JOINT CITY COUNCIL OVERSIGHT COMMITTEE AND FINANCE COMMITTEE MEETING MINUTES

April 30, 2014

The City Council Oversight Committee and Finance Committee of the City of Norman, Cleveland County, State of Oklahoma, met at 5:30 p.m. in the City Council Conference Room on the 30th day of April, 2014, and notice and agenda of the meeting were posted in the Municipal Building at 201 West Gray 48 hours prior to the beginning of the meeting.

OVERSIGHT COMMITTEE PRESENT: Councilmembers Holman, Kovach, Jungman, and

Chairman Miller

FINANCE COMMITTEE PRESENT: Councilmembers Castleberry, Griffith, Heiple, and

Chairman Kovach

ABSENT: None

OTHERS PRESENT: Mayor Cindy Rosenthal

Ms. Kristina Bell, Assistant City Attorney

Mr. Jeff Bryant, City Attorney

Ms. Susan Connors, Director of Planning and

Community Development

Mr. Terry Floyd, Development Coordinator Ms. Suzanne Krohmer, Budget Manager Mr. Ken Komiske, Director of Utilities

Mr. Steve Lewis, City Manager

Mr. Shawn O'Leary, Director of Public Works Ms. Linda Price, Revitalization Manager

Ms. Debra Smith, Environmental Services Coordinator

Mr. Charlie Thomas, Capital Projects Engineer Mr. David Woods, Oil and Gas Inspector

Ms. Karla Chapman, Administrative Assistant III

Item 1, being:

DISCUSSION REGARDING BULK WATER METER SALES AND OTHER ISSUES ASSOCIATED WITH OIL AND GAS DRILLING OPERATIONS WITHIN THE CITY.

Councilmember Kovach, Finance Committee Chairman, said tonight Councilmembers will focus on the agenda topics and make recommendations to bring to the full Council for discussion; however, there may be issues that will go back to one of the Council Committees for further discussion. He said tonight the Committee's will focus on bulk water meter rates and oil well safety, both the operations and water quantity issues. Councilmember Miller, Oversight Committee Chairman, reminded the public that this meeting is not a public meeting and even though it is open to the public it is a working Council session. She said tonight's issues are important and there may be some things that can be done immediately, but there are some things that cannot be done as quickly so the Committees want to focus on what can be done fairly quickly.

BULK WATER METER SALES

Mr. Ken Komiske, Director of Utilities, said Section 21-406 of the City of Norman's Code of Ordinances allows for bulk water purchases from fire hydrants with an approved permit. He said the deposit, permit fees, and water use charges are set administratively. He said this ordinance prevents people from stealing water from fire hydrants and allows the City to sell water, in bulk, on a temporary basis to customers who might need it for construction purposes. The Line Maintenance Division has about 60 hydrant meters they rent for a deposit of \$100 for 3/4" and 1" meters and \$1,000 deposit for 2" meters. The monthly per meter permit fee is \$25.00 and \$2.50 is charged for every 1,000 gallons of water used.

Bulk Water Meter Sales, continued:

Mr. Komiske highlighted bulk water usage over the last three years and said bulk water sales have been between \$40,000 and \$77,000 per year. He said revenues from bulk sales have totaled approximately \$14 million. He said a possible alternative water source for bulk water sales is reuse water. He said reuse water requires a permit from the Oklahoma Department of Environmental Quality (ODEQ), but the City does not have a permit at this time. He said other sources could include non-potable water from farm ponds, streams, arsenic wells, etc.; potable water from the City's distribution lines; private ground water wells; and water tank trucks. He said private wells and water trucks would not benefit the City financially and water trucks could cause traffic issues. Councilmember Castleberry asked the weight of a water truck and Mr. Komiske said a typical 6,000 gallon tank truck would hold 25 tons of water and that does not include the weight of the truck itself. Councilmember Castleberry asked how a 25 ton truck would impact roadways and Mr. Shawn O'Leary, Director of Public Works, said 25 tons is a legal weight and roadways are designed to hold maximum capacity; however, some roadways are not designed for large trucks or large volumes of large trucks.

