

Eldorado Gas & Oil Team
ORDINANCE FEEDBACK NOTES
Santa Fe County Oil and Gas Amendment,
Santa Fe County Land Development Code

PREFACE

Uses of the Santa Fe Gas & Oil Drilling Ordinance:

1. Regulate gas & oil drilling practices in SF County.
2. Make the ordinance available to neighboring NM counties in similar situations, such as Mora and Rio Arriba counties.
3. Serve as a model for other areas of the country in similar situations relative to potential and/or actual gas & oil drilling.

MAJOR ORDINANCE FEEDBACK ISSUES

- There are few stated consequences for non-compliance with ordinance directives
 - Example: There are approximately 152 directives in “Section 11., Oil and Gas Special Use and Development Permit Provisions,” that have no stated consequences in terms of actions or financial penalties for non-compliance. With no stated negative consequences, there are no built-in incentives for Operator compliance.
- What is the status of financial penalties for non-compliance?
 - What are they?
 - Where can they be found?
 - Are the financial amounts still relevant and applicable to today’s dollar and business culture values?
 - And if not, what is the process for changing the penalty amounts?
- There are often no stated timelines for compliance
- Include the meaning and use of terms that are used in the draft document but are not found in “Section 7. Definitions and Rules of Interpretation”
- Expand medical emergency stipulations and processes
- Some generalities are too broad and need to be more specific
- Expand and clarify several water protection directives
- The use of referrals to other documents: What and where is their availability? What is the level of their current applicability?
- Offsets are generally too close.

- Fire and noise directives are insufficient to provide adequate protection.

INTRODUCTION

In presenting public feedback to the ordinance's County developers, there is a fundamental principle which must be decided upon:

When "yes" or "no" decisions regarding drilling are required, which is to take highest priority – human needs and values or commercial profit-taking? If the answer to that is clear to all involved parties – including the public – many decisions will be much easier and the resultant regulations much more consistent and easily enforced.

FEEDBACK NOTES

p. 2, Section 3. Scope. "... and coalbed methane drilling is not permitted anywhere within the county."

Q: What distinguishes coalbed methane drilling from gas and/or oil drilling?

Q: Why is coalbed methane drilling not regulated through the Ordinance under development? Doesn't CMD deal with the same 'takings,' 'split-estate,' and other related issues that will be regulated by the new ordinance?

p.28 "Oil Conservation Commission"

- Statement of OCC purpose /function?
- Staffing specifications
- How large?
- Voted or appointed? By whom elected or appointed?
- Staff tenure?
- Public contact and/or interaction system?

p.45 "High Sensitivity" area

- Since it is the fragile physical makeup that designates a "High Sensitivity" area, why is *any* drilling allowed in a High Sensitivity area?
- Wouldn't appropriate LOS infrastructure also be required in a High Sensitivity area, no matter the proscribed density of gas/oil wells; e.g., one firehouse needed for just one well-site?

- How will a fractional average number of gas/oil wells per square mile be handled?

p. 46 Q: Is it “low” or “light” Sensitivity Area? “Low” makes more sense as “light” is also a regulated factor in the Ordinance.

p. 50 [Note: With reference to the recent Durango, CO, emergency room event]

- Put medical emergency *specific* directions, actions, and requirements in Ordinance.
- Include appropriate and certified medical professionals in certification process(es) and ordinance development consultation.

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p. 55 **Mitigation measures.** “Whenever feasible,” “seek to avoid.” Language is weak and vague; i.e., if not “feasible,” then no drilling should occur.

p. 56 (D) What is the intended definition of “**scientifically consequential information**”? Q: How is an acceptable level determined?

9.6.1.7.4 © “... could avoid or substantially lessen one or more of the **significant effects.**”

- The “alternatives” must lessen all of the “significant effects,” not just “one or more.” It is either “significant” or it is not.

p. 61 © Including CIP facilities with existing facilities when determining “**whether capacity exists...**” CIP facilities do not actually exist as they are only in a plan, so they must not be a factor in determining “capacity.” When only in a planning stage, they cannot put out a fire or get anyone to a hospital.

p. 63 9.6.2.5 (b) Q: Why would there be no “expiration period” on a development order? The expiration period should be clearly stated so that desired actions will occur within a desired time-frame.

p. 67 9.6.3.5 “**full-time professional service personnel**”

Q: What percentage of current SF County fire personnel are in this category? What percent are volunteers?

Q: What percentage of County fire personnel are trained in fighting wildfires?

Of those, how many are trained to Forest Service standards?

