### Oil and Gas drilling.

Fri 11/16/2018 11:52 AM

To: Public Comment < Public Comment@sandovalcountynm.gov >;

I am a citizen of Sandoval County and have been a resident of New Mexico since 1980. I implore you to do everything in your power to eliminate opportunities for fracking. I have been reading and attending meetings since August and it is clear to me that fracking causes a threat to our safety in terms of water usage, quality of water, noise pollution, ground stability( earthquake danger)...to name a few. Thank you for listening. Sincerely, Kathy Barrett

Sent from my iPhone

### Fracking in Rio Rancho

#### CAREN WATERS < CWATERS101@msn.com>

Sun 11/18/2018 12:35 PM

To: Public Comment < Public Comment@sandovalcountynm.gov >;

I am attending the hearing to double the wells in Rio Arriba County and San Juan County tomorrow morning. With all the damage that has been and continues to be done, the conversation should not be about doubling wells, we need to talk about holding the oil companies accountable for the damage they have done.

Hell no! We don't want drilling in Rio Rancho, or anywhere in New Mexico! Lets make money by making medical marijuana legal instead!

That way we don't endanger our resources!

Caren Waters Sent from <u>Mail</u> for Windows 10

### Requested Amendment to the Proposed Sandoval County Aquifer Protection and Oil and Gas Exploration and Development Ordinance

#### Alan Friedman <alfreedo@comcast.net>

Tue 11/20/2018 7:13 AM

To: Dave Heil <dheil@sandovalcountynm.gov>;

0 1 attachments (16 KB)

Siting language for RR Estates.docx;

Chairman Heil. I just returned from a trip to Morocco and missed all the "excitement of the past few weeks. I have addressed this email to you, since it is my understanding that you are the primary "architect" of Article X-D of the Ordinace. I have copied the other Commissioners, members of the Science Team, Ordinance Team, Professor Rinehart and Jim Griswold of OCD and others. I don't have Jim Manatt's email, would you copy him as well.

The Proposed "Sandoval County Aquifer Protection and Oil and Gas Exploration and Development Ordinance" now contains a Relief section Article X- D that would allow exception on horizontal drilling in Rio Rancho Estates Units 1,2,3,4,5 and 6. I request an amendment be added to the Proposed Ordinance.

There are currently 4 criteria for review to give relief, but none of the criteria examine the geology and hydrogeology where drilling would occur. I suggest adding a 5th to address this issue. As you may know, OCD does not have siting criteria to minimize the possibility of aquifer contamination from O&G wells. The amendment I request, will help give guidance to the County for minimizing that possibility.

Throughout this "process" there has been a difference of opinion between geologists as to the possibility of aquifer pollution from upwelling of pollutants from horizontal drill bores, through conductive faults, into the overlying aquifer. The "arguments" have been general. The Ordinance Team Draft contains language to address this in a site specific way. Earlier, I had passed that siting language by both Alex Rinehart and Jim Griswold to review. I have adapted that language specifically as it relates to the Albuquerque Basin. The Amendment I request is included in the attached file.

Although Article X-D refers specifically to Rio Rancho Estates Units 1,2,3,4,5 and 6, horizontal drilling can extend the "reach" of the O&G operation outside that area, perhaps by several miles. That's the rationale for the 2 mile "area of review" in the language. The concept of area of review also comes from language for injection well siting in New Mexico.

Professor Rinehart has mentioned that Thrust Energy has "seismic line data" for the area that they may want to keep confidential. That data would help in the "safety assessment". Provisions are contained within the amendment to keep proprietary data confidential.

Finally, in Article X-D-4: "Such request for relief shall be reviewed for approval by the Director after receipt of advice from the Directors noted in the Article VI D" Those Directors do not have the expertise to make recommendations based on Geology and Hydrogeology considerations. Therefore, the Amendment has language for the County to retain an independent Consultant, at the applicants expense, to evaluate the data from the report and make a recommendation to the Director.

