

The Planning and Zoning Commission commence on Tuesday, November 16, 2010, at 1:30 to conduct a special session to make recommendations to Board of County Commissioners to amend the Rio Grande County Land Development Code.

Members in attendance include: Rose Vanderpool—Land Use Administrator, Dwight Freeman—Chairman of the Planning and Zoning Commission, Vern McCallister Jr., Janice Slade, Pam Bricker, Gary Seger, and Craig Frankie.

It was moved and seconded to accept the agenda as set and to accept the minutes from the October 19th work session. Pam Bricker made the motion to accept the agenda and approve the minutes. Craig Frankie seconded the motion. The motion carried unanimously.

Mrs. Vanderpool stated that the Land Development Code currently does not speak to the amount of time in which recreational vehicles may remain on vacant land and/or land with a primary residence. Given the mass influx of individuals who visit Rio Grande County in the summer months, Mrs. Vanderpool suggested the Land Development Code be amended to allow recreational vehicles to inhabit land based on the following structure—A 14 day occupancy for vacant land and 30 day occupancy for land in which there is a primary residency. In response to Mrs. Vanderpool's recommendation, Mr. McCallister inquired about the importance of a septic tank—either on-sight or the capacity of the RV to retain waste, if the exemption was extended to 30 days. Mrs. Vanderpool offered Alpine Village as an example where RV's that stay for an extended period of time, become a point of contention with the surrounding home owners'. Mr. McCallister further questioned the propensity of the County to enforce the proposed amendment. Mr. Freeman acknowledged that currently individuals requesting an exemption for RV's on their property are encouraged to retain a Conditional Use Permit; and that changing this process might make it easier on both the County and the individuals interested in the permit. Mr. Frankie clarified that the Code currently provides an exemption for people who are living in a RV during the construction of their primary residence.

Mr. Freeman established the following rules for the hearing:

- 1.) Applicant's Presentation and Witnesses in Favor:
 - a. Witness's Testimony
 - b. Questions by Planning Commission
- 2.) Witnesses Opposed to the amendment present their concerns:
 - a. Witness's Testimony
 - b. Questions by Planning Commissions
- 3.) Applicant's Closing Statement
- 4.) Announcement by Commission that they will make their decision within the Statutory Time Limit.

In the event that the Applicant is not present Mr. Freeman stated that Mrs. Vanderpool would present the application on their behalf. Additionally, prior to giving their testimony, each individual will be sworn in.

Mr. Freeman asked if anyone would like to present their case as to why RV's should not be subjected to the above listed time limits for extended stay.

After being sworn in, Mr. Charlie Burd suggested that the proposed time period seemed reasonable; however, he feels that requiring a permit for individuals to allow family members or friends to stay in a RV on their property would be excessive. Mrs. Vanderpool clarified that this process is not necessarily intended to unfairly discriminate against family members and friends of property owners; instead, it is aimed at discouraging RV's on vacant land for extended periods of time. Additionally, it provides a more substantial enforcement mechanism.

Mr. Frankie stated that although the permit process might aid in enforcement, the administrative overhead may be larger than anticipated. Regardless, Mr. Frankie made the motion to recommend the following amendment to the Land Use Development Code for consideration by the County Commissioners—on land with a primary residence and a functioning septic system, RV's will be allowed for 30 days on the lot or parcel. Mr. Seger seconded the motion as he recognized that the 14 day allotment for RV's on vacant land was intentionally left out of the motion. The motion was moved and seconded with this exemption; motioned carried.

An individual in the audience asked for clarification if this was intended for one recreational vehicle or two or more vehicles. Mrs. Vanderpool explained that as it reads, the Code only refers to a single vehicle, the amendment will remain consistent with this language, as it is only intended to extend the period of time in which the RV may reside on the property.

The second amendment for consideration by the Planning Commission is concerning exempt divisions of land, requiring power to be underground on new vacant corners that are being split. For new divisions of land without a home, power lines shall be buried. Mr. McCallister made the motion to recommend this amendment to the County Commissioners; Mr. Frankie seconded the motion. Motion carried.

