

**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 DAVID R. BROWN,
DJR OPERATING, LLC ON BEHALF OF THE INDEPENDENT PETROLEUM
ASSOCIATION OF NEW MEXICO**

July 28, 2021

IPANM EXHIBIT 4

IPANM_0042

**Direct Testimony of David R. Brown
No. EIB 21-27 (R)**

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. David R. Brown. My business address is DJR Operating, LLC, 1 Road 3263, Aztec, New Mexico 87410.

Q. ON WHOSE BEHALF ARE YOU SUBMITTING DIRECT TESTIMONY?

A. The Independent Petroleum Association of New Mexico

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

A. I have been employed by DJR Operating, LLC (“DJR Operating”) since 2018. I am the Manager of Regulatory, Government, and Public Affairs for DJR Operating.

Q. PLEASE DESCRIBE YOUR PAST EMPLOYMENT HISTORY.

A. From 1977 to 2000, I worked at various locations for the Amoco Production Company. From 2000 to 2010, I was employed by BP America Production Company and was stationed at various locations. Then, from 2010 to 2018, I was employed with Airswift Worldwide (Consulting Services) and provided consulting services to BP America, Chesapeake Energy, Fidelity Exploration and Production, and Ward Petroleum.

Q. WHAT ARE YOUR RESPONSIBILITIES AS MANAGER OF REGULATORY, GOVERNMENT, AND PUBLIC AFFAIRS FOR DJR OPERATING?

A. [INSERT]

Q. PLEASE DESCRIBE YOUR EXPERIENCE PARTICIPATING IN EFFORTS TO ADDRESS OZONE PRECURSOR POLLUTANTS OF THE OIL AND GAS SECTOR PROPOSED FOR REGULATION UNDER 20.2.50 NMAC.

A. I was an industry participant in the Four Corners Air Quality Task Force and assisted in drafting technical papers directed at reducing ozone precursors.

**Direct Testimony of David R. Brown
No. EIB 21-27 (R)**

1 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL EXPERIENCE.**

2 A. I obtained a bachelor's of science degree in Business Administration at Oral Roberts
3 University in Tulsa, Oklahoma. I then earned master's degree in Environmental
4 Management and Policy from the University of Denver in Denver, Colorado. A copy of
5 my resume is attached as **IPANM Exhibit 5**.

6 **Q. HAVE YOU PREVIOUSLY PARTICIPATED IN STATE OR FEDERAL**
7 **REGULATORY PROCEEDINGS ON OZONE PRECURSOR POLLUTANTS?**

8 A. No, but I was an industry participant in the Four Corners Air Quality Task Force.

9 **II. PURPOSE OF TESTIMONY**

10 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

11 A. The purpose of my testimony is to provide IPANM's position on NMED's proposed
12 requirement in 20.2.50.112(A)(2)-(10) and (B)(3) NMAC that owners or operators of
13 sources subject to the proposed regulations mandating an Equipment Monitoring Tag
14 ("EMT") to physically tag each unit and specify the format of each tag. My testimony also
15 relates to EMT requirements throughout the proposed Part 50, including the following
16 Sections: 20.2.50.113(B)(9), (C)(7), (D)(1)(a), and (D)(2)(a); 20.2.50.114(B)(5);
17 20.2.50.115(B)(3)-(4), (C)(2)(d), (D)(2)(c), and (E)(2)(b); 20.2.50.117(B)(4) and (C)(3);
18 20.2.50.118(B)(3)(d); 20.2.50.119(B)(4) and (C)(4); 20.2.50.122(B)(6), (C)(4), and
19 (D)(6)-(7), and; 20.2.50.123(B)(8) and (C)(4).