Mr. Komiske highlighted alternatives to water usage charges. He said commercial customers pay \$2.10 per 1,000 gallons and bulk rates are \$2.50 per 1,000 gallons because the water is for temporary usage and customer convenience. He said there are concerns about selling bulk water during the summer months when the City may have to purchase water from Oklahoma City (OKC) to meet peak demands. He said typical summer months for purchasing water from OKC are June, July, and August at a cost of \$5.23 per 1,000 gallons. He said Norman purchases 3% of its water from OKC during the summer months so a blended rate could be calculated using the percentage of days water is purchased from OKC making the rate \$3.32 per 1,000 gallons or calculating the rate based on the percentage of volume of water purchased from OKC making the rate \$2.59 per 1,000 gallons. He said another alternative would be to use an inverted rate similar to what is currently used for residential customers. He said residential customers pay \$3.29 per 1,000 gallons for zero - 10,000 gallons, \$4.00 per 1,000 gallons for 10,001 to 50,000 gallons, and \$5.00 per 1,000 gallons for anything over 50,000 gallons. He said residential customers are encouraged to conserve water since the more water they use, the more they pay. He said using an inverted rate for bulk water may encourage those customers to use water more frugally. Councilmember Jungman asked if overhead costs need to be included because the City does not want to provide bulk water to customers without recovering costs of service and Mr. Komiske felt a carrying charge would be reasonable if water purchased from OKC is used. Chairman Kovach said he preferred a year round inverted rate of \$5.25 for anything over 50,000 gallons. Chairman Miller said she likes that idea as well because the rate would not be limited to oil wells, it would apply to water used for construction as well. She asked Mr. Komiske what type of reaction the City might get from builders and Mr. Komiske said there are customers that use bulk water on a regular basis such as Silver Star Construction who paid \$5,500 for one year's use of bulk water so this rate would essentially double that amount. Chairman Miller said that is true, but the City is talking about multi-million dollar projects. Councilmember Jungman asked what construction companies used water for and Mr. Komiske said earth compaction, dust control, initial landscaping, etc.

Chairman Kovach said the City is exposing itself to losing money by selling water and finds that disturbing. He said OKC sells bulk water for an emergency rate of \$5.23 per 1,000 gallons. He prefers using an inverted rate because it encourages conservation and he would like fees for 50,000 gallons or more to match or exceed the OKC rate. He would like more information and discussion on reactivating an arsenic well to sell to bulk customers. He asked the cost to reactivate an arsenic well and Mr. Komiske said ODEQ made the City separate the pipes and disconnect all electricity from the wells when they were taken out of service. He said these wells have been out of commission for ten years and if they do not need new pumps and motors, they would at the very least need new electric motor starters and other equipment, which would cost approximately \$5,000 per well to activate. He said the convenience of fire hydrants is that there are a lot of them all around the City and arsenic wells a/k/a non-potable wells are stationary so the chances of having one near where it is needed is slim, but it is an option. He said one well is being used by the City for irrigation purposes and another well that is high in fluoride, not arsenic, is being used by the Street Department for street sweeping purposes. Councilmember Griffith supported an inverted rate and would not mind seeing a higher rate than OKC's on-demand emergency rate, but that could also reduce the demand for water which would hurt the City's revenues.

Bulk Water Meter Sales, continued:

Councilmember Jungman said it has been implied that water used for fracking is basically lost for all time and asked if that is true and Mr. Komiske said yes, the water may be lost for many, many years, but the water being taken out of the Garber-Wellington could be 10,000 years old. Councilmember Jungman felt there should be different rates for fracking versus irrigation versus construction because the water is being used for different purposes and used in various locations.

Councilmember Heiple asked if manipulating water rates too much would jeopardize the City's ability to sell bulk water and Mr. Komiske said not as long as the price is comparable to OKC.

Chairman Kovach said in this meeting, Councilmembers are reviewing several water use issues, not just water being used for oil well fracking. He said the City is expecting a long term drought cycle so there are a lot of things that need to be done to conserve water and he believes part of the outrage from the public has been that the water being used for fracking is lost from the system forever while at the same time the public is being told to cut back and conserve. He said switching to non-potable water for some usages may keep prices at a lower rate even if companies have to truck the water to the location. He said it would nice to be able to have and encourage non-potable water options.