The next amendment Mrs. Vanderpool proposed was; shall set-backs for parcels less than two acres be changed from the current—25 feet on each side, to residential set-backs—25 feet in front, 15 feet rear, and 8 feet on each side? The parcels in question are rural parcels that are 2 acres or less having been granted exemption through “grandfathering”. It should be noted however, that the Code currently doesn't allow the creation of parcels less than 2 acres, thus this amendment applies to parcels to date that are less than 2 acres. Mrs. Bricker made the motion to allow existing parcels, less than two acres to conform to the following set-backs: 25 ft. front, 15 ft. rear, and 8 ft. on the sides. Mr. Frankie clarified that the existing 50 foot road set-back will still apply in these cases. Mrs. Slade seconded Mrs. Bricker's motion; the motion carried.

The Commission then considered an amendment to Article XII of the Land Use Development Code—Oil and Gas Regulations, specifically section 6.1.1.2 regarding baseline water quality testing.

Mrs. Vanderpool stated that the Oil and Gas Regulations, as adopted, require baseline water testing to be conducted at a distance of 1-mile from the proposed well pad. Property owners outside of the designated 1-mile radius have expressed their concern that this distance isn't inclusive enough of an area; instead the testing area should be expanded to include a 3-mile radius from the proposed well pad.

Exhibit A—is a map used as a visual representation of the difference in the two widths—the 1-mile radius is indicated by the purple circle where as the 3-mile radius is indicated by the red circle. Mrs. Vanderpool pointed out, per 8.8.1.2 in the Development Code, “Water wells. The Oil and Gas Operation shall not cause degradation in the water quality or water pressure of any public or private water wells within (3) miles of the site”. This passage has consequently created ambiguity within the Code which can be clarified through this amendment.

Mr. Frankie questioned, what, if any contaminates will arise at the 3-mile perimeter that wouldn't be present at 1-mile? Further, Mr. Frankie recalled that in the October 19th work session Mrs. Slade made the motion to extend the current 1-mile radius to a 3-mile radius. Mrs. Vanderpool acknowledged Mr. Frankie's point and stated that a public hearing is required by law before amendments can be made to the Land Use Development Code.

To answer Mr. Frankie's initial question, Mrs. Vanderpool introduced Karen Spray, a hydrogeologist for the Colorado Oil and Gas Conservation Commission (COGCC). Ms. Spray reassured the audience that the State of Colorado hasn't, to date, received an application from the Dan A. Huges Petroleum Exploration and Production Company, L.P.; however, the State doesn't require baseline water testing to be conducted prior to drilling operations. The State's water testing scheme is as follows: two, adjacent water wells that are within one-quarter of a mile of the oil and/or gas well; or if two such well do not exist, the distance from the oil well can be extended to one-half of a mile. The State has established sequential water testing, in which the wells are tested one-year after the commencement of drilling operations, three years after and finally, six years after. Ms. Spray affirmed that this process is typically used in testing water wells potentially affected by coal-bed methane production, but it is a basic process that can be used in formulating statistical trend analysis.

Mr. Freeman asked Ms. Spray if the State would oppose Rio Grande County adopting more stringent baseline water testing regulations than those of the State. Ms. Spray stated that the State would not be opposed to the more stringent regulations per se, but they may perceive them as “over-kill”. Additionally, the State would not provide any form of enforcement for any regulations the County devises.

Mrs. Bricker referenced the October 19th Planning Commission work session, in saying other water sources—springs, surface water, etc. should be included in the amendment as well.

Mrs. Vanderpool asked Mr. Burd—the individual hired by Western Land Management to conduct the preliminary water tests, what water bodies, if any had been tested to date. Mr. Burd stated, to date water testing on all of the “live water” sources within 1-mile of the proposed oil well-pad, including each of the owners’ wells within 1–mile have been tested.

Mr. Freeman opened the hearing to testimony from witnesses who are in favor of this amendment.

