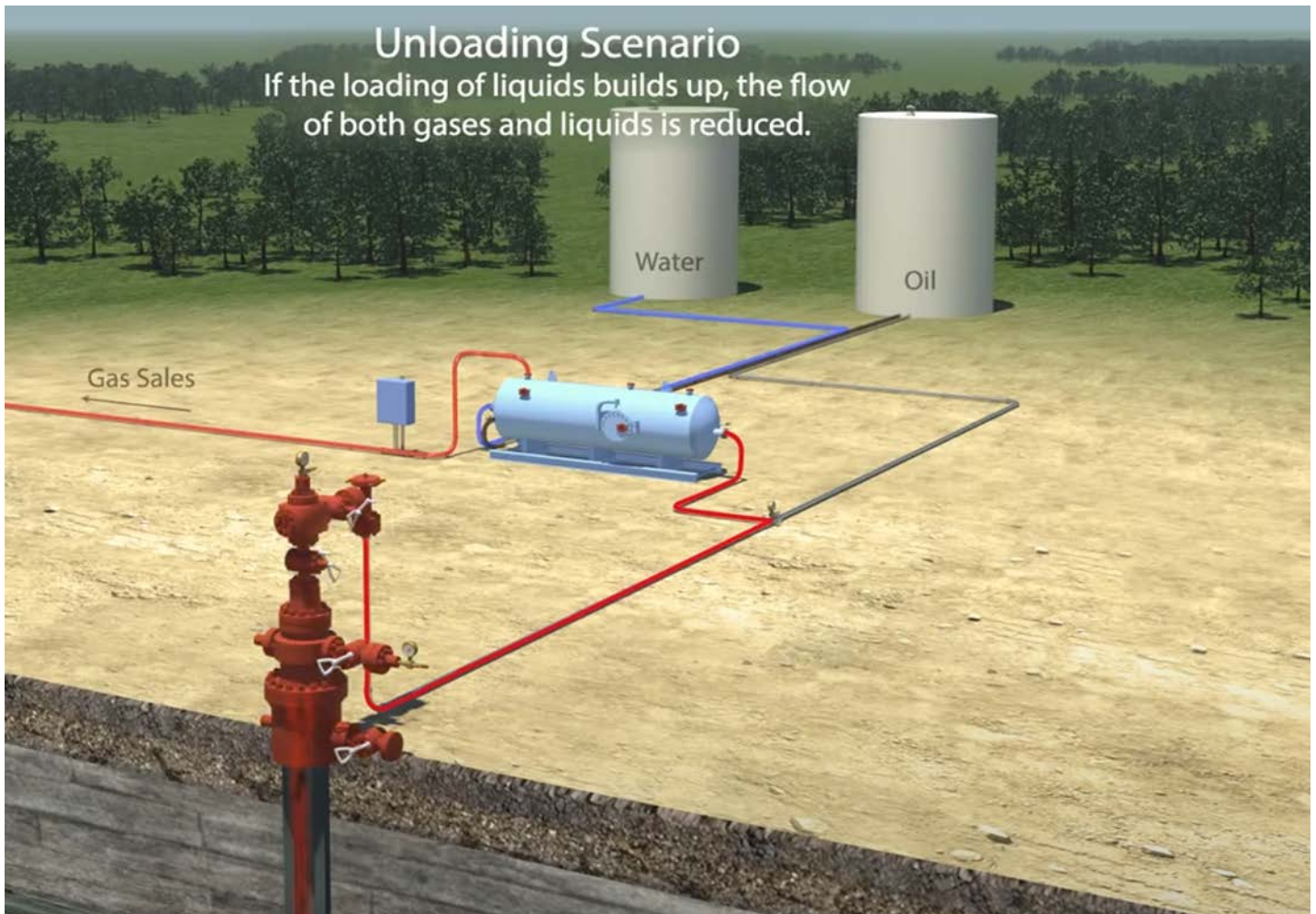


Figure 5: Production Scenario with liquids loading

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

The manual liquids unloading configuration is shown in Figure 6 (Figure 6: Unloading Scenario. From *Methane Emissions from Process Equipment at Natural Gas Production Sites in the United States: Liquids Unloadings*, by David Allen, 2013. Retrieved from <http://dept.ceer.utexas.edu/methane2/study/> <https://www.youtube.com/watch?v=tup1SICEXGY&feature=youtu.be>) below illustrating the multiphase flow being directed to the storage tank.