Councilmember Griffith likes the idea of utilizing arsenic wells and his only concern would be damage to roadways if there is a large project and a lot of tank trucks are used to haul the water to the project site. He said while it would be great to offer a reduced rate for using non-potable water, he is concerned that the cost of rehabbing roadways would be expensive. Mayor Rosenthal asked how the City could enforce compensation for roadway damage and Mr. O'Leary said it is currently done through roadway construction contracts. He said if Staff is aware that a roadway or bridge project is going to inherently create a haul road scenario, there can be a provision in the contract where the contractor reimburses the local agency for damages to the roadway based upon a before and after analysis. He said repairs could be the cost of milling and overlaying the asphalt. He said that same provision could be applied to the oil and gas permitting process. He said there has to be a mechanism for damage to roadways or recouping costs could be difficult.

Councilmember Castleberry asked if a haul road provision was included in the Main Street Bridge Project contract and Mr. O'Leary said no, and explained that when bids are submitted contractors are given latitude on where they get their materials and the City did not know that materials would be hauled from West Main Street until after the contract was approved. Mayor Rosenthal asked if road repairs are covered by the bond contractors have to submit and Mr. O'Leary said yes, that is one of the intents of the bond. Mayor Rosenthal said \$200,000 does not cover a large area of road repair costs and suggested Council review bond language for oil and gas drilling to ensure road repairs are addressed. She felt a \$1 million liability bond would be sufficient. Councilmember Holman said most oil well sites are off rural section line roads and rural roads would be more susceptible to damage, but not cost as much to repair.

Chairman Miller said water wells can be drilled without Council's approval, but there are environmental issues that need to be considered. She did not want to push companies into drilling their own water wells to get the water they need and Councilmember Griffith agreed.

Chairman Kovach said the City drafted a Water Conservation Plan consisting of stages and can prohibit car washing in certain stages and asked if Councilmembers wanted to discuss at what stage the City would prohibit bulk water sales. He asked Mr. Komiske to highlight the various water conservation stages and Mr. Komiske the City currently has mandatory off/even year round, which is not to prevent citizens from using water, but is a better use of water and makes citizens more cognizant that landscaping and grass do not need water every single day. He said it also helps during peak use which puts a strain on the system. He said in Stage Two conservation

Bulk Water Meter Sales, continued:

watering is allowed two days per week and developers and construction companies are asked to wait until the current drought or emergency has passed before establishing new landscaping. Any new landscaping installed during a drought stage will be subject to water restrictions. He said street sweeping; car washing; except at commercial car washes; washing of paved surfaces; flushing of hydrants or water lines are not allowed and splash pad operating hours are reduced. He said Stage Three allows watering one day per week on the citizens' trash collection day, splash pads are closed, potable water use for dust control compaction or wash downs is prohibited, and potable water cannot be used to fill ponds or lakes. Chairman Kovach said since bulk water sales are not addressed in any stage and felt it should be addressed in Stage Three. Mayor Rosenthal felt bulk water restrictions should be addressed in Stage Two because the City is asking citizens to make sacrifices in Stage Two; however, she would not restrict the use of non-potable water. Chairman Kovach said the City may have to enact Stage Two restrictions quite a lot over the next few years. He asked if Councilmembers wanted to make an exception for soil compaction, not dust control, in Stage Two because if there is no exception the City will be slowing down a lot of construction projects. Mayor Rosenthal said there are options for tanking water in from non-potable sources. Chairman Kovach said that brings the conversation back to reactivating wells. Councilmembers agreed they would support bulk water restrictions in Stage Two and if compaction is required for a construction project, companies can truck the water from a non-potable site. Chairman Miller asked Mr. O'Leary's opinion and he said a majority of bulk sales are made is to contractors because water is a necessary part of their projects. He said if an abandoned well is activated, contractors may still have to truck that water for miles to the project site and that could be placing 500 tons of weight on the roadways daily, which can do some damage to the roadway, which is currently occurring on the interstates.

Councilmember Castleberry asked if Stages Two and Three apply to commercial or residential and Mr. Komiske said both. Councilmember Castleberry asked if road projects usually include incentives if the project is completed early and Mr. Bryant said yes. Councilmember Castleberry asked if the City would have any liability if a contractor stated they could not complete construction early because the City delayed the project by not allowing bulk water sales and Mr. Bryant said no.

