From: Sent:	Bob Wessely <wessely@sciso.com> Monday, November 13, 2017 12:01 PM</wessely@sciso.com>
To: Subject:	Sidney Hill Comments on the Proposed Sandoval County Oil and Gas Ordinance - Documented Pollution
Attachments:	O&G-295f-SubmissionOfSpillSpreadsheet.pdf O&G-268b-OCD-spills-09-01-17- Reformatted.xlsx

Mr. Hill -

_ _

Please accept my four page comment entitled, "**Oil and Gas Does Pollute Water in New Mexico**". It is attached in file O&G-295f....pdf. The comment text references an OCD spill data spreadsheet which is also attached as file O&G-268b....xlsx. It is my understanding that you will be passing this comment material on to the Commissioners.

Thanks, Bob W 13 Nov 17 1200 MDT

Bob Wessely	(505) 454-0555	(Land)	Wessely@SciSo.com
	(505) 259-7842	(Cell)	

Comment on the Proposed Sandoval County Oil and Gas Ordinance

Oil and Gas Does Pollute Water in New Mexico

My name is Bob Wessely. 56 Paseo de San Antonio, Placitas, New Mexico 87043 (505) 259-7842 or <Wessely@SciSo.com>

Mr. Chairman, Commissioners -

Please consider my comment on the proposed "Stoddard" draft oil and gas ordinance for Sandoval County, as follows:

Personal Background -

I am a retired system engineer. For over 30 years, I was Technical Director for a management consulting company with a staff that ran to over twenty people.

A large portion of our work was writing and critiquing detailed requirements documents for systems' development and test – systems that usually involved hardware, software, and people.

Our clients were large companies on both coasts of the U.S. and the Pacific Rim. We worked projects in varied industries: Defense (four services), health care, manufacturing, oil extraction, transportation, aeronautics, nuclear power, and newspaper publishing.

More recently, I have worked for nearly 20 years leading the Middle Rio Grande regional water planning effort, and over 8 years advising on local oil and gas ordinances.

My PhD is in theoretical solid state physics from Rutgers University.

Issue Synopsis -

The Stoddard ordinance draft does not successfully address the likelihood of water pollution from oil and gas operations in New Mexico, and particularly in the Albuquerque and Rio Rancho aquifers. The draft ordinance should be tabled or postponed at least until the all-important New Mexico Tech water study becomes available.

Issue Description -

Contrary to rumors that have been circulated, pollution impacts to water sources from oil and gas operations in New Mexico are real and frequent. The "Stoddard" draft ordinance measures are inadequate. The industry written "best practices" and "applicable state and federal regulations" as cited in Stoddard 6.7 have allowed frequent water pollution events, recently one per month as well documented.

Data Backup - I am submitting as an attachment to this e-mail file O&G-268b....xlsx. It contains a 6 Mbyte spreadsheet of oil and gas industry spills in New Mexico. I downloaded that spreadsheet on September 1, 2017 from the New Mexico Oil Conservation Division's website. If useful, you could download a newer version that is updated to the present from the same website:

https://wwwapps.emnrd.state.nm.us/ocd/ocdpermitting/Data/Incidents/Spill SearchResults.aspx?FacilityNameSearchClause=BeginsWith&WellNameS earchClause=BeginsWith&OperatorSearchClause=BeginsWith&IncidentNo SearchClause=BeginsWith&Section=00

The September 1 spreadsheet lists 23,592 self-reported oil and gas industry spills dating back to the 1980s. The spreadsheet contains 31 columns of information about each spill. Of particular interest here are the data in the columns named "Ground Water Impact" and "Waterway Affected", each with entries "yes" or "no" for each spill.

In the Ground Water Impact column, there are 787 spills labelled "yes", that aquifers were impacted. Of those aquifer impacts, 34 occurred relatively recently, since 2012.

In the Waterway Affected column, there are 212 spills labelled "yes", that surface streams were impacted. Of those surface water impacts, 47 occurred relatively recently, since 2012.

Data Summary_- A total of 999 spills impacting water are listed, with 81 since 2012. Despite industry claims to the contrary, there *are* documented events of oil and gas operations contaminating water sources in New Mexico. In fact, there are many, on average, about one per month from 2012 through August 2017.

Incentives Needed - The residual pollution event frequency shows that any State OCD (and federal) incentives for oil and gas operators to avoid water source impacts are insufficient. The Sandoval County oil and gas ordinance needs to provide added incentives to oil and gas operators such as rebates on annual permit fees for no violations, quantitative tight thresholds (numeric or relative to baseline) for violations, ongoing site inspection/monitoring reimbursed by the operators, and meaningful violation penalties like permit suspension/revocation. The incentives are so that neither profit motives nor human laziness cause the operational personnel to engage in risky behavior by cutting corners.

Early Detection Needed - However, no incentives work perfectly. Accidents do happen. Regardless of the chosen incentives, the Sandoval County oil and gas ordinance needs to mandate sufficient monitoring that any problems are detected for remedy before they grow up to be disasters. NM OCD neither requires nor performs monitoring of water impacts. Counties have the legal authority to impose such a requirement.

Incentives Extending State Law Allowed – In the recent Mora decision, Judge James Browning wrote, "New Mexico state law does not impliedly preempt the entire oil and gas field...If the Defendants [Mora County] had merely regulated oil-and gas production in Mora County, those regulations may not conflict with state law even if they were stricter than state law. As long as the regulations did not prohibit conduct that state law permits or permit conduct that state law prohibits, the regulations would likely be upheld"

Extreme Consequence Protection Needed - And finally, when the consequences of an accident could be extreme, the Sandoval County oil and gas ordinance must impose extreme precautions, possibly even site-specific prohibitions. A case in point is any location where, based on the local hydrology and geology, there is a serious potential of polluting the fresh water aquifers that supply some 700,000 people.

Conclusion -

The draft "Stoddard" oil and gas ordinance for Sandoval County <u>does not</u> provide incentives to avoid corner cutting. It <u>does not</u> provide monitoring for early problem detection, and it <u>does not</u> provide for extreme precautions in extreme risk locales. As it stands, the Stoddard draft ordinance is unsatisfactory. The draft should be tabled until these omissions are rectified, and that will take at least until the New Mexico Tech report depicts the boundaries of the at-risk Albuquerque and Rio Rancho aquifers.

Thank you.