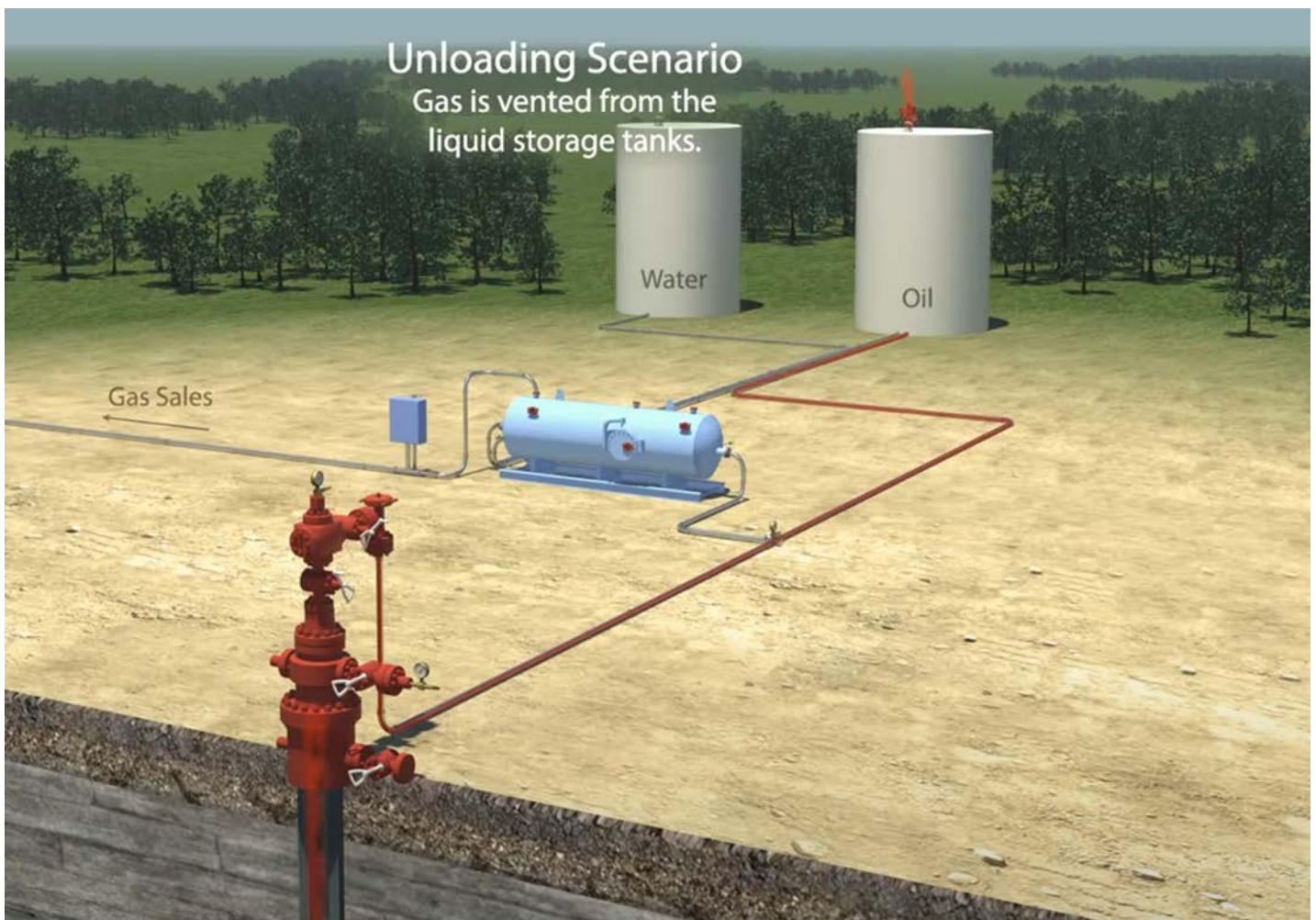


Figure 6: Unloading Scenario

Liquids unloading is a necessary process to maintain optimal production and maximize the recovery of natural gas. If the liquid loading is not addressed, it will lead to unstable flow

