

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION**

**IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION COMMISSION
FOR THE PURPOSE OF CONSIDERING:**

**APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION,
THROUGH THE ENGINEERING BUREAU CHIEF, FOR THE AMENDMENT OF
RULE 307.**

**CASE NO. 13268
ORDER NO. R-12191**

ORDER OF THE OIL CONSERVATION COMMISSION

BY THE COMMISSION:

THIS MATTER came before the Oil Conservation Commission (the Commission) on July 15, 2004, at Santa Fe, New Mexico, on application of the New Mexico Oil Conservation Division (the Division) through the Chief of the Engineering Bureau, and the Commission, having carefully considered the evidence, the pleadings, comments and other materials submitted in support of and in opposition to the proposal, now, on this 12th day of August, 2004,

FINDS:

1. Proper notices have been given of this proceeding and of the public hearing hereof, and the Commission has jurisdiction of the subject matter.
2. This is a **rulemaking** proceeding in which the Division has proposed adoption of an amendment to Division Rule 307, codified at 19.15.5.307 NMAC.
3. Existing Rule 307 prohibits, or has been interpreted to prohibit, the use of vacuum pumps or other devices to operate wells at below atmospheric pressure.
4. The proposal advanced by the Division would allow the use of vacuum pumps to operate gas wells or gathering systems at below atmospheric pressure upon certain conditions therein specified. The proposal would require that, before a well is operated below atmospheric pressure, the operator have in place an agreement with the operator of the gathering system to which the well is attached permitting such operation, and that, before a gathering system is operated below atmospheric pressure, or delivers gas from a well or gathering system that has operated at below atmospheric pressure, the operator of such gathering system have in place an appropriate agreement with any downstream gathering system to which such gathering system will deliver the gas.

5. The Commission invited public comments and held a public hearing on the proposed amendment of Rule 307 at its regular meeting held in Porter Hall on July 15, 2004, at 9:00 a.m. The Commission received public comments both before and during the hearing that were incorporated into and made a part of the record. The Commission deliberated on the proposed amendment in open session at its regular meetings on July 15 and August 12, 2004.

6. At the hearing, the Division appeared through counsel and offered the testimony of Mr. **Bruce Gantner**, registered professional engineer employed by Burlington Resources Oil & Gas Company, LP (Burlington) and co-chair of the Environmental Health and Safety Committee of the New Mexico Oil and Gas Association (**NMOGA**), and Mr. Richard Ezeanyim, registered professional engineer employed by the Division as Chief of the Engineering Bureau.

7. In addition to the referenced testimony, Mr. Bill Hawkins of BP America Production Company (BP), Mr. Rick Foppiano, employee of OXY USA and co-chair of the Regulatory Affairs Committee of NMOGA, and Mr. Greg Hale, an employee of El Paso Field Services, made statements at the hearing. NMOGA filed a written statement in support of the proposed amendment.

8. Mr. Gantner testified to his experience and certification as a safety engineer, and the Commission accepted his testimony as an expert in that capacity.

9. Mr. Gantner testified that he served on a committee of the New Mexico Oil and Gas Association, and subsequently on a work-group, organized under the auspices of the Division, that studied the issue of below-atmospheric pressure operation of gas wells and gathering lines.

10. Mr. Gantner testified, based on his knowledge and experience and the researches of the committees in which he participated, that:

(a) some gas-producing areas of the State, particularly in the San Juan Basin, have reached, or are reaching, a state of maturity such that operations at below atmospheric pressure would be economic;

(b) very substantial amounts of gas cannot be produced except by vacuum operations, so that significant waste will occur due to gas being left in the reservoirs if below atmospheric pressure operations continue to be prohibited;

(c) although such operations have the potential to introduce oxygen into the gas stream, experience with such systems has demonstrated that the amount of oxygen introduced is not sufficient to cause an explosion or fire hazard;

(d) oxygen introduced into gathering systems as a result of vacuum operations can, under some circumstances, cause corrosion in gathering lines; and

(e) the extent of the corrosion hazard created depends on the particular nature of the gas and of the gathering system, so that no standards of universal applicability can be set that would be effective to forestall this hazard.

11. Mr. Gantner further testified that the Division-sponsored work group had reached a consensus of support for the rule proposed by the Division that would allow below-atmospheric pressure operation upon terms agreed upon by contract between a well operator and a gathering system, and that gathering system operators, due to their investment in their systems, would have adequate economic incentive to require safeguards that would protect their systems from corrosion.

12. Mr. Gantner further testified that the work group has recommended subsection B of the proposed rule, requiring an agreement with the operator of a down-stream gathering system or pipeline if either the producer or the upstream gathering system were operated at below atmospheric pressure, due to concerns of operators of down-stream gathering systems that gas that had been in a vacuum system at any upstream point could present a corrosion hazard to a downstream system.

13. Mr. Ezeanyim, after establishing his credentials as a petroleum engineer, testified that he chaired the Division-sponsored work group that formulated the proposed rule and that all members of the work group, including representatives of both producers and gatherers, reached consensus on the proposed rule.

