

May 13, 2016

Bob Wessely
(505) 454-0555
Wessely@SciSo.com

Considerations for Local Oil and Gas Regulatory Ordinances

An Overview for the Water Protection Advisory Board

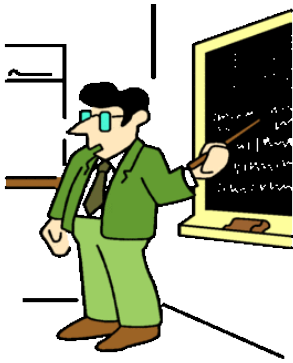


Personal Background

- Solid state physicist by education; systems engineer by profession
- Over 30 years technical director for Albuquerque business
 - consulting services on systems engineering management
 - fortune 500 clients on both US coasts and the Pacific Rim
 - multiple industries – defense (four services), health care, manufacturing, oil extraction, transportation, aeronautics
- Over 15 years leading Middle Rio Grande regional water planning
- Over 6 years advising on oil and gas ordinance for San Miguel County

San Miguel County Ordinance Background

- 2009 - A citizen task force was sponsored by the County – it failed
- There were vocal pressures for a ban and for minimal regulation
- The commission's balancing guidance was to regulate strongly
- Citizens gathered numerous studies, analyses, reports and articles
- County hired an international expert to provide professional services
- Citizens drafted key ordinance text segments as input to the expert
- There were multiple drafts of the ordinance with detailed critiques
- The County held many public input meetings and hearings
- Ordinance was passed by the County Commission in late 2014
- To date – no lawsuits, no applications, low oil prices, inspector hired



Why Are We Here?

To identify topics and attributes the Local Government could address in developing a regulatory oil and gas ordinance

To identify risks and impacts of oil and gas, as well as to suggest mitigation strategies for the ordinance

Not to recommend for or against particular choices or trade-offs



The Basic Local Government Choices

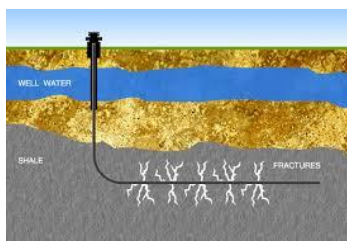
To what extent will the Local Government pay for the costs imposed upon Local Government?

To what extent will the local government protect the health, welfare, and safety of the citizenry?

Easy questions to ask. Many difficult details to answer.

Issues Around Oil and Gas Development

- National and state level issues – climate change, tax revenues, etc.
- Financial rewards to and property rights of mineral estate holders
- Uncertain economic impacts on the Local Government
- Concerns raised by the public – especially for air and water
- Impacts to many split estate surface property owners – despite SOPA
- Local risks and impacts that are not state or federally regulated
- Minimal enforcement by state and federal entities
- Intense news coverage of oil and gas accidents and mistakes
- Oil and gas operators often prioritize profits over health and safety
- Misinformation – industry-funded sources and fear-driven sources



Some Fundamental Principles

Local government's authorized role is to protect health, welfare and safety of its citizens

Oil and Gas is a complex, highly technical industry, offering benefits and substantial multi-dimensional risks

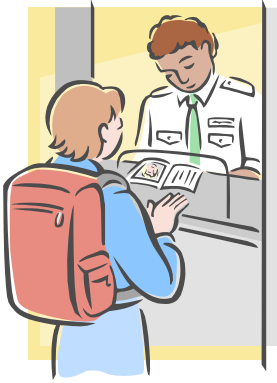
Zoning ordinance sections are the best home for regulations;
too weak = insufficient risk mitigation; too extreme = legal challenge

Identify attributes or results of “responsible development”,
And then provide inducements for developer to be responsible

Choose performance requirements over prescriptive requirements
Where practical, specify what to achieve, rather than how to do it

Handful of wells cannot justify other needed facilities and infrastructure,
many hundreds or thousands will be needed to keep industry going

Set a Regulatory Price of Admission



Common Sense Requirements
that
A Responsible Operator Should Follow
Even Without an Ordinance