Alan Friedman 52 Anasazi Trails Loop Placitas, NM 87043 (505) 771-8819 Home (505) 239-7838 Cell

#### Language to be inserted on page 34 after:

- <u>4-</u>The operator shall use noise attenuation techniques so as to maintain noise levels at 60 dB level 24 hours a day at the property boundary.
- 5. The Applicant shall prepare an Aquifer Protection Siting Report.
- (a) The Aquifer Protection Siting Report shall contain an analysis performed by the Applicant. The Siting Report will be reviewed by an independent Consultant, hired by the County but paid for by the Applicant. Based on the analysis, the Consultant will make a recommendation to the Director. The analysis must demonstrate that geologically, hydrologically and seismologically the proposed Well Site has adequate safeguards in place to ensure the proposed activity will not lead to Degradation of the water in the Albuquerque Basin Aquifer in the Area of Review (the area within a 2 mile radius of the vertical well bore). At the request of the Applicant the Director may determine that the analysis is confidential information as defined by Section 2–174 of the Sandoval County Code of Ordinances.
- (b) The analysis performed by the Applicant shall include the following information:
  - (i) An analysis of the structural and stratigraphic geology, the hydrogeology, and the seismicity within the Area of Review.
  - (ii) An analysis of the local geology and hydrology of the Area of Review, including, at a minimum, detailed information regarding stratigraphy, structure and rock properties, aquifer hydrodynamics and mineral resources.
  - (iii) Based on the analysis provided under (b)(i) and (ii) the Report shall demonstrate that adequate safeguards are in place to ensure the proposed activity will not lead to Degradation of the aquifer in the Area of Review. Such a demonstration can be made by showing:
    - (aa) the Confining Zone is laterally continuous and free of transecting, transmissive faults or fractures over the Area of Review sufficient to prevent the movement of fluids into the aquifer and;
    - (bb) the Confining Zone contains at least one formation of sufficient thickness and with lithologic and stress characteristics capable of preventing vertical propagation of fractures; and
    - (cc) the Confining Zone is separated from the base of the lowermost aquifer by at least one sequence of permeable and less permeable strata that will provide an added layer of protection for the aquifer.

### SANDOVAL COUNTY OIL & GAS ORDINANCE COMMENTS: Oil & Gas extraction activities and affect on people's health, welfare and safety

#### David Craig < dtc.bayern@gmail.com>

Wed 11/21/2018 2:26 PM

To: Public Comment < Public Comment@sandovalcountynm.gov >;

Cc:Dave Heil <dheil@sandovalcountynm.gov>; James Holden-Rhodes <jholden-rhodes@sandovalcountynm.gov>; Jay Block <jblock@sandovalcountynm.gov>; Con Chapman <dchapman@sandovalcountynm.gov>; Kenneth Eichwald <keichwald@sandovalcountynm.gov>;

#### 2 attachments (1 MB)

2018-08-08 AZTEC NM OIL GAS -- Aztec NM grandmother recognized for one-woman fight for clean air NM Political Report.pdf; 2018-03-28 AZTEC NM OIL GAS -- Grandmother protects her family from Fracking in New Mexico Moms Clean Air Force.pdf;

Here are some public comments directed at the Sandoval County Commissioners about the county's proposed oil & gas ordinance to be recorded as my public comment for the county's oil & gas ordinance. There are also several documents attached which serve as background information that are part of my comments and I ask that these documents be included in the county's public comment record.

#### County Commissioners,

I ask that you please consider during your oil & gas ordinance evaluation the affects of oil & gas extraction activities on people's health, welfare and safety.

To show the human face of such extraction activities I ask that you view a film about such affects in the town of Aztec New Mexico. This video may be viewed on YouTube. I made this video based on my August 2018 visit to Aztec to see for myself how oil & gas extraction has affected this town's residents as discussed by a long-time Aztec resident. This 40 minute film has an 8 minute summary at the beginning.