- Since a percentage of SF County fire personnel are volunteers, the response time to a fire must include time for personnel to get from home/job to the fire station. So far, that is not the case in stated average response times.

p. 80 9.6.7.1.3 (4) (iii) Existing Wells Needs to be more specific:

Q: How many existing private or public wells – or what percentage – in a given affected area?

Q: What are “up” or “down” “gradient Monitoring Wells”? (*Term not in glossary*)

- “The applicant shall provide. . .an analysis of baseline water quality...” This again is a Fox/chickencoop issue. The analysis must be conducted by an agent not financially and/or operationally influenced by the outcome.

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p. 81 9.6.8.6 [*Description not complete*]

- Add: the list must include *specific* chemical names, not just trade names. Trade names are not adequate to determine appropriate emergency medical treatment. Such lists must be made available *immediately* to any/all authorized EMPs (Emergency Medical Personnel).
- This requirement must supercede any and all “proprietary rights” or “trade secret” rights in the event of a medical emergency involving gas/oil project materials.

p. 83 99.6.10.4 “An application for an Oil & Gas Overlay Zoning District Classification is deemed complete . . .”

- Not adequate. It is too easy for an incomplete application to slip through accidental or intended cracks and then be considered “complete.”
- Place the responsibility for application completeness on the Applicant, rather than on the County; i.e., an application is not “complete” until the Applicant is notified as such by the County.

p. 96/97 11.17.2 Liability Insurance

- \$10M is not nearly sufficient. (Note: When conducting management training programs, I *personally* carry \$3M in liability insurance)
- “Per occurrence”? This is not clear; e.g., would the death of a family of five in the same drilling-related event result in a \$10M or \$50M total?

p. 97 11.7.3 “Standard pollution liability insurance”

- Q: What are the terms of a “standard pollution liability insurance” policy?
- Q: “Pollution of *what*? Water? Air? Greenhouse Gasses? Land? All of these?
- Q: What are the “pollution” criteria? Benchmarks?
- Q: Who determines “pollution” levels? With what methods?
- Q: Who receives the “pollution” reports? What action is then taken?
- Q: What are the related timelines in the entire process?

11.18.1 Standards For Oil & Gas Facilities

“... shall be conducted at all times in accordance with the practices of a Reasonable and Prudent Operator.”

- Q: This is too vague to be enforceable. What specifically are “the practices of a Reasonable and Prudent Operator?”
- Q: Who has determined these “practices”? Where can they be found?
- Q: Why should they supercede the County’s judgment as to what is “reasonable and prudent” in the development of this ordinance to meet the specific needs of SF County?
- Q: What are the specific consequences if these “practices” are not met?

p. 97/98 11.18.2 (b) “... as-built facilities map shall be held confidentially by the County’s Fire Chief ...”

- Q: Why is the as-built facilities map confidential?
 - MSDS needs to include “substance” as well as “chemical” at any Oil and Gas Facility, if there is considered to be a difference

between the two. Both must be chemically specific, not just the material's trade name.

p. 98/99 11.18.3.2 "Required Fire Prevention Equipment"

(a) "During drilling operations , a minimum of four portable fire extinguishers . . ."

- In an environment that frequently has both high winds and very dry grass and trees, THIS IS COMPLETELY INADEQUATE. Forest Service and other wildfire-fighting teams need to be consulted on developing this section of the Ordinance.

p. 99 11.18.3.2 (b) Flammable vapors

- The list of "sources of ignition" would virtually proscribe the presence of any "flammable vapors." Such a proscription would be appropriate in any physical environment in which even one burning cigarette butt is already considered extremely dangerous, as in the Galisteo Basin area of SF County.

11.18.3.2.2 ". . . shall be protected as set forth in applicable NFPA standards."

Q: What are the "applicable NFPA standards"? How was it determined that they are appropriate for SF County?

11.19.1 -8 "Shall" directives

Q: What are the specific consequences if one or more of these eight directives are not complied with?

Q: What is the warning process or protocol for non-compliance?

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Q: What is the process mandated to handle non-compliance and achieve compliance?

p. 100 11.22 Noise ". . . shall be conducted in a manner to minimize the noise created to the greatest extent possible."

Q: Much too vague to be enforceable. What if "greatest extent possible" is still much too loud; i.e., above the prescribed limits and/or causing a severe physical and/or emotional problem for humans?

Q: To whom are noise problems for humans directed?

Q: Who is empowered to enforce this directive?

Q: What are the consequences for noise level non-compliance?