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

regimes such as churn and slug flow which make a wells production sporadic and the operation of that well difficult resulting in less than optimal production and overall less resource (oil and natural gas) recovered and sent to sales. Ultimately, the hydrostatic pressure from the accumulated fluid will become equal to the reservoir pressure. This equalized condition results in the well being incapable of producing. This flow regime progression is illustrated below in Figure 2 (Figure 2: Gas Well Flow Regimes. From *Study of Identifying Liquid Loading in Gas Wells and Deliquification Techniques*, by Subhashini Sankar, S. Arul karthi, 2019. Retrieved from <https://www.ijert.org/research/study-of-identifying-liquid-loading-in-gas-wells-and-deliquification-techniques-IJERTV8IS060708.pdf>)

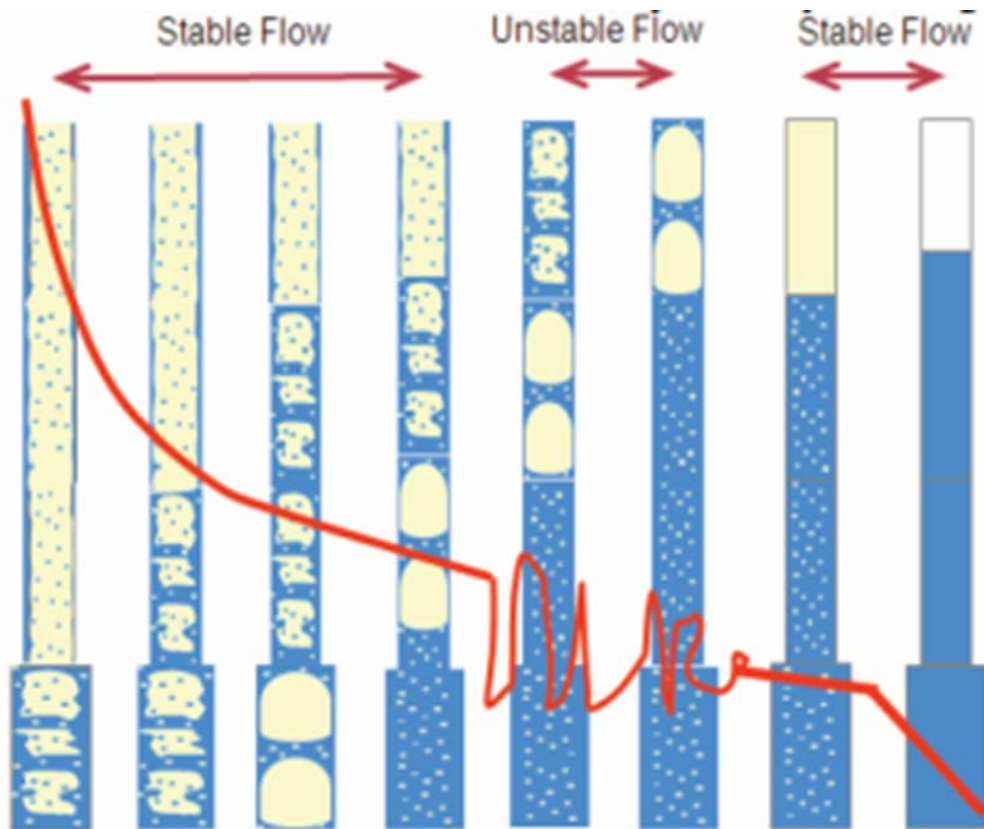


Figure 2: Gas Well Flow Regimes¹

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

Most, if not all wells, have liquid production associated with the natural gas production. These liquids include produced water, natural gas condensate or crude oil. A well experiences liquid loading when the gas rate falls below the critical velocity. The critical velocity is the gas velocity required to suspend a droplet of liquid in flow. This is illustrated below in Figure 1.