Oil & Gas Drilling - Sandoval County NM - 21 Aug 2018 - Aztec NM "Toxic Tour of Hell" <a href="https://www.youtube.com/watch?v=0le8gpjOe3s">https://www.youtube.com/watch?v=0le8gpjOe3s</a>

I ask that you also consider visiting Aztec and other areas with extensive oil & gas extraction activities so you can see, hear and smell for yourself these areas and decide if you think what you observe is significant.

There are also 2 documents attached relating to Aztec and oil & gas which may interest you.

2018-03-28 AZTEC NM OIL GAS -- Grandmother protects her family from Fracking in New Mexico | Moms Clean Air Force.pdf

2018-08-08 AZTEC NM OIL GAS -- Aztec NM grandmother recognized for one-woman fight for clean air | NM Political Report.pdf

Thank you for your time.

- ------
- David Craig
- Cochiti Lake New Mexico
- 505.465.0087 / <u>dtc.bayern@gmail.com</u>
- Sandoval County Aquifer Water Protection & Oil and Gas Citizens Working Group (CWG)

· CWG Secretary	& C	WG	Ordinance	Team	member
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The NM Political Report clean-air/)

(http://nmpoliticalreport.com/867876/nm-grandmother-recognized-for-one-woman-fight-for

#### **ENVIRONMENTAL PROJECT**

August 8, 2018

### NM grandmother recognized for one-woman fight for clean air

By Roz Brown, Public News Service



Moms Clean Air Force

Shirley McNall

AZTEC, N.M. – A New Mexico woman who has spent her life in the San Juan Basin near hundreds of oil and gas wells says she'll continue her fight for a cleaner environment despite her own health issues.

Shirley McNall is profiled in a report (https://www.momscleanairforce.org/face-to-face-oil-gas/) by the group Moms Clean Air Force about the consequences of living near oil and gas drilling. In the town of Aztec, McNall takes journalists and other visitors on what she calls a "Toxic Tour of Hell" in northwest New Mexico, which she said includes residential neighborhoods dotted with leaky gas tanks, oil on the ground, fumes venting into the air and nonstop compressor noise.

McNall said it's important to demonstrate to others what many people live with, "to show 'em how we live, all over the United States now, with these dangerous little industrial sites right next to our homes and our schools and our churches. Aztec has

over 110 gas wells in our little town."

Under the Trump administration, oil and gas is experiencing major growth and contributing to New Mexico's economy, but health and environmental groups have said the boom also means increased rates of asthma, cancer and other health ailments related to air pollution.

The oil and gas industry is allowed to drill as close to a house as 100 feet in San Juan County, and McNall said she lives about a half-mile from eight gas wells.

"Because they just come in, and if they want to drill by your house, they drill," she said. "You don't have any control over whether or not they can drill."

McNall said she realizes that as one of the poorest states in the nation, the boomand-bust energy industry benefits New Mexico's economy when times are good. However, she also said she worries about the thousands of children who attend school or day care in close proximity to oil and gas infrastructure.

"I always make a point of saying, 'I realize we need the energy and we need the jobs. But our health and our safety shouldn't be at risk'," she said.

The Moms Clean Air Force report profiled six other women, in states from California to Pennsylvania, who are "face to face" with oil and gas pollution in their daily lives.

More information is online at <u>momscleanairforce.org</u> (<a href="https://www.momscleanairforce.org/face-to-face-oil-gas/">https://www.momscleanairforce.org/face-to-face-oil-gas/</a>).

#### Share this:

(http://nmpoliticalreport.com/867876/nm-grandmother-recognized-for-one-woman-fight-for-clean-air/#print)



#### Related

# GRANDMOTHER PROTECTS HER FAMILY FROM FRACKING IN NEW MEXICO

BY DIANE MACEACHERN ON MARCH 28, 2018



Shirley McNall in San Juan County, NM Photo by Jerry McBride/Durango

Shirley McNall is nicknamed "Sug," which is short for sugar. But don't think this 73-year old eco-warrior is a sweet pushover. She describes herself as "an independent Granny who is advocating for a cleaner environment for now and for future generations," and she's leading the charge to protect her family and community in northwest New Mexico.