The first individual to present his case was Dave Neil, a San Francisco Creek resident, who stated, while currently the regulations seem to be in conflict, it is clear that the original intent of the water testing was to protect the water within the 3-mile radius. If the original intent is not upheld, individual lot owners will be required to initiate their own testing. We [San Francisco Creek Residents] feel the operator should bear the expense of the water testing rather than the property owners. For all intents and purposes, the operator should in fact document the 3-mile baseline testing.

Following Mr. Neil, John Bricker—a property owner in San Francisco Creek, outside of the 1-miles radius offered this, “an ounce of prevention is worth a pound of cure”. As specifically applied to this situation, Mr. Bricker stated although the intent is not to drill horizontally in initial test well, if the well proves to be productive and horizontal drilling becomes a viable option, and individuals who reside outside of the 1-mile radius will be impacted as well. Preventative and proactive efforts in the short-term will pay off in the long-term, meaning water testing should not be limited to the 1-mile circumference.

Mr. Freeman inquired with Ms. Spray since the drilling company will be familiar with the State’s Regulations, will Rio Grande County’s proposed regulations be perceived as extremely rigid? Ms. Spray stated that to her knowledge Rio Grande County would have the most rigorous regulations of any county and possibly the only county to require baseline ground water testing.

Further, Mrs. Bricker asked Ms. Spray, would we not be prudent to go ahead and institute rigorous regulations, for both protection and mitigation purposes, considering the problems encountered in other parts of the country (i.e. Wyoming and the eastern part of the U.S.) wouldn’t it be wise to be prudent? Additionally, she stated, the 3-miles radius might be arbitrary as well, given that the San Luis Valley has such a unique aquifer.

In response to Mrs. Bricker’s comment, Ms. Spray said the State has a fairly thorough permit process that is unique to each area, especially areas in which no prior oil and gas production has existed. The potential permit for this area will be discussed at great length at the State level. Moreover, the State has numerous safe-guards in place to aid in this process including: a public

comment process, which allows the public to not only view the application but also offer suggestions. The State also has mechanisms, such as surface casing, in place to prevent the possibility of water contamination. Ms. Spray reassured the audience that this permit process will not merely be “cookie-cutter” approved, once again referencing the State’s water testing criteria—2 wells ¼ of a mile away from the producing oil well in which a statistical trend can be extrapolated from.

Susan Constance, a San Francisco Creek resident, ask for a clarification from Ms. Spray in saying, doesn’t the location of the water wells, used as testing points, depend on what geologic formation the well is drawing water from? For example, if the well is drawing water from the alluvium and consequently is connected to surface water, the water coming from the sandstone aquifer may be vulnerable to surface pollution. Therefore, the operator should be charged with the responsibility of funding the sampling for all of the wells within the 3-mile radius in order to establish baseline standards and contribute to the interim monitoring.

Ms. Spray reiterated that the State had no opinion on how intense the Rio Grande County regulations are.

Mr. Freeman refocused the conversation, orienting it on Rio Grande County’s baseline water testing requirements. Mr. Frankie said the commission needs to keep in mind what is reasonable, in terms of data collection, and on what basis?

Chris Canaly, with the SLV Ecosystem Council, presented the Planning Commission with a memo outlining the baseline water sampling scheme that was used at the Baca National Wildlife Refuge when 2-14,000 square foot Oil wells were proposed in that area. Ms. Canaly stated that due to the San Luis Valley’s complex hydrological system, water sources within 5 miles of the proposed wells were required to be tested. With this in mind, the proposed 3-mile radius being considered in the amendment, will not be asking the Oil Company (Huges Petroleum Exploration and Production Company) to do anything above and beyond the norm.

Jim Kuehn posed the question of, “if contamination does occur, how long will it take the contamination to reach the Town of Del Norte and/or the Rio Grande River due to the close proximity of the proposed oil production and each of these entities?”

Cristi Larsen stated that she has approximately 6 wells on her property all of which are permitted; however, a portion of them do not have working pumps. In a situation like this, will each of the wells still be tested? Or will the wells that do not have pumps remain untested?