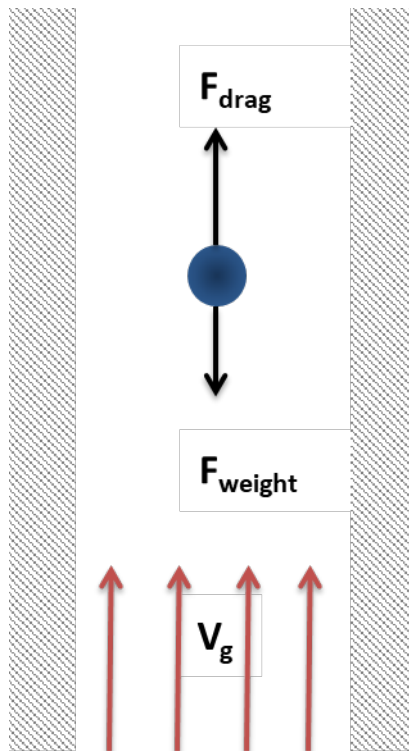


Figure 1: Critical Gas Velocity

A natural gas well's critical velocity is dependent on the tubing size and flowing tubing pressure. Some wells will come online flowing above the critical velocity but due the natural decline of the well over time, the gas rate can fall below the critical rate. Since the critical velocity is dependent on the flowing tubing pressure, a gas well can experience liquids loading when there is an increase in the flowing tubing pressure. There are various reasons for an increase in the flowing tubing pressure, but one of the primary reasons is an increase in sales line pressure due to a midstream upset. These upset

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

conditions could include gathering compression outage, liquid condensation and accumulation in the line or line pigging operations, which is beyond the control of the operator. Operators will apply appropriate artificial lift over the life of the well to prevent the need for manual liquids unloading. Artificial lift application is an engineered solution based on individual well characteristics and site parameters. Plunger lift is not a one size fits all solution for deliquifying gas wells. The application of plunger lift is dependent of the wellbore and wellhead configuration, the gas to liquid ratio, the pressure build rate and operating pressures of the well. Other factors could limit the operator's ability to apply plunger lift such as tubing size and condition as well as the production equipment capacity and capability. Based on my experience, an artificial lift engine is a gas-powered engine that used as a prime mover on a pumping unit. An artificial lift engine is not a stand-alone piece of equipment. I do not see how the installation and use of an artificial lift engine will result in any VOC emission reductions regarding manual liquids unloading.

4. NMED'S PROPOSED REQUIREMENTS FOR PNEUMATIC CONTROLLERS AND PUMPS (20.2.50.122 NMAC)

Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF NMED'S PROPOSAL TO REGULATE PNEUMATIC CONTROLLERS AND PUMPS (20.2.50.122 NMAC)?

A. It is my understanding that NMED intends to secure VOC emission reductions from natural gas-driven pneumatic controllers and diaphragm pumps. The reduction in VOC emissions from pneumatic controllers is to be accomplished by setting natural gas-driven pneumatic emission rates of zero for new pneumatic controllers and existing pneumatic controllers with access to commercial line power while transitioning all other gas-driven pneumatics

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

1 to non-emitting over time. A similar approach is proposed with natural gas-driven
2 pneumatic diaphragm pumps by setting natural gas emissions rates of zero for natural gas-
3 driven pneumatic diaphragm pumps at natural gas processing plants and wellhead sites,
4 tank batteries, gathering and boosting sites, or transmission compressor stations with access
5 to commercial line power. The existing natural gas-driven pneumatic diaphragm pumps
6 located at wellhead sites, tank batteries, gathering and boosting sites, or transmission
7 compressor stations without access to commercial line power must reduce VOC emissions
8 by 95% by routing emissions to a control device, fuel cell, or process.

9 **Q. WHAT IS YOUR POSITION ON NMED'S PROPOSAL OF 20.2.50.122 NMAC?**

10 A. Pneumatic controllers are a vital device employed in the oil and gas field separation and
11 processing. These devices monitor crucial process parameters such as temperature,
12 pressure or liquid level and use a pneumatic signal to control the field separation or
13 processing. The pneumatic actuation is critical for the safe and efficient operation of
14 process equipment in remote areas.