Chairman Kovach asked if bulk water sales should be addressed in Stage Two or Stage Three or be a hybrid of the two and Councilmember Holman said a hybrid of the two. Chairman Kovach said the City should prohibit bulk sales with an exception for compaction and Mr. O'Leary said Staff can do more research and speak with contractors to form better definitions of compaction and dust control. Councilmember Griffith said if the City is going to allow an exception for compaction in Stage Two it should include building projects as well as roadway projects. Mr. Komiske said contractors could still use small amounts of water from a hydrant to mix cement or use for wash downs. Councilmember Castleberry said this is a significant issue, but an insignificant amount of water overall is being used and asked what the City would really accomplish between Stage Two and Stage Three. Chairman Kovach said another proposal would be to allow construction to continue, but prohibit bulk sales for everything else. Mr. Bryant said, from a legal perspective, there would need to be some basis as to why some customers are being denied bulk water sales while others are not. He asked how the City would differentiate between construction, charity car washes, oil well fracking, etc. Chairman Kovach said restrictions are already set in Stage Three so Council just wants to extend that to all bulk water sales.

Chairman Miller said even though the City is not talking about a huge amount of water every single thing that is done to conserve water can make a difference. She said it is a message, it is education, and it is saying the City cares about trying to be conservation minded and that is important. Mayor Rosenthal said it is also about sending a consistent message that the City means what is says when talking about conservation. She said a concern among the public is that the City is being very inconsistent by having one standard for residences and a different standard for bulk use customers. She agreed with Councilmember Jungman that bulk water rates should be higher because of the impact on an individual's use. She felt a minimum of \$4, \$5, and \$6 should be charged to cover true costs to the City and Councilmembers agreed.

Chairman Miller said discussions will continue to take place regarding water issues, but the Committees have another topic to discuss tonight that involves safety, health, and environmental issues and need to move forward with that discussion.

Bulk Water Meter Sales, continued:

Items submitted for the record

- 1. Memorandum dated April 24, 2014, from Ken Komiske, Director of Utilities, to Steve Lewis, City Manager, with Attachment 1, Repeat Hydrant Meter Customer over the last three years, Attachment 2, All Hydrant Meter Customers within the last year, and Attachment 3, Norman Utilities Authority Actual versus Projected 2014 (bulk water sales)
- 2. PowerPoint Presentation dated April 30, 2014, entitled, "Bulk Water Sales," Joint Conference of Oversight Committee and Finance Committee

OIL AND GAS DRILLING OPERATIONS

Mr. Terry Floyd, Development Coordinator, said Staff researched areas of commonality on oil and gas ordinances between Norman, Oklahoma City, Edmond, and Moore. He said all cities have setback requirements; require a bond or Irrevocable Letter of Credit and insurance; have water well regulations in relation to drilling operations; address road and repair maintenance; have fencing requirements; and charge a drilling permit fee. He highlighted permit fees as follows:

Norman \$3,000

OKC \$2,200 plus \$550 application fee

Edmond \$3,500

Moore \$5,000 plus \$5,000 application fee

Mr. Floyd said hydraulic fracturing, better known as fracking, is partially regulated by the Oklahoma Corporation Commission. He said Edmond and OKC's ordinance language state, "In the completion of an oil and gas injection disposal or service well, where acidizing or fracking processes are used, no oil, gas, or other deleterious substances or pollutants shall be permitted to pollute any service or subservice fresh waters." He said OKC also has language that all fluids produced from fracking or acidizing is to be placed into tanks. He said Norman and Moore do not have any of this language in their ordinances. He said all cities require the applicant to identify the source of water they intend to use for drilling operations, but none specifically regulate and/or address potable water sales in their ordinances.

Mr. Floyd said OKC requires a six foot fence around the oil well site that is impregnable to children or animals under ordinary or foreseeable circumstances; however, the requirement can be waived or the fencing type can be designated by the Oil and Gas Inspector if the well is located 600 feet from any dwelling or business structure. He said Moore requires evergreen trees (2 inches in diameter and six feet tall at maturity) be placed 30 feet apart completely around the well site, storage tanks, fencing or lease equipment. He said Moore does not address noise while OKC and Edmond state that all drilling or production operations shall be conducted in such a manner to eliminate as much as possible all noise, dust, etc., while Norman regulates noise issues through its Noise Ordinance.

Mr. Floyd said Edmond's permit is a special use permit approved by the Planning Commission and City Council. Moore's City Council approves permits before they are issued and OKC has a designated oil and gas district in which permits can be administratively approved and any company wanting to drill outside the defined district must file an appeal with the Board of Adjustment. He said more and more appeals/variances are being filed in OKC.