Susan Constance thanked Chris Canaly for her relevant comments. She affirmed that establishing degradation of water quality will be difficult if there’s no baseline data to reference. It will be nearly impossible to establish a correlation between contamination and degraded water quality without conducting testing prior to the oil production.

Ms. Spray rectified this statement in saying; isotopic geochemical analysis can be conducted after the fact that makes it possible to isolate the source of contamination. Isotopic geochemical analysis is frequently used in areas where coal-bed-methane production is occurring and methane contamination is prevalent. In these situations, isotopic finger prints can be used to predict the source of methane contamination either, biogenic—produced by bacteria, or thermogenic—geologic based.

Clair Vander Nuet, another San Francisco Creek Resident, stated that she is strongly in favor of the 3-mile extension for water well testing, and is highly supportive of amending the Code.

Heather Green, a resident as well, asked what is defined as the starting point for testing—the edge of the well pad, or the actual well-head?

Glen Nebeker, a spokesperson for Huges Petroleum Exploration and Production Company, said the company is proposing a vertical exploration well, rather than a directional well. The application has not been submitted yet, but the proposed “top-hole” location is the same as the proposed “bottom-hole” location. Future well exploration on the part of the company depends on the success this well. If production is substantial the company will apply for another application that will be subject to different conditions of approval with an entirely separate surface casing. This process will allow the company to deviate the “bottom-hole” location and pursue a number of directional drilling options, if production at this location supports further exploration.

Ms. Green rearticulated Mr. Nebeker’s statement and questioned the company’s intentions. She stated although the company is currently planning a vertical well, it is important to be absolute stewards of the watershed protecting it from future damage.

Brad Hance, a San Francisco Creek Resident, requested clarification from the Planning commission, “Is drilling is probably going to happen? If so, why can’t the County either outright ban drilling or make it nearly impossible for the company to conduct drilling operations?” Mr. Frankie responded to this inquiry in saying; State law grants individuals the right to recover their minerals, the County cannot supersede this law.

Terry Hance, a San Francisco Creek Resident as well, stated that both the town and the 3-mile radius around the oil well should be upheld in the amendment. In addition, Ms. Hance proposed that water should be pre-tested, post-tested, and regularly tested based on a set schedule.

Rob McConnel—a Del Norte resident, who lives on Spruce Street, suggested that the circumference in which water is tested, be it 3 miles or 6 is not the important issue, what is important however is to thoroughly consider the long-term effects of any sort of contamination. By making it difficult for the company to drill, it transfers the responsibility solely onto the company, included in this is requiring them to conduct water testing on Del Norte’s water supply.

Mr. Neil restated that the purpose of this hearing is to delineate the reasoning behind extending the water testing requirements from 1-mile to 3-miles through the amendment in question. The County has committed to water quality protection at a distance of 3 miles from the oil well; by spot regulating on a case-by-case basis the regulations lose both continuity and credibility. It may be important to include, for future reference, if directional drilling techniques are used the 3-mile water testing requirement extends from the end of the bore hole, opposed to the “top-hole” location.

Ms. Constance stated regardless, the County’s Oil and Gas regulations need to be clarified so they are clear to everyone.

Ms. Spray, suggested on way to capture baseline testing that includes cases where there are multiple wells in one area with overlapping 3-mile radii, is to institute sequential testing, in which the first cycle is completed no more than one year after production has commenced, although six months is a preferable time frame. Following the initial testing, wells should be tested one year after, three years after, and finally, six years after the commencement of oil production.

Mrs. Constance stated that she’s read multiple versions of the County’s Oil and Gas Regulations and still feels there are several areas in which the current regulations fall short. There is no enforcement defined, not enforcer defined, nothing that addresses the issues of air and soil quality. She would like to encourage both the planning commission and the BOCC to re-visit the regulations and address the issues that are currently neglected in the baseline testing. She submitted the following statement:

Statement by Susan Constance for review by the Rio Grande County Planning and Zoning Committee and for inclusion into the minutes of the hearing held on November 16, 2010 at 1:30 pm.

