

AMENDED

CITY COUNCIL OVERSIGHT COMMITTEE MEETING

**CONFERENCE ROOM – MUNICIPAL BUILDING
201 WEST GRAY**

WEDNESDAY, MAY 14, 2014

6:00 P.M.

- 1. DISCUSSION REGARDING ORDINANCE REQUIREMENTS ASSOCIATED TO THREE UNRELATED PERSONS RESIDING IN A SINGLE FAMILY RESIDENCE.**
- 2. DISCUSSION REGARDING OIL AND GAS APPLICATION, PERMIT, AND DRILLING PROCESSES PRIMARILY REGULATIONS FOR FENCING AND GAS FLARES.**
- 3. MISCELLANEOUS DISCUSSION.**

Item 1

THREE UNRELATED PERSONS



office memorandum

To: City Council Oversight Committee

From: Susan Connors, Director of Planning and Community Development *SC*
Leah Messner, Assistant City Attorney

Date: May 8, 2014

Subject: Three Unrelated Persons Ordinance

BACKGROUND:

The City Council Oversight Committee met to discuss this topic at their February meeting. During that meeting, the Committee discussed the potential options regarding the Three Unrelated Persons ordinance, heard from interested citizens, and asked Staff to prepare additional information for the Committee's discussion at their May 14, 2014 Committee meeting. First, the Committee asked Staff to provide more information on the Fair Housing Act protections. Second, the Committee asked Staff to review possible modifications to the Ordinance in order to include a variance procedure. Third, the Committee asked Staff for more information regarding other enforcement options that would resolve concerns addressed by the Three Unrelated Persons Ordinance if Council chose to modify or repeal the Ordinance.

DISCUSSION:

Fair Housing Act

The federal Fair Housing Act, 42 U.S.C. §§ 3601 – 3619, provides that it is the policy of the United States to provide, within constitutional limitations, for fair housing throughout the United States. Under the Fair Housing Act, it shall be unlawful: (a) to refuse to sell or rent after the making of a bona fide offer, or to refuse to negotiate for the sale or rental of, or otherwise make unavailable or deny, a dwelling to any person because of race, color, religion, sex, familial status, or national origin; or (b) to discriminate against any person in the terms, conditions, or privileges of sale or rental of a dwelling, or in the provision of services or facilities in connection therewith, because of race, color, religion, sex, familial status, or national origin. 42 U.S.C. § 3604.

“Familial status” is a defined term in the Fair Housing Act. It means “means one or more individuals (who have not attained the age of 18 years) being domiciled with -- (1) a parent or another person having legal custody of such individual or individuals; or (2) the designee of such parent or other person having such custody, with the written permission of such parent or other person.” 42 U.S.C. § 3602(k).

The United States Tenth Circuit Court of Appeals, the court with federal appellate jurisdiction over all of the state of Oklahoma, heard a case in 1995 regarding the definition of “familial status.” In *Mountain Side Mobile Estates Partnership v. Secretary*

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of Housing and Urban Development, the residents of a mobile home park challenged the mobile home park's policy of limiting occupancy of each mobile home to not more than three persons. 56 F.3d 1243 (10th Cir. 1995). The subject mobile home park was built in the 1960s to accommodate "older" single-wide mobile homes of 8 to 10 feet wide and 30 to 55 feet long. *Id.* at 1246. The park cannot accommodate the modern single-wide or double-wide mobile homes, which are much wider and longer. *Id.* The density in the park is almost 10 mobile homes per acre, whereas modern parks average 5 to 6 mobile homes per acre. *Id.* Because of concerns with the age of the park, the size of the lots, and the sewer capacity of the park, the park owners studied options for occupancy limitations that would prevent damage to the quality of life at the park. *Id.* at 1255. As a result of this study, the park owners decided to implement the no more than three persons per mobile home rule. *Id.* at 1255.

In 1991, Jacqueline VanLoozenoord, her three minor children, and her "roommate and companion," Michael Brace, moved into a mobile home in the park. *Id.* at 1246. Prior to the time that VanLoozenoord, her children, and companion purchased the mobile home in place and moved in, they did not contact park management or apply for tenancy. *Id.* In addition, the mobile home sellers did not advise them of the occupancy limit. *Id.* Park management, upon determining that there were five persons living in the mobile home, told VanLoozenoord that they would have to move and eventually served them with a notice to vacate. *Id.* As a result, VanLoozenoord filed a written complaint with the Denver office of HUD asserting that Mountain Side had violated the familial status provision of the 1989 amendments to the FHA. Brace filed a similar companion complaint. *Id.* at 1247. On appeal to the Tenth Circuit Court of Appeals, the Court ultimately determined that the mobile home park's three person occupancy limitation was the result of a legitimate business need and refused to find a violation of the Fair Housing Act.