Structure and justify an ordinance to
Legally Require: Transparency, Competence, Baselines,
Application, Qualification and Permitting Processes,
Ongoing Monitoring, Environmental Protections,
Inspections, Enforcement, Penalties,
Takings Offsets
and
Coverage of Costs



Legal Realities



Government is limited to “police powers”
to protect health, welfare and safety

Weak state and federal requirements “preempt” local;
Can extend, but cannot conflict with regulations

Cannot have “arbitrary and capricious” requirements;
Rules must be justified as within “police powers”

Need a mechanism to avoid takings without due process
or just compensation

Each attribute has both explicit and traditional legal interpretations



Not “Arbitrary and Capricious”



Each requirement should have a basis in the
Governing Body’s “Findings” listed in ordinance

Each Finding should have a basis in the
Governing Body’s archived submissions –
testimony, analyses, scientific reports, articles, etc.

Shows that the ordinance supports health, welfare and safety



Information Sources

Existing ordinances:

Santa Fe

San Miguel

Rio Arriba

... Others



Existing Studies, Analyses, Reports, and Articles
on all aspects of O&G development

Take account of the more recent information



Don't reinvent the wheel

Transparency

Applicant should reveal in detailed writing:

- What they intend to do,
- How they will meet ordinance requirements
- What all the impacts will be,
- How they will mitigate any impacts, and
- How all costs will be covered

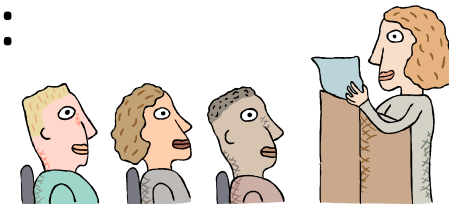


Government should perform technical review of submission:

- Using well qualified and independent personnel
- To ensure the plans really satisfy all ordinance requirements

General public should have opportunities that:

- Allow timely review and input about materials
- Occur at each stage of the application process
- Permit appropriate incorporation of detailed critique



The ordinance application process should clearly specify all of the above

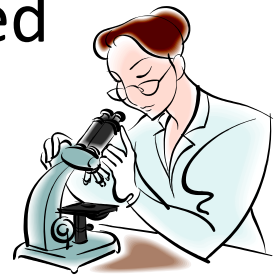
Competence

The ordinance should require government personnel to meet clearly defined technical qualification criteria:

- Ordinance administrator
- Application reviewers
- Operations inspectors



The ordinance should require submission of detailed background data on the track record of a proposed operator, both for a new application and for a replacement operator.



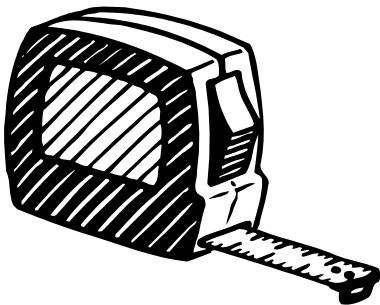
The ordinance should permit the government to reject a proposed operator for a less than satisfactory track record

Oil and gas related activities are not for amateurs

Baselines

Prior to authorization to proceed on a project, the ordinance should require submission of detailed information on status quo ante for the work site and for neighboring sites.

- Water quality
- Water quantity
- Air quality
- Noise levels
- Light levels
- Viewshed
- Ground cover
- Roadways
- Support services
- Other



A clear reference for detected changes and for reclamation needs protects everyone in disputes about pre-existing conditions