15 As an operations engineer for a small independent oil and gas operator I have found it
16 difficult to cost effectively replace gas-driven pneumatics utilized in our field operations.
17 In terms of performance and reliability, instrument air is the best solution to eliminate
18 natural gas emissions from pneumatics. The issue we have in the San Juan Basin related to
19 instrument air installations is the lack of available line power on the majority of our sites.
20 The cost to bring power to the site and the cost of the instrument air systems are cost
21 prohibitive. The installation of instrument air is an involved process. It isn't just a simply
22 plug and play type retrofit. The process starts with selection of a compressed air system
23 that incorporates an air compressor, filtration system and air dryer. The system also needs

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

1 to have the appropriate enclosures, controls and storage capacity. Once you have an
2 instrument air package there is modification that must take place on the site to separate the
3 instrumentation supply system from the fuel system on the process equipment. This
4 includes rerouting supply lines and pressure regulators to incorporate the use of
5 compressed air on the instrumentation and control devices. The systems require wiring and
6 trenching for proper installation. The instrument air skid must be placed with the
7 appropriate setback from other equipment on location to ensure the safe operation of the
8 system. When you consider all of the cost associate with the installation of instrument air
9 it is difficult if not impossible to justify on an individual well economics standpoint. Where
10 line power is not available and on single well sites with few pneumatic devices it is cost
11 prohibitive as an option to eliminate natural gas emissions from pneumatic devices. We
12 have spec'd out systems for future development and they do tend to make sense on new
13 multi-well sites where line power is available

14 We have utilized other means to eliminate emissions from pneumatic devices in the past
15 with very little success. We have installed solar powered instrument air systems and the
16 reliability of these systems coupled with the maintenance cost forced us to return to natural
17 gas as the motive fluid on our pneumatic devices. The solar power requirements also make
18 solar cost prohibitive. We conducted a pilot project with rotary electric actuators here in
19 the San Juan. We had many issues of which some we were able to address through the pilot
20 project. Ultimately the two issues we were unable to address were the power consumption
21 issues during winter month operations and the increase of emissions to the tank. The solar
22 power systems were challenged during the cloudy/stormy periods and we ended up with a
23 significant number of malfunctions do to loss of power during the winter. The actuation

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

1 response of the rotary electric lead to an increase in the amount of gas being sent to the
2 tanks due to the actuators not being able to close quickly enough. We concluded the pilot
3 project and changed all of the liquid level controllers and actuators back to gas-driven
4 pneumatics. As part of a voluntarily effort to reduce our greenhouse gas emissions we
5 eliminated all of our continuous bleed liquid leveler controllers and replaced them with
6 intermittent bleed controllers. We have utilized many cost-effective conversions to go from
7 high bleed to intermittent bleed. I have significant concerns about the cost of retrofitting
8 our pneumatic controls to zero bleed especially when there is an opportunity to secure
9 reductions with this source in a more cost-effective manner. There are a few applications
10 of continuous bleed controller for process and safety control purposes this would include
11 the need to throttle a process such as in gas dehydration where it is critical to maintain a
12 liquid level in the absorber or contact tower while also maintaining a minimum flow to
13 feed the circulation pumps. Overall there are still opportunities to retrofit to an intermittent
14 controller in the general separation and processing equipment to secure meaningful
15 reductions in natural gas emissions.

16 If we look at what Colorado has done with Regulation 7 on pneumatics, you will see that
17 they have implemented regulations to phase out gas-driven pneumatics with a percentage
18 of liquid production approach. If you couple this approach with the use of intermittent
19 bleed pneumatic controls you strike a cost-effective balance to reduce emissions with the
20 pneumatics sources in NM. Although it is difficult to define a specific emission rate for
21 intermittent bleed device there is data and peer review studies that indicate the emission
22 from a properly functioning intermittent bleed device is lower than a low bleed threshold
23 of 6 scf/hr. The emission factor for intermittent controllers used by NMED was 13.5 scf/hr.