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

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

23 A. I will be addressing the following sections:

**Direct Testimony of David R. Brown
No. EIB 21-27 (R)**

- 20.2.50.112 NMAC –General Provisions;
- 20.2.50.113 NMAC –Engines and Turbines;
- 20.2.50.114 NMAC –Compressor Seals;
- 20.2.50.115 NMAC –Control Devices;
- 20.2.50.117 NMAC –Natural Gas Well Liquid Unloading;
- 20.2.50.118 NMAC –Glycol Dehydrators;
- 20.2.50.119 NMAC –Heaters;
- 20.2.50.122 NMAC –Pneumatic Controllers and Pumps, and;
- 20.2.50.123 NMAC –Storage Vessels

Q. HAVE YOU REVIEWED NMED’S STATEMENT OF REASONS FOR THESE PROPOSED REGULATIONS, FILED AS ATTACHMENT 3 TO NMED’S ORIGINAL PETITION [PDF 37-48]?

A. Yes.

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

A. Yes.

1. NMED’S PROPOSED REGULATIONS TO GENERAL PROVISIONS SECTION (20.2.50.111 NMAC)

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

A. This section requires the owner/operator to manage the sources record of data in a database capable of generating a Compliance Database Report (CDR), which can be submitted to the New Mexico Environment Department (“NMED” or “Department”) upon request. The rule goes on to say the CDR format shall be determined by the Department. Further the

Direct Testimony of David R. Brown
No. EIB 21-27 (R)

rule allows for the Department to possibly request that an owner/operator retain a third party at its expense to verify any data of information collected, reported, or recorded and make recommendations to correct or improve the collection of data or information.

Q. WHAT IS YOUR POSITION ON NMED'S PROPOSAL OF 20.2.50.111 NMAC?

A. IPANM has serious concerns with the proposal that requires companies to implement an EMT. Owners and operators of a source are required to physically tag each unit with an EMT in a format that is either RFID (Radio Frequency Identification), QR (Quick Response), or a bar code, such that, when scanned, it provides a unique identifier of the source. Using one of these systems requires an owner/operators of emission sources to store information regarding: the location; type of source being regulated; emission thresholds for NOx and VOC potential to emit (PTE), and the same information when a control device is being used; make, model and serial number and a link to a manufacturer's maintenance schedule, and; repair recommendations and tracking compliance events information, such as stack testing no later than three business days after the event.

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

A. Yes. The concerns highlighted in my answer to the question below leaves IPANM to conclude that the technology challenges and costs—and the lack of any evidence EMT will reduce ozone precursor pollutants—simply does not justify an EMT program as part of this rule. IPANM therefore recommends eliminating the following subsections: 20.2.50.112(A)(2)-(10) and (B)(3) NMAC, and any reference to EMT in the remainder of the proposed rule.

Q. PLEASE EXPLAIN THE BASIS FOR THIS PROPOSED CHANGE.

Direct Testimony of David R. Brown
No. EIB 21-27 (R)

1 A. The EMT requirements will be overwhelming for small oil and gas operators. It is unclear
2 if the Department has analyzed the technical complexity such an approach will have on
3 small business owners involved in the oil and gas industry, much less the cost. To
4 demonstrate, I have evaluated the implications of Monitoring Tag Options and Costs, and
5 how they will impact small oil and gas business owners.

6 **(i) Monitoring Tag Options**

7 While this approach has been used in refineries and major facilities, IPANM is
8 unaware of its use for unmanned dispersed sites covering thousands of square miles in New
9 Mexico, which constitute upstream oil and gas activities. The three options presented in
10 the rulemaking, RFID (Radio Frequency Identification), QR (Quick Response) codes and
11 bar codes will require frequent monitoring to ensure they remain intact considering weather
12 condition and the normal scratching and smudging that occurs over time. It should be
13 noted that RFID tags are much more expensive than QR and bar codes.

14 Since these tagging options have not be used at dispersed oil and gas sites before,
15 smaller companies do not have the experience to choose which tagging option is technical
16 preferable. In addition, it is not clear if tagging will be required for units such as tanks,
17 VRU, dehydrator, pneumatic controllers, or if it includes components subject to leak
18 detection and repair (LDAR). If all LDAR components are included (valves, connectors,
19 etc.), the complexity of installing tags increases dramatically. Small businesses do not
20 have the financial resources or staffing to implement tagging requirements that do not
21 appear to have a practical application in conditions where upstream oil and gas activities
22 occur.