11.22.2 Q: If there are “building units” on all sides of the noise-making equipment, how is it to be decided in which direction the exhaust from such equipment is to be vented?

11.22.3 Q: What if there is not adequate electric power within the prescribed 1,320 feet with which to power production equipment?

Q: Is drilling still allowed, regardless of or despite “adverse effects”?

Q: Who decides “adverse effects” and if drilling is to be allowed?

Q: Does the Operator have a legal right to put electric power lines on or above the surface owner’s property?

11.22.4 Measurement distance.

- This section needs to be much more specific, with stated consequences for non-compliance and reliable processes for public reporting of any harmful sounds.
- The 300’ measurement distance is very inadequate. 300’ is just the length of a football field and any band member on a brass instrument can easily be heard the length of a football field, as can most any team of high school cheerleaders.

Q: When measuring, what provisions are made for a) wind velocity and direction; b) variations in terrain; c) sound frequency; and, d) rhythmic nature of the sound (“Chinese Water Torture” effect).

11.23 Light.

11.23.1

Q: What are the specifics of the “Code and Night Sky Protection Act” that would apply to a gas and oil operating process? How are specifics of this Act measured and by whom? What are the consequences of non-compliance?

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Q: What is the process and to whom can affected public citizens report violations or “adverse effects” of this Act or actions?

Q: “Minimum required to meet security and safety standards . . .” Does this mean there will always be light emanating from “Oil and Gas Facilities or Projects?”

Q: What are the “security and safety standards” that are

“consistent with the practices of a reasonable and prudent operator”? What are the criteria, and who has determined them?

Q: Rather than generalized, shouldn't standards be specific to the needs and wishes of the SF County public and officials?

p. 101 11.23.4 Q: Though Code non-compliance “shall not be permitted,” (of course!), what are the specific consequences or penalties if they are?

Q: By whom is the Code enforced in these circumstances?

- This all needs to be more clear.

11.24 Fracturing and Acidizing

11.24.1 Q: Again, what are “practices . . . operator”?

Q: How determine appropriate fracturing pressures?

Q: How frequently are they inaccurate, risking water contamination?

- “May be monitored” is much too vague. Does it refer to permission or possibility? For either definition, change to “Will be monitored by the Oil and Gas Inspector.”

Q: What are the consequences of non-compliances?

11.24.3 “Fracturing operations shall not create . . .”

- 80dB level is much too high for a measured distance of only 300', the length of a football field (without the end zones).

11.24.4 “. . . shall not contain dissolved hydrocarbons or tother toxic contaminants.”

- Needs to be more specific as to chemicals that cannot be used, and the consequences if they are.

11.24.6 Water pollution. “. . . of the surface or subsurface fresh waters before, during, and after the fracing process is prohibited.”

Q: What specific controls are there on the process to prevent H2O pollution?

Q: If there is pollution, what are the consequences and immediate remediation actions?

Q: What testing directive(s) need to be in place in this document to ensure that any such pollution is immediately detected, users notified, the process halted, and remediation immediately begun?

p. 101/102 11.25 Setbacks.

11.25.1 • Many of the setbacks are too short to be effective. To put them in a visual context for better understanding, following is a translation of the distances into a visual form that most individuals understand – football fields:

- Inhabited dwelling – 750' – 2.5 football fields (ff)
- Assembly, school, institution building – 750' – 2.5 ff
- Non-residential use or building – 400' – 1.3 ff
- Public road or highway – 200' – .7 ff
- Lot line for residential use property – 600' – 2 ff
- Water areas – 1000' – 3.3 ff
- 100-year floodplain line – 500' – 1.7 ff
- Existing water well – 750' – 2.5 ff
- Cultural, historic, archeological resource – 750' – 2.5 ff
- Country trail, designated open space – 200' – .7 ff

11.28 Well pads “... shall be the minimum size necessary to provide a safe work area and minimize surface disturbance.”

Q: Who determines and enforces the criteria for what is a “safe work area” and the criteria for an adequate “minimized surface disturbance”?

p. 103 11.29 Flaring of Gas. “... only as permitted by OCD regulations.”

Q: In such a volatile dry and high winds environment – including difficult fire prevention and management situations – what are the specific “OCD regulations”? *[Need specificity here to give appropriate feedback.]*

11.32 Water Quality. (1) “... shall not cause “significant degradation in the quality of and quantity of surface waters ...”

Q: How is “significant degradation” determined? What measuring system (including frequency), by whom, to what criteria, and criteria established by whom?