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

1 While this emission factor is utilized by EPA in the greenhouse gas reporting process, it is
2 outdated and overstated. There have been more recent studies that incorporated hundreds
3 of measurements in comparison to the 26 measurements collected by EPA more than 25
4 years ago. These recent studies have shown the emissions from intermittent pneumatic
5 controllers ranging from 0.32 scf/hr to 2.2 scf and routinely at the bottom end of that range.
6 The Colorado Air Quality Control Commission recently utilized an emission factor of 3.5
7 scf/hr. The other point to mention here is that the intermittent bleed rate/volume is
8 dependent on liquid production. Thus, if the NMED were to encourage the use of
9 intermittent bleed devices and phase of gas driven pneumatics based on liquid production,
10 the department could maximize the reductions of emissions while not overburdening
11 operators in the state with the cost of compliance. There is also a need to provide some
12 relief for operators of marginal or stripper wells. The Colorado regulations provides such
13 relief by allowing flexibility for operators who have a company-wide average daily
14 production rate per well of 15 boe or less. This is another important consideration when
15 considering the impact on smaller operators whose margins do not support the expenditure
16 of retrofitting to non-bleed controllers. This is very crucial to prevent the premature
17 plugging and abandonment of wells in the state. The premature plugging and abandonment
18 of wells would negatively impact the local communities and the state by eliminating jobs
19 and revenue. I would strongly encourage the EIB to consider a more balanced approach
20 when it comes to securing emission reductions related to gas-driven pneumatic devices.

21 **Q. ARE YOU RECOMMENDING CHANGES TO NMED'S PROPOSALS?**

22 A. Yes

1 Q. PLEASE EXPLAIN THE BASIS FOR THIS PROPOSED CHANGE.

21 5. NMED'S PROPOSED REGULATION OF WELL WORKOVERS (20.2.50.124
22 NMAC)

IPANM 0035

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

1 A. My understanding is that the NMED intends to secure VOC reductions associated with
2 well workovers. The proposed regulation accomplishes this through the use of best
3 management practices, while depressurizing or blowing down wellbores for downhole
4 maintenance or repairs. These best management practices include reducing the wellhead
5 pressure prior to blowdown, monitoring the blowdown and routing to sales if possible.

6 **Q. WHAT IS YOUR POSITION ON NMED'S PROPOSAL OF 20.2.50.124 NMAC?**

7 A. It has been my experience that being able to move a rig onto location in a timely fashion
8 to perform routine downhole maintenance is crucial for industry. When we have a
9 workover rig working in an area and a well in close proximity goes down we may need to
10 be able to move the rig to location within 24 hours to avoid having the rig leave the area
11 and return later. If we are required to notify all residents within a quarter mile via certified
12 mail three days prior would delay the process of restoring production and taking advantage
13 of using a rig in the area. This unnecessary delay would drive the cost of workovers up
14 and result in more miles traveled by workover rigs to perform routine downhole
15 maintenance.

16 **Q. CAN YOU DESCRIBE YOUR WORK EXPERIENCE RELATED TO WELL**
17 **WORKOVERS?**

18 A. The first four years of my time with Merrion I worked as the production engineer for the
19 company. My responsibility included well workover analysis and field work supervision.
20 I evaluated the economics and procedures for downhole well workovers and supervised the
21 rig work associate with the well workovers.

22 **Q. HAVE YOU REVIEWED THE PROVISIONS FOR WELL WORKOVERS IN THE**
23 **NMED PROPOSED OZONE PRECURSOR RULE?**

**Direct Testimony of Ryan Davis
No. EIB 21-27 (R)**

1 A. Yes

2 **Q. DO YOU HAVE ANY CONCERNS WITH THE PROVISIONS? CAN YOU**
3 **EXPLAIN THOSE CONCERNS?**

4 A. Yes. IPANM has concerns about the notification provisions in 20.2.50.124.E. NMAC.
5 The three-day prior notification using certified mail has the potential of creating delays
6 with routine downhole maintenance activities that are necessary to restore production. It
7 also would lead to inefficiencies related to moving workover rigs in the field. For example,
8 Merrion has wells, in the San Juan Basin, that are 120 miles from the well service rig yard
9 locations. There are instances where we or another operator may have a rig working in an
10 area and we have a well go down due to a pump failure, rod pump or other needed
11 downhole repair; it is the most efficient practice to use that rig while it is in close proximity.
12 This reduces the travel time, mileage and emissions associated with the rig mobilization
13 and ensures we can restore production quickly. The requirement to notify the adjacent
14 residents via certified mail three days prior would delay the repair and restoration of
15 production while making the activities less efficient and ultimately not result in any
16 reduction of VOC emissions.