Ongoing Monitoring



Automated sensors or meters to detect/report leaks and other non-compliance

Regular testing and observation where automation is impractical

Frequent review by the Government of recorded data

Report aberrations for immediate remedy

Monitoring should continue after abandonment



Need to catch problems before they become disasters

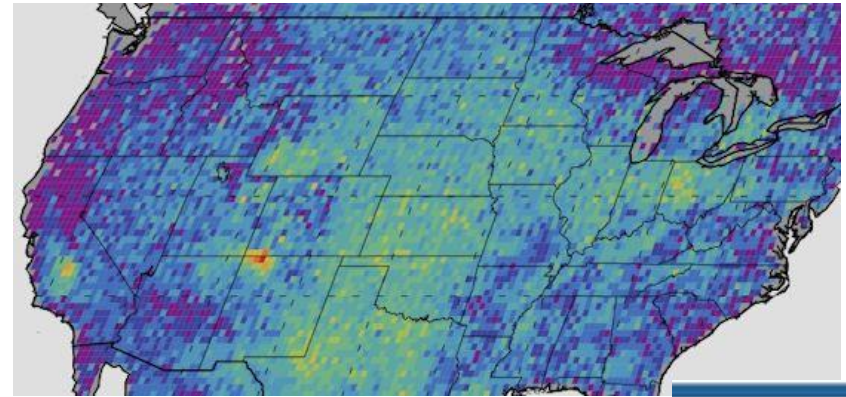


Protections



Limit Degradation to Zero or Some Tolerance Over Baseline

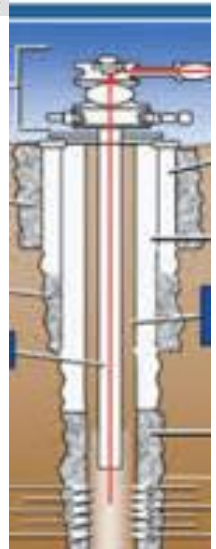
- Surface water quality & quantity
- Fresh groundwater quality & quantity
- Brackish groundwater quality & quantity
- Air quality (both dust and chemicals)
- Noise levels
- Light levels
- Traffic Levels



Other Less-Quantitative Protections

- public nuisances; unique local attributes; acequia communities; long term economic health; dangers to residents and workers; compatibility with land uses; surface property values; wildlife; split estate protections; historical/archeological sites; facility setbacks; operational hours

Specify measureable limits for any impacts



Frequent Inspections

Require the Government to Inspect All Facilities

- In depth
- Frequently
- Without prior warning
- At varied times of day and night
- With varied personnel



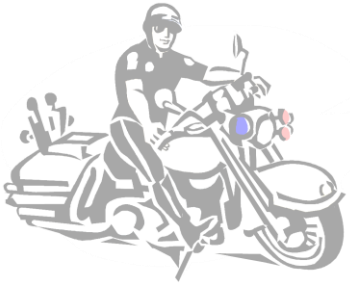
Inspect for Violations On- and Off-Site

- Of local, state, and federal regulations

For Detected Violations

- Of federal and state regulations, report to appropriate agency
- Of local regulations, take enforcement actions

Make sure operators know they are being closely observed



Vigorous Enforcement

Formally and Publicly Report All Violations

- Local, state, and federal regulations
- Report state and federal violations to appropriate agency

Promptly Re-Inspect to Assure Remedial Action

Impose Penalties for Violations of Local Regulations:

- For failure to remediate
- For repeated misdeeds
- For egregious non-compliance



Prevent obscuring of problems



Meaningful Penalties

Cash Fines Sound Good; Have No Meaning

- State law places small limits on allowable magnitude

Adverse Publicity is Close to Meaningless

Stopping Operations Will be Felt

- Suspension of permit at single site
- Suspension of permit at all of operator's sites
- Revocation of permit at single site
- Revocation of permit at all of operator's sites



Make sure penalties are not a routine cost of doing business

Unconstitutional Takings

Need to recognize the complex issue



- Fifth Amendment: “No person shall be ... deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.”
- Recent case law: Okay to regulate even if it diminishes the economic value of the property ... as long as the value isn't diminished completely.