Mr. Floyd said Norman has a defined set of regulations regarding the location of wells. He said drilling is prohibited in parklands, parkland districts, Planned Unit Developments (PUD's), and areas described by or contained within approved final plats and rural Certificate of Surveys (COS). Drilling is limited to ten acre parcels of un-platted agriculturally zoned properties. He said Norman does not require Council or other Board approval and has no appeal or variance process. Chairman Miller said drilling is limited to ten acre parcels so much of what happens in terms of drilling happens in the more rural areas of Norman so it impacts Ward 5 more than any other ward. She said an issue brought to her attention regarding oil wells is security and Norman's ordinance regarding fencing is not as stringent as some of the other cities and she would like to see

Oil and Gas Drilling Operations, continued:

more stringent regulations and Chairman Kovach agreed. Chairman Miller said Norman's ordinance requires a six foot fence around the oil well site, but some oil wells were drilled years before this requirement was put into place and were grandfathered in so there is nothing the City can do about them, but Council can change regulations for future drilling sites. She said many of the existing fences are not well maintained and people can enter the site. She said other cities have stipulations that the fence be six feet with three barbed wire lines at the top to discourage children and teenagers from climbing over the fence. She said some cities' regulations require sight preventative fencing so no one can see through the fence and some cities allow landscaping to be used to block the oil well from sight. Mayor Rosenthal said OKC's ordinance requires existing oil wells to bring oil well sites to current codes within one year and that is something Norman should consider in terms of safety measures such as fencing.

Councilmember Griffith said two of the cities require Council approval for oil well drilling and he would support Norman's City Council reviewing proposed well site plans. Chairman Kovach said he liked the idea of designating zones where oil wells could be approved administratively if located in those zones and all others could come before Council. He said there could be some instances where oil wells would be prohibited. Councilmember Castleberry said he does not have a problem being more restrictive to protect oil wells sites even if that includes being retroactive on existing oil wells. Councilmember Holman said some wells may have been located in the middle of nowhere a decade or two ago, but are now near residences with children so he would support a grace period for bringing existing oil wells into compliance. He said it should also be made clear that the owner of the oil well site is responsible for making the oil wells compliant. He would also like to see some type of approval process so people living in close proximity of a proposed site will get notification that an oil well will be drilled.

Mayor Rosenthal supported Council review and approval of oil well permits because Council is in the best position to weigh that issuance against broader policies to protect water runoff such as the specific policy in the Norman 2025 Land Use and Transportation Plan to protect water quality in Lake Thunderbird and the Garber-Wellington Aquifer from point and non-point pollution related to development, e.g., impervious surface, runoff, oil and gas drilling, disposal of toxic chemicals, etc. She said OKC has very specific requirements for oil well drilling in watersheds and around reservoirs, storing chemicals around water, and they have a deleterious substance control plan. Mr. Floyd said OKC's plan is primarily a list of all parties that might be involved in the event of a catastrophe and how quickly they can respond and contain the problem. Councilmember Castleberry asked if the City has the equipment and ability to handle remediation of an oil well site catastrophe or if they have a backup plan and Mr. Lewis said he was not sure since the Fire Chief is not present, but he will make sure the Fire Chief attends the Oversight Committee meeting regarding oil wells to answer those types of questions. Chairman Kovach agreed that OKC's ordinance has a lot of good language regarding watersheds and encouraged Staff to incorporate that language into Norman's ordinance.

Chairman Kovach said other cities require a remediation plan to be filed when drilling a new well and Norman does not have that requirement, which he feels is important and should be required.

Councilmember Holman said another safety concern is open flames at oil wells and Mr. Jeff Bryant, City Attorney, said the City Council Oversight Committee will be reviewing that topic in May. Chairman Miller said open flames are used to burn off excess gas, but there is other technology that can be used. She said one issue is light pollution since the flames burn 90% of the time so it is light at night in people's backyards and wondered if that fell under the City's lighting ordinance. Chairman Miller said the City does not want open flames leaping into the air 90% of the time in residential areas and Mr. Floyd said Staff could research other methods of burning off gas.