Subject: Amendment to Article XII of the Rio Grande County Land Development Code—Oil and Gas Operations.

My name is Susan Constance, I live in the San Francisco Creek Subdivision on Wagon Wheel Road. My water well is within the one mile radius of the Oil or Gas drilling site proposed by the Dan A. Huges Company.

I come from a working class family, I went to public school and my parents helped me through college.

I have Bachelor’s of Science degrees in Plant and Soil Science and Nursing and a Master’s of Science degree in Preventative Medicine and Environmental Health with a sub-specialty in Industrial Hygiene.

I worked for 15 years as an Industrial Hygienist in manufacturing and consulting and was certified by the American Board of Industrial Hygiene in Comprehensive Practice. During that time I was responsible for review and interpretation of Federal, State and Local Regulations and corporate policies and procedures. I was also responsible for conducting air, water and bulk materials sampling and interpreting results of analysis for compliance with specific regulations.

I currently work as a Clinical Nurse.

I am submitting the following recommendation for your review.

- 1. Schedule meetings such as this in the evening so that working people can attend. Improve your methods of announcing meetings to encourage attendance.*
- 2. Amend Article XII baseline water well testing funded by the operator to include 3 mile water wells and other bodies of water including rivers, creeks, springs, stock reservoirs within that 3 mile radius.*
 - a. Reasoning: The operator is responsible for not degrading water resources within the 3 miles radius but no baseline monitoring is required in the Article. Without baseline testing it is more difficult to prove that degradation was the result of Oil and Gas activities and was not present prior to their start.*
- 3. Require operator funded interval monitoring of all water wells and bodies of water within the 3 mile radius with specific intervals defined including but not limited to the end of the exploratory drilling phase and prior to production phase, prior to changes in drilling methods or entry into different strata, in the event of lease transfer, and at the end of production and extending 20 years after the well(s) is plugged. In other words, cradle to grave.*
 - a. Reasoning: Intervals are recommended up to 5 years after the drilling is complete but no interval is defined for this time and it is not stated that it is operator funded nor that an independent sampler must be used.*
- 4. Clearly define who will be responsible for enforcement, how violations will be enforced and the schedule of penalties imposed for violations or noncompliance.*
 - a. Reasoning: Nowhere in Article XII is it clearly stated who will be responsible for enforcement or how such enforcement will be implemented. Without enforcement Article XII is an empty document, it MEANS NOTHING.*
- 5. Review Article XII for other areas that need baseline testing such as air quality and require operator funded independent baseline and interval sampling.*
 - a. Reasoning: There are other areas of contamination that are addressed in Article XII that are not well defined. Air quality is one that the operator must not degrade but there is no way to identify when or if it becomes degraded and who or what the cause is. Soil is another. If contaminated soil becomes airborne it can become a source of exposure to harmful chemicals.*

6. *Review Article XII for references to other agency regulations and include the text of such regulations within the body of Article XII for clarity and to make regulation simpler to understand and enforce.*
 - a. *Reasoning: There are many other sections in Article XII that are softly written using words such as “encourage” and “recommend” instead of “required” and there are sections that are “required” but there is no process nor entity defined to monitor or enforce the requirements.*
7. *Require that operators use the most up to date technology and that where newer technology can be implemented during the life of the well(s) the operator is required to do so.*
 - a. *Reasoning: There are ways to add a fluid marker to drilling and fracking fluid so that if the well water is contaminated it clearly shows it and links it to Oil and Gas activities. There are vapor recovery systems and scrubbing systems available to eliminate exhausting of VOC’s to the atmosphere from tanks and production equipment. The operator must be required to install them.*
8. *Impose a Moratorium on acceptance of all applications to drill until Article XII has been reviewed, is amended, and is enforceable.*
 - a. *Reasoning: Article XII is a VERY IMPORTANT document that is far reaching in its implications for the health and safety of the current and future residents of Rio Grande County, the San Luis Valley and beyond. Taking the time now, without pressure from the Oil & Gas industry, to re-evaluate it and make it a regulatory document that makes sense, is clear to all who read it and is enforceable is imperative to the well being of Del Norte citizens, Rio Grande County and the State of Colorado.*

Thank you for your review and consideration of these recommendations.