Protect against the most likely legal claims

Coverage of Costs

If industry does not pay these direct and indirect costs, they will be borne by the taxpayers

- Permit reviews
- Monitoring, inspection and enforcement
- Safe waste disposal
- Post-operation inspection and remediation
- Accident response and cleanup
- Independent financial assurances to cover impacts
 - During development and operations and after abandonment
- Impacts to surface property owners
- Additional facilities and services such as:
 - Roadway maintenance and improvement
 - Law enforcement and emergency services
 - Medical and other treatment services
 - Additional infrastructure
 - Changes in housing demand



Paid via permit fees, annual fees, and/or cost reimbursement

Miscellaneous Additional Considerations

- State & federal regulations address 'down-hole' issues, but say little about surface issues.
- Need to determine ordinance applicability – to private, state and federal lands (like Santa Fe, San Miguel), or just private lands (like Rio Arriba)
- Like for any other development, counties & municipalities have the traditional responsibility and tools, in the form of zoning rules and ordinances, to regulate for the health, welfare and safety of citizenry.
- Ordinance must be consistent with existing local land use and comprehensive plans
- Ordinance should apply to all kinds of O&G facilities, including exploratory and production wells, monitoring wells, injection wells, pipelines, well pads, roads, compressor stations, waste storage and disposal, and temporary housing facilities
- Ordinance is the only meaningful contract between industry, and local government and split estate property owners
- Ordinance should contain a section for severability

Ordinance Attribute Checklist

Many Dimensions to Consider:

- Applicability (private, state, federal, tribal lands)
- Surface water quality
- Surface water quantity
- Fresh groundwater quality
- Fresh groundwater quantity
- Brackish water quality
- Brackish water quantity
- Air quality – chemical
- Air quality - dust
- Noise levels
- Light levels
- Hours of operation
- Setbacks of facilities
- Pipeline Right of Way Locations
- Visual impacts
- Waste disposal
- Archeological sites
- Historical Sites
- Land use compatibility
- Traffic levels
- Public nuisances
- Leasing Agents
- Temporary housing
- Acequias
- Worker safety
- Public health and safety
- Insurance and financial assurances
- Permitting documents (perhaps half a dozen)
- Permit reviewing
- Operations inspection and monitoring
- Post-abandonment monitoring
- Enforcement
- Penalties
- Takings protections
- Value impacts on split estate owners
- Economic impacts on Local Government
- Cost allocation – permit review
- Cost allocation – monitoring
- Cost allocation – inspection
- Cost allocation – enforcement
- Cost allocation – post abandonment inspections
- Cost allocation – accident response
- Cost allocation – surface property impacts
- Cost allocation – road maintenance & improvement
- Cost allocation – additional law enforcement
- Cost allocation – additional emergency services and equip.
- Cost allocation – additional medical and treatment services
- Cost allocation – additional infrastructure

Overall, What Are We Trying to Do?

- Identify the scope of the regulatory problem for addressing a complex industry.
- Educate decision-makers on risks and impacts
- Identify the kinds of risks that should be considered in the drafting process
- Suggest the controls and adjustment mechanisms that are possible
- Identify the need for careful review and refinement of the ordinance drafts



Assure the ordinance is well thought out and reflects local values



In Summary



We Are Dealing with a Complex Issue

An Ordinance Must Have a Huge Quantity of Detail

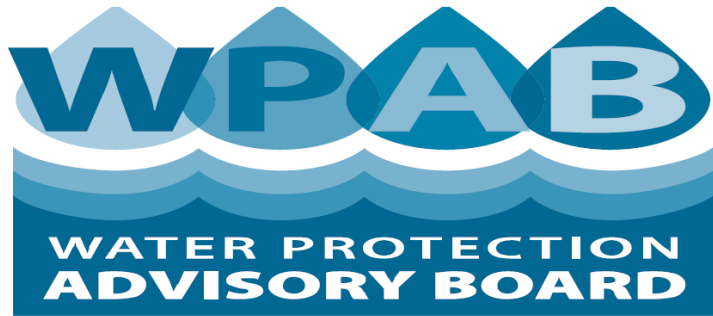
Tries to Plug All the Loopholes



It's More Important to Do It Right than to Do It Quickly



We should minimize the negative impacts that offset benefits



Thanks for Listening



Questions? Comments?

Bob Wessely
(505) 454-0555
Wessely@SciSo.com