14. Mr. Ezeanyim further testified to the need to require a contract, not only with the first gatherer, but also with any downstream gathering system that accepted gas that had been handled at below atmospheric pressure, so that the downstream gatherers would have the ability to protect the integrity of their systems.

15. Mr. Hawkins made a statement on behalf of BP, wherein he proposed a modification of the proposed rule. Under his proposal, where gas from a well that was operated at below atmospheric pressure was delivered to a gathering system, and that gathering system delivered the gas to a second gathering system or pipeline, only notice to, and not a separate contract with, the first gatherer would be required.

16. Mr. Foppiano made a statement on behalf of NMOGA in support of the Division's proposal.

17. Mr. Alexander made a statement on behalf of Burlington, supporting generally the Division's proposal, but also supporting the modification thereof advanced by Mr. Hawkins.

18. Mr. Hale made a statement on behalf of El Paso Field Services, an operator of gathering systems, in which he indicated that gas that might be acceptable to a first gatherer might nevertheless cause serious problems for a downstream gathering system because of different conditions of temperature and pressure in the downstream system.

19. The Commission concludes that:

(a) The proposed rule allowing operation of wells and gathering systems below atmospheric pressure will make possible production of gas that would otherwise be left in the reservoirs, thereby preventing waste.

(b) The evidence and comments received at the hearing indicated that the only substantial reason for continuing the prohibition of such operation would be to protect pipelines into which the gas was delivered from corrosion that could be caused by the introduction of oxygen into the gas.

(c) The operators of gathering systems can prevent corrosion of their lines by imposing contractual requirements regarding the quality of gas they will receive and the conditions under which they will receive it if the operators are required, prior to operating below atmospheric pressure, to enter into a contract with any gathering system to which they deliver gas.

(d) However, operators of downstream gathering systems and pipelines would not be able to protect their systems from corrosion caused by oxygen content of gas delivered to them from upstream gathering systems unless the delivering gathering system is required to enter into a contract for such delivery that would allow the downstream gathering system or pipeline to control the quality of gas received from the upstream gatherer and the conditions of delivery thereof. Accordingly, where gas that has been handled at below atmospheric pressure is transported through more than one pipeline, a separate agreement with the operator of each receiving system should be required.

(e) Under the proposed rule, which requires filing of notice with the Division prior to commencing operation below atmospheric pressure but does not specify a time-frame for filing such notice, an operator could defeat the purpose of the notification requirement by filing such notices for all of its wells, or for a large number of wells, without a *bona fide* intention to put all of those wells on below atmospheric pressure operation. Accordingly, operators should be required to file such notice within ninety (90) days before commencing such operation.

(f) Division Rule, 307 should be amended to read, in its entirety, as shown on attached Exhibit A attached hereto.

IT IS THEREFORE ORDERED:

1. Division Rule 307, codified at 19.15.5.307 NMAC, is hereby amended to read, in its entirety, as reflected on Exhibit A attached to this Order; such amendment to be effective as of the date of its publication in the New Mexico Register.

2. Staff of the Division is instructed to secure prompt publication of the referenced amendment in the New Mexico Register.

3. Jurisdiction of this matter is retained for entry of such further orders as may be necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

**STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION**



MARK E. FESMIRE, P.E., CHAIR



JAMI BAILEY, CPG, MEMBER



FRANK T. CHAVEZ, MEMBER

SEAL

EXHIBIT "A"
to Order No. R-12191
Case No. 13268

19.15.5.307 USE OF VACUUM PUMPS; Vacuum ~~pumps~~ or ~~other devices~~ shall not be used for the purpose of ~~creating~~ a partial vacuum in any stratum containing oil or gas.

OPERATION AT BELOW ATMOSPHERIC PRESSURE:

 A. A well operator may use vacuum ~~pumps~~, gathering system compressors or other devices to operate a well or gathering system at below atmospheric pressure only if that operator has:

 (1) executed a written agreement with the operator of the downstream gathering system or pipeline to which the well or gathering system so operated is ~~immediately~~ connected allowing operation of the well or gathering system at below atmospheric pressure; and

 (2) filed a ~~sundry~~ notice in the appropriate district office of the division for each well operated at below atmospheric pressure or served by a gathering system operated at below atmospheric ~~pressure~~, within ~~ninety~~ (90) days before beginning operation at below atmospheric pressure, ~~notifying~~ the division that the well or gathering system serving the well is being operated at below atmospheric pressure.

 B. A gathering system operator may use vacuum pumps, gathering system compressors or other devices to operate a ~~gathering system~~ at below atmospheric pressure, or may accept gas originating from a well operated at below atmospheric pressure or that has been carried by any upstream gathering system operated at below atmospheric ~~pressure~~, only if that operator has executed a written agreement with the operator of the downstream gathering system or pipeline to which the gathering system is ~~immediately~~ connected allowing ~~delivery~~ of gas from a well or gathering system that has been operated at below atmospheric pressure into the downstream ~~gathering system or pipeline~~.