Sincerely,

Susan Constance

Mr. Bricker stated, much like the County building code, wouldn't it be beneficial to adopt sequential water testing to be done on the part of the company. He feels like this would be something the community, as a whole would like to see.

Mrs. Bricker asked Ms. Spray how frequently water contamination occurs. Ms. Spray stated that municipal water contamination is fairly uncommon. Most of the contamination that occurs can be directly linked to pit related issues, in situations in which closed-looped systems are not utilized. Even then, these problems are not epidemic. Mrs. Vanderpool confirmed that Rio Grande County Oil and Gas regulations require closed-loop systems and acknowledge their usefulness in preventing contamination.

In response, Scott Sopol stated, there is not a database that exists that documents individual homeowners' wells and contamination issues. In Pavillion, WY an Oil and Gas company is responsible for supplying bottled water to residents in compensation for past contamination. Forensic testing should be required, however it's expensive, and who "foots the bill", the County?

Charles Mertian—A San Francisco Creek Resident, asserted that the San Luis Valley water system is indefinably unique. His property contains two water wells and two warm water springs that he uses for agricultural purposes. It appears that all of his wells fall outside of the 1-mile radius, and he would like the Planning Commission to suggest to amendment to the Commissioners.

Mr. Freeman concluded the discussion and presentation of testimony in expressing the Planning Commission's gratitude to the residents for their input. He also stressed that the Commission heard their concerns and will take their suggestion into consideration. He reiterated that the Commission is specifically considering expanding the current baseline water testing requirements from 1-mile to 3-miles for all water bodies, including but not limited to ground water through recommending this amendment to the BOCC for consideration.

Mr. Freeman presented the Planning Commission with the option to go ahead and recommend the amendment or to choose to exercise their statutory right and postpone their decision.

Mr. Frankie reminded both the Planning Commission and audience that the County merely has jurisdiction over surface activities; they do not have the authority to regulate "down-hole" activities.

In response to a concern expressed by Mrs. Bricker, regarding when well testing should be conducted, Mrs. Vanderpool cited section 8.8.1.7 in saying, "Water well testing is required at the start of the operation and will continue once every year thereafter for five years".

Mrs. Vanderpool also brought up the idea of developing and retaining an escrow account or increasing bonding amounts to cover the cost of water testing if the company neglects to conduct the testing in adherence with the set-forth time frame. The County currently has \$100,000 Performance Bond per section 10.1 of the Oil and Gas Regulations; the time frame for payment and acceptable forms of payment are outlined in the successive sections—10.2 and 10.3.

Glen Nebeker—A spokesperson for Huges Petroleum Exploration and Production Company, reaffirmed that the Company is bonded with the Bureau of Land Management for \$25,000, included in this is their bond with the State, as the COGCC defers bonding to the federal government in Federal Mineral Estate cases. Additionally, the Company holds one million dollars in liability insurance for both personal injury and property injury.

Mr. Frankie made the motion to recommend to the BOCC, amending the County Land Development Code, to reflect the water testing requirements referenced in 6.1.1.2 be extended from a 1-mile radius to a 3-mile radius from the bottom hole location and that baseline water testing shall include all water sources within this radius. Additionally, testing shall be funded by the operator.

Vern McCallister seconded the motion. The motion carried unanimously.

Mr. Frankie clarified that the scheduled of testing—as specified in the penciled in portion of the Code book, shall also be included in the amendment.

The final item on the agenda was an issue regarding amending the current zoning provisions. Mrs. Vanderpool presented Article IX that clarifies the zoning classifications that were adopted in the original Master Plan.

Mrs. Slade made the motion to recommend amending Article IX—the district regulations and Article IX—List of uses, for consideration by the BOCC. Mrs. Bricker seconded the motion. Motion carried.

Mr. Frankie made the motion to adjourn the meeting; Mr. Seger seconded the motion. Meeting adjourned at 4:10.