"I've basically been in oil and gas all my life," she reports from the small town of Aztec, where she lives. Her grandfather worked on a wildcatting crew doing exploratory drilling out West as far back as the 1920s, and she and her first husband lived in the middle of a "patch" when her husband was employed taking care of gas wells.

"It was pretty benign at the time," she remembers. But then, they moved into town so their daughter could go to junior high. They ended up in a house only 2,400 feet from a gas well.

"It started leaking," she remembers. "Gas would get into the house at night. We were terrified our heater would spark it and cause a big explosion."

"It dawned on me that this is not good!...I've been a busy bee working on this ever since."

By "working on this," Sug means organizing seminars on the threats oil and gas development pose and taking visitors on a "Toxic Tour of Hell" she's put together. The tour includes nasty industrial sites in residential neighborhoods that are dotted with leaky gas tanks, oil on the ground, fumes venting into the air, and non-stop compressor noise.

Though it seems unthinkable that Americans would have to live under such duress, Sug attributes the crisis to the fact that "the average American thinks natural gas is a clean fuel." But it's not. "It's dirty and unhealthy," and Sug tries to educate folks by showing them just exactly how bad it is. Although burning natural gas emits half the carbon dioxide as burning coal in power plants, the process of getting natural gas out of the ground creates methane pollution. Methane, the main component of natural gas, is 86 times more potent than carbon dioxide over a twenty-year time frame. In addition, leaking methane comes packaged with other harmful pollutants that impact the health of those who live, work, learn and play nearby.

Sug is particularly concerned that so much fracking is going on so close to where people live and kids go to school. In her San Juan, NM county, developers are allowed to drill 100 feet away from a house. Children are especially vulnerable to air pollution since their bodies are still developing and have a longer time to live with environmental onslaughts that can develop into diseases.

"At the local elementary school, there's a gas well 400 feet from the school building. I've been there and found leaks twice, so severe they were overwhelming," Sug reports. "The stink coming out of that well! Teachers have complained that they can smell it in their classrooms."

Oil and gas operations can expose children to the health and safety risks from air pollutants such as methane, diesel exhaust, particulate matter, and Volatile Organic Compounds like benzene. But Sug says that the wells being drilled in and around her community also contain hydrogen sulfide. Hydrogen sulfide, which smells like rotten eggs, can affect the brain and upper-respiratory system causing nausea, headaches, delirium, and dizziness. In a short period of time, exposure to the gas can lead to unconsciousness, followed by death. "Every oil and gas employee is required to wear a hydrogen sulfide monitor," she notes. "If it goes off, they know they can't go near the well." Regular citizens like Sug have no such protection – even though there are eight gas wells within a half mile of Sug's house, and she believes that four of them are hydrogen sulfide positive.

Sug recounts one Christmas Eve day when, walking to retrieve her newspaper from her mailbox 900 feet down the road, the air pollution was so toxic she became dizzy, disoriented, and almost too wobbly to walk. She knew if she collapsed she'd freeze to death so she forced herself to make it back to her house. Later, representatives from British Petroleum, which was constructing gas wells in the area, came out to investigate and discovered a new gas well was leaking. "I could have died out there," says Sug.

Sug notes that as a country, we need to use a lot less gas and a lot more clean renewable energy. But she doesn't expect that switch to happen particularly fast under President Trump or his Administrator of the Environmental Protection Agency, Scott Pruitt.

"Trump doesn't care if we all drop dead from dirty air tomorrow," says Sug. As for all the clean air regulations on the books, she believes that, under Pruitt, "they're being thrown in the toilet."

Still, she declares, "We can't give up."

"I realize we need jobs, energy, and income," she notes, referring to the arguments often used to justify fracking.

"But our health, and the health of our kids, is more important."

Sug has a great grandbaby coming in June. "That's the reason I don't sit around eating chocolate and knit booties," she says with a chuckle.