Direct Testimony of David R. Brown
No. EIB 21-27 (R)

1 **(ii) Costs**

2 **(a) Tagging.** The costs incurred for installing a type of monitoring code on
3 operational equipment cannot be ignored. IPANM contacted an air quality consultant who
4 was requested to provide a preliminary quote on placing a barcode system at a multi-well
5 site based upon the consultant's reading of the current proposal. The costs were almost
6 \$2,000. However, if you include LDAR components to the tagging, the cost increase in a
7 range between \$41,000 to \$48,000, depending upon the type of tagging option chosen. This
8 is due to the large increase in having to tag a few dozen units to over 2,300 for a multi well
9 pad if LDAR components are included

10 **(b) System Implementation.** Tagging the equipment is only the initial step of
11 the proposed regulatory process. Next, a system must be purchased and implemented so
12 the owner or operator can manage the source's information in a database that can generate
13 a Compliance Database Report ("CDR"), as required by the proposed regulations. The
14 only way this can be achieved is to have a computer-based record system to compile the
15 information. IPANM contacted a company involved in environmental management
16 systems, and the preliminary quote provided to us based on its review of the proposed rule
17 was a range of \$95,000 to \$145,000. That does not include annual maintenance fees which
18 could be in the range of \$10,000 annually. In addition, cyber security of any operating
19 system is mandatory and will be a major consideration regarding accessibility and access
20 to the data. . IPANM was unable to anticipate what the Department considers an adequate
21 CDR, so the costs could rise even more depending upon Department increases.

22 **(c) Independent Verification of Data.** The proposed rule allows the
23 Department to have a third party audit an operator's EMT at the expense of the operator.

Direct Testimony of David R. Brown
No. EIB 21-27 (R)

1 Upon contacting an environmental consulting firm, they indicated the type of review
2 contemplated in the rules would be approximately \$5,000 for a single vertical well site
3 which would include field audit of the site, desktop audit (verify tag function and linking)
4 and desktop audit for compliance verification. For a multi-well horizontal well pad the
5 costs would be approximately \$7,600 for conducting a field audit and desk top audits.

6 **(d) Staffing.** IPANM anticipates additional staffing or contractor assistance
7 will be needed to meet the requirements of EMT. This includes tagging all the units or
8 emission points and uploading data and information into the management system to
9 generate a CDR report. Based upon the current rule, it appears to upload required data
10 and information to the operating system would require as much as a full-time equivalent
11 person likely in the form of a contractor and at least half the time of another contractor to
12 initially tag all the equipment subject to the rule and inspect locations afterwards to ensure
13 the tags are intact. This could vary depending upon the number of wells and facilities, but
14 the costs for contractors to implement this program is likely to exceed \$150,000 annually
15 which will be a significant cost burden for independent oil and gas companies.

16 **(e) Total Costs.** The costs IPANM has compiled will be a significant expense
17 for independent oil and gas owners and operators. This analysis leads to one conclusion:
18 EMT implementation is going to have a major impact on small oil and gas business
19 operators and the members of IPANM for a benefit which cannot be clearly identified to
20 reduce ozone precursor pollutants.

21 A one-size fits all prescriptive tagging and database system is not necessary. What
22 is wrong with the current system of record keeping that individual companies currently

Direct Testimony of David R. Brown
No. EIB 21-27 (R)

1 use? If the Department requests verification on monitoring or record-keeping, the
2 information can be provided by the operators upon request.

3 We are unaware the current approach is not working. While there are costs in
4 responding to agency requests for information, those pale in comparison to the costs small
5 businesses will be forced to absorb and implement EMT. In addition, these costs, which
6 must be incurred as operating expenses, will not only impact profitable wells, but will place
7 at risk marginal and stripper wells across the state, resulting in pre-mature abandonment
8 and eliminating an important source of revenue to federal, state, and local government.

9 **IV. CONCLUSION**

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

11 **A. Yes.**