17 **6. NMED'S PROPOSED REGULATIONS TO SMALL BUSINESS FACILITIES**
18 **(20.2.50.7.OO NMAC AND 20.2.50.125 NMAC)**
19

20 **Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF NMED'S PROPOSAL OF**
21 **20.2.50.7.OO AND 20.2.50.125 NMAC.**

22 A. I understand that the NMED proposal is intended to reduce the requirements applicable to
23 small businesses, as defined by the regulations. The regulations define "small business
24 facility" as "a source that is independently owned or operated by a company that is not a
25 subsidiary or a division of another business, that employs no more than 10 employees at

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

any time during the calendar year, and that has a gross annual revenue of less than \$250,000. Employees include part-time, temporary, or limited service workers.”

Q. WHAT IS YOUR POSITION ON NMED’S PROPOSAL OF 20.2.50.125 AND 20.2.50.7(OO) NMAC?

A. While IPANM supports reducing requirements applicable to small businesses, it does not believe that the proposal effectively accomplishes that objective. As drafted, the definition of “small business facility” is so limiting that few, if any, oil and gas operators in New Mexico could qualify. IPANM is concerned that the 10 employee cutoff is too limiting and will exclude most small businesses in this sector. Additionally, the gross income threshold is too limiting. The gross revenue of an oil and gas producer is tied to the price of oil and gas in the market. Increases or decreases in the price of oil or gas cannot be passed on by the producer nor can an increase in cost. Moreover, the gross annual revenue is not a measure of the business’s profitability. The upfront costs of drilling a well and the infrastructure needed to move the product to a processing facility as well as the ongoing operating expenses are not factored into gross revenues. IPANM believes that other measures are a more appropriate gauge for determining whether a business should be subject to these regulations and what requirements should apply.

Q. ARE YOU RECOMMENDING CHANGES TO NMED’S PROPOSALS?

A. Yes, IPANM recommends that the proposed small business facility definition and the requirements in 20.2.50.125 NMAC not be adopted and an alternative approach that will allow truly small businesses to be exempted from many or most of the requirements of these rules. IPANM is not proposing specific language at this time to accomplish that end, but believes that NMED’s initial draft, which excluded certain operations, is more in

Direct Testimony of Ryan Davis
No. EIB 21-27 (R)

1 keeping with IPANM's objective to assure that small businesses are not unduly burdened
2 by these rules, but still provide appropriate environmental protection.

3 **Q. PLEASE EXPLAIN THE BASIS FOR THIS PROPOSED CHANGE.**

4 A. As I explained, the proposed rule for small business facilities may not provide any
5 regulatory relief to truly small oil and gas operations. IPANM believes that an approach
6 that is more consistent with NMED's initial draft, may provide the necessary protections.
7 The need for the appropriate relief or flexibility for small business facilities is very
8 important to preserve the opportunity for small independent operators to continue to
9 operate in New Mexico and provide good paying jobs as well as revenue to the state.
10 IPANM estimates that there are thousands of wells that will not be able to burden the cost
11 of compliance associated with this proposed regulation. This is especially true for the low
12 volume and low decline rate gas wells here in the San Juan Basin and across the state.
13 These low volume gas wells with low decline rates still have a significant amount of
14 reserves associated with them and ultimately provide a consistent and stable production
15 base in the state. It is also important to note that the provisions that have recently been
16 adopted by the New Mexico Oil Conservation Commission in the new waste prevention
17 rule have requirements for all wells in the state that reduce the amount of natural gas being
18 vented or flared. It is essentially for the EIB to consider a balanced approach when
19 considering the impacts on small business in the oil and gas sector.

20 **IV. CONCLUSION**

21 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

22 A. Yes.