Chairman Kovach asked if other communities require recycling of fracking injections and if Staff has done any research on that and Mr. Floyd said Staff did not find anything, but would do further research. Chairman Kovach said in states such as Texas where drought is a huge issue, people are looking at best practices to encourage recycling and he would like whatever is not included in Norman's current regulations to be included if it is working well with other communities.

Oil and Gas Drilling Operations, continued:

Items submitted for the record

- 1. Memorandum dated April 24, 2014, from Terry Floyd, Development Coordinator, to Steve Lewis, City Manager
- 2. Oil and Gas Regulations, A comparison of the Cities of Norman, Oklahoma City, Edmond, and Moore Ordinances with Attachment B, Map of Active Wells in Norman, and Attachment C, chapter 13 Licenses and Occupations, Article XV. Oil and Mineral Production of the Code of the City of Norman

Discussion Review

Chairman Miller asked Staff to go over directions given by Council tonight for the public's benefit and Mr. Lewis highlighted directions as follows:

Develop non-potable bulk water options

Amend Stages 2 and 3 of Water Conservation Plan

Develop exemption for road construction project soil compaction

Develop mediation plan patterned after OKC ordinance

Develop more stringent regulation on fencing around oil well sites

Research information on alternatives to burning off gas (flare ups)

Review OKC fencing ordinance to consider a one year grace period for existing oil wells to bring into compliance with new standards

Review all OKC regulations to incorporate pertinent language into Norman's ordinance

Clarify in Norman's ordinance that the owner of an oil well is responsible for meeting regulations

Review the option of Council approving oil well permits with option that in more rural districts oil well permits could be done administratively

Review how proposed ordinance amendments will be more consistent with other major policy documents such as the Norman 2025 Land Use and Transportation Plan, Fertilizer Ordinance, etc.

Review specific requirements relative to reserve pits and other safety issues such as those found in Section Three of OKC ordinance

Research and review options for recycling fracking material

Review regulations to improve best practices

Review road maintenance issues by having a before and after analysis on each road to address road damage caused by hauling materials/water

Review option of requiring a \$1 million bond for roadway damage repairs

Review Council approval of all permits that affect the Lake Thunderbird watersheds

Review a tiered inverted bulk water rate in the ranges of \$4, \$5, and \$6 to be implemented June 1st

Mr. Lewis felt the best time to implement changes would be June 1st effectively giving contractors and drilling companies a 30 day notice.

Public Comments

Ms. Joy Hampton, <u>The Norman Transcript</u>, said if contractors are not allowed to compact soil in watershed areas then that could lead to the unintended consequence of more silt ending up in Lake Thunderbird. Mr. O'Leary said the City requires erosion control measure for any construction project in excess of once acre, but does not necessarily require water as the mechanism. He said the City requires silt fencing and other things.

Ms. Hampton asked if Norman has a conservation policy that allows builders to postpone required landscaping until a drought is over and Chairman Kovach said yes.

Public Comments, continued:

Mr. Mike Rainer, 4705 Augusta Drive, thanked the Mayor and Councilmembers for taking an interest in oil well site safety issues that exist in Norman. He said when he tried to develop a piece of land he was told by Mr. Blaine Nice, former Assistant City Attorney, that there is no such thing as "grandfathering." Mr. Rainer felt it was ridiculous to not place the sole responsibility of securing well sites on the owner of the well as there is no question that is who should be responsible. He said they are the parties that own the piece of equipment that pose the threat to public safety. He has driven to several sites throughout Norman and there are many that do not comply with existing regulations. He respected the Mayor's suggestion of allowing a grace period for those responsible to make the sites compliant. He said if responsibility is placed on the "operator" as defined by the Corporation Commission, the ordinance will be a lot easier to enforce. He said the City needs to do better job of enforcing the current ordinance. It is his understanding that well sites are being inspected two to three times per year, but if that is true there is no enforcement taking place. He said the City should keep a log book with dates of inspections, pictures, violations, compliance re-inspection dates, etc., and there should be one warning followed by fines if compliance is not met.