Q: What are specific Operator consequences if it occurs?

Q: What emergency plans must be in place in case 'degradation' occurs, to be carried out immediately, and at Operator's expense?

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(2) "... shall not cause significant degradation in the water quality or water pressure of any public or private water wells."

Q: How is "significant degradation" of public and/or private wells determined?

Q: Specifics: What measuring system(s) (including frequency) is/are used, by whom, to what criteria, and established by whom? All processes are at Operator's expense – but measuring is not by the Operator.

Q: What are specific consequences for Operator if public and/or private well 'degradation' occurs?

Q: What emergency plans must be in place in case 'degradation' occurs?

- Users immediately notified to protect public health, at Operator's expense
- Mitigation must begin immediately, at Operator's expense
- If necessary, outside consultants are called in, at Operator's expense

(3) (Same questions regarding "significant risk" and "degradation" to "subsurface water resources.")

(4) Pollution Monitoring Equipment. "... shall inspect the equipment quarterly."

- This is not nearly often enough. A monitoring equipment failure affecting something as human health-related as water could cause very significant public health issues to a large number of people (especially children) – including death.

Q: How often are monitoring results obtained and reported to the Administrator? The same frequency concerns apply to the frequency of water monitoring as apply to equipment inspection, for the same reasons.

Q: Who does the monitoring? If Operator, it is obviously neither safe nor appropriate, as it results in a Fox/chicken coop situation. There

needs to be independent monitoring, at Operator's expense.

- Obtain appropriate medical advice regarding monitoring / testing frequency vs. potential pollutants for Ordinance development.

11.33.4 "In the event of any spill or leak of produced water of any deleterious substance . . . Operator shall promptly notify the Oil and Gas Inspector." "If . . . such leak represents a potential hazard to surface or ground water resources or the environment . . . notify the

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OCD. " "May additionally require the Operator to conduct testing of the surface and subsurface for pollutant incursion . . ."

- Since water supply pollution is an immediate public health threat, this process is far too slow where human health and safety are concerned.

The complete process needs to be reconsidered as to how to increase its urgency and immediacy, including specified timelines for all actions.

- Quickly notifying any citizens likely to be affected.
- Obtaining medical advice relative to the polluting substance and its related symptoms and treatment.
- Begin immediate remediation and treatment of any affected people.
- Do not have Operator involved in conducting testing, as it can result in biased testing, slower response times, and denial as to fault.

p. 105 11.34.4 Following Abandonment. "Area formerly occupied . . . shall be fully restored to a safe and clean condition." "Compliance with the reclamation plan submitted by the Applicant . . ."

Q: Who approves the Applicant's reclamation plan?

- There needs to be a specific timeline – with significant and specific penalties for it not being met – in each Applicant's proposed plan, lest the reclamation be put off by the Operator for an unlimited amount of time.

Q: What are the criteria for whether or not the restoration has resulted in a "safe and clean condition? Who establishes these criteria?

Q: Who inspects the reclamation and judges whether or not the criteria

have been met? What are the procedures/consequences if they have not?

11.35 Violations, Enforcement, Penalties

11.35.2.1 Penalties set forth in NMSA 1978.

Q: What are the specific penalties set forth in “NMSA 1978, 4-37-3 (1993) (as amended)” that would apply to violations of compliance with this document?

[Need specifics in order to give appropriate feedback.]

- Since the basic NMSA 1978 is apparently 30 years old, and the amendment 15 years old – a time period in which many things have

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changed – it needs to be carefully examined to determine if:

- a) The penalties are appropriate to the type of violations of directives and situations as stated in this document?
 - b) The financial levels of penalties reflect the need to serve as substantial deterrents to Code and directives violations?
 - c) Amendments are necessary to the NMSA document to bring it up to a level that meets the current and specific SF County needs of this document?
 - d) And if so, how and when can those amendments can be achieved?
- It is obvious that specific updated penalty and consequence information must be in place before the Ordinance draft can be considered ready for the next level of public consideration and feedback.

11.35.2.2 **“The violation of each separate provision . . . shall be considered a separate offense . . . each day the violation is allowed to continue shall be considered a separate offense.”**

Q: Does this apply to such possible long-term violations as pollution of a public or private water supply source? (Another reason for frequent equipment testing and water monitoring)

Q: If not, a) to what length of violation does it apply? And, b) what directive does – or needs to – apply to such long-term violations?

* * *

Thanks for your interest, work, and concern regarding the success of this ordinance document for the protection of SF County residents, environment, and future.

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