Mr. Jack Dake, Baron Exploration Company, said Baron began drilling wells in 1958 and, to his knowledge, have had more permit approvals than any other company in the State. He said what needs to be kept in mind in the overall perspective of everything discussed tonight is the importance of oil and gas wells to cities. He said cities cannot function without oil and gas. He said cities cover large areas and underneath those areas are natural resources that need to be developed for everyone's best interest and benefit including the people that own mineral rights. He said mineral owners are really not aware of all this discussion taking place tonight and how the discussion affects them, but once they do become aware they will get very involved so it is important that the thought process has within it not just the concerns of the surface owner, but the mineral owners as well. He said if no bulk water sales will be allowed in Stages Two or Three of the Water Conservation Plan, there needs to be some thought process about whether or not a well is connected and drilling and if that well can be disconnected if the City declares Stages Two or Three. He said during drilling of an oil and gas well, the mud is used to remove the chipped up rock as the bit breaks the rock. The mud is called a chemical even though it is actually water and ground up dirt and rocks. If the water is lost the mud cannot be maintained and if the mud cannot be maintained the well could be lost or the mud could hold back pressure after losing water and cause a blowout. Once a well starts drilling, the water has to be secured and without that it really does become a serious safety issue. He said if trucking water to the site is an option, it could take 75 to 100 loads of water per day and that is a lot of unnecessary trucking especially if a fire hydrant is nearby. He said trucking water is also a safety issue because there would be large trucks constantly turning in and out of the property onto the roadways and that is one of the key reasons oil companies prefer getting water from fire hydrants. He said there is no such thing as a perfect ordinance or perfect required remediation plan.

Mr. Dake said OKC and Edmond used to require sight proof fencing, but no longer do and are against sight proof fencing. He said sight proof fencing is an attractive nuisance where children, teenagers, or others can go to be able to do thing where no one can see them. He said there is also a safety issue because since you cannot see through the fence, many times you cannot tell the equipment site is not being well maintained where with see through fencing everyone can see the equipment or see if the site is leaking. Chairman Kovach asked if Mr. Dake approved of a six foot fence with barbed wire on top and should that be the responsibility of the producer and Mr. Dake said Baron fences their tank batteries with an eight foot chain link fence with barbed wire at top and the well head is fenced with a six foot chain link fence with barbed wire on top. He said the fences need to be constructed so they can be easily taken down to get into the site to maintain the equipment. Councilmember Holman said a lot of older wells in Norman are not guarded by a six foot fence; they are guarded by a four foot cattle guard that anyone can get over and that is his concern especially in newly developed rural areas.

Mr. Dake said there is no problem with Norman's current ordinance. He said wells have been drilled in Norman without incident and all this discussion is taking place over a questionable newspaper story. He said oil companies try to find the best spot topographically to protect watersheds. He said when fracking is done, water flows back to a surface pond where it is evaporated back in the atmosphere and although there is some loss of water, not all water used is lost.

Public Comments, continued:

Ms. Marge Greer, 735 South Lahoma, asked if there are any other community Norman can purchase water from besides OKC and Mr. Komiske said Norman has a pipe connection with OKC, but the Strategic Water Supply Plan is reviewing long term solutions for water needs. He said other cities such as Noble are looking at Norman as an alternative water source.

Mr. Ken Myers, 5 Burlington Place, said the official term for the oil well owner is "operator." He said the best regulation for a "spill" is a Spill Prevention Plan that is specific to oil only. He said recycling of fracking water is such a new technology that techniques change quickly so it would be difficult to interface with that.

Mr. Casey Holcomb, 127 West Acres, said someone mentioned OKC has a 300 foot setback for wells being situated near a waterway, but the River Keeper Alliance recommends a 1,000 feet to 4,000 feet setbacks. He said watersheds are a source of life for the community and asked that Council not let them get polluted by oil wells.

Mr. Joe Griffith, 508 Chautauqua, said he retired from Phillips Petroleum, spent 40 years drilling oil wells, and is a Norman taxpayer. He said water is going to be the next oil and must be protected. He estimates water consumption during a regular drilling operation to be 7,000 gallons per day and would estimate the daily cost from the City to be \$50 to \$60 per day. He said a truck load of water is going to cost about \$200 and three truckloads a day would be needed. He said if the operator is forced to use water from the lake or river, they have to treat the water with caustic soda, sodium hydroxide, soda ash, etc., but the City is selling water already treated. He said the operator should pay triple what the water costs the City.

Item 2, being:

MISCELLANEOUS DISCUSSION.

None

ADJOURNMENT.

The meeting adjourned at 7:20 p.m.

enda A

ATTEST:

City Clerk

Mayor