Though this case is factually distinguishable from a potential legal challenge to the City of Norman's Three Unrelated Persons Ordinance, i.e. private mobile home park as opposed to government actor and occupancy limit policy as opposed to citywide ordinance, it demonstrates how courts have allowed restrictions on occupancy, despite the familial status of persons challenging the rule, when the restriction is demonstrably based on quality of life. In addition, the case reinforces that the Fair Housing Act's definition of familial status is intended primarily to protect families with minor children rather than preventing any sort of inquiry into the familial relationships between potential tenants or purchasers.

Variance Option

The City of Williamsburg, Virginia, home to the College of William & Mary, has an ordinance limiting occupancy to not more than three unrelated persons in single family homes. However, they have adopted a variance process allowing this number to be increased to four unrelated persons upon satisfaction of certain conditions. If the conditions are satisfied, the City of Williamsburg issues a conditional use permit for the increase in occupancy. A copy of the City of Williamsburg's variance procedure ordinance is attached to this Memo.

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In addition, Staff has drafted a variance procedure ordinance, similar to the one used in Williamsburg, for Council's discussion. According to the draft ordinance, the residential occupancy of a quasi-unit quarter may be increased from three unrelated persons to four unrelated persons by administrative approval of the Planning Director subject to certain conditions. Several of the figures in the draft ordinance have been left blank for the Committee's input and discussion. The first condition is submission of an application that includes a floor plan with dimensions and location of each room, a location map, location of all parking, lot coverage, and location of trash and recycling containers. The next condition requires that the dwelling unit contain a minimum square footage of living space. The third condition requires a minimum number of parking spaces per dwelling unit. Spaces must comply with current City code, i.e. size, location, and paving. The draft ordinance includes an option to allow a property owner to count a number of on-street parking spaces if the Committee wishes to do so. The fourth condition requires compliance with the International Property Maintenance Code prior to the grant of a permit for an increase in occupancy.

The next condition allows for input from neighboring property owners prior to grant of an increase of occupancy. The procedure included in the draft ordinance is similar to how the City currently permits street closures for special events. This procedure requires the applicant for an occupancy increase to obtain signatures from each property owner either in support or opposition to the occupancy increase. The draft ordinance does not define a certain percentage of supporting property owners required for grant of the permit nor does it define a specific amount of property owners from whom signatures must be obtained. Options for this might be: property owners within 350 feet, property owners within the same block, or immediately adjacent property owners.

If the above conditions are satisfied, the Planning Director would then issue the conditional use permit for the occupancy increase. Once that permit is issued, the property owner would then submit, within 30 days of issuance of the permit, the names and contact information for all of the occupants as well as documentation that the occupants are aware of the occupancy limit and the pertinent City codes. Once this is done, the conditional use permit would be extended for a term of up to four years. The City of Williamsburg allows for this duration of permit, but Council could vary this as desired.

Next, the draft ordinance addresses violations of the permit and allows the permit to be revoked if violations occur. If the permit is revoked, the property would return to the three persons occupancy limit. Under the draft ordinance, the permit can be revoked for violations of the occupancy limit or other violations of applicable City codes or state statutes. If a permit is revoked, the property would not be eligible for a new permit for four years. This time limit is from the City of Williamsburg's ordinance and Council can vary it as desired.

This draft ordinance is presented to the Committee as an option for discussion. Staff is available to conduct additional research or do additional drafting as requested.

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Other Enforcement Options

The City of Norman currently has other ordinances that can be used to resolve issues caused by more than three unrelated persons occupying a single family home. First, the City of Norman has parking ordinances that prevent parking in the grass, parking across sidewalks, parking on the street for more than twenty-four hours without moving the vehicle, among others. Second, the City of Norman has a variety of noise and party related ordinances. Chapters 15 and 10 of the Code of Ordinances ban nuisance parties and regulate the amount of permissible noise. Chapter 15, Sections 15-506 and 15-507 and Chapter 10, Sections 10-301 et seq. Third, the City of Norman has ordinances regulating nuisances, trash, inoperable vehicles, and property maintenance that could be enforced against over-occupied properties if there were violations of that type. These ordinances are located in Chapter 10 of the Code.

It has been the experience of the Planning Department and Code Compliance Division that these types of violations do occur at over-occupied properties, and the above discussed ordinances could be, and have been, used to resolve those violations. However, with many of the properties that have been worked for three unrelated ordinance violations, these issues continue until the over occupancy situation is resolved. For example, tenants move in and out of these properties requiring Code Compliance to work frequent parking violations. These parking issues are frequently more easily and more economically solved in terms of City investment, when the over occupancy issue is resolved.

RECOMMENDATION:

The above information is provided for the Committee's information and discussion at the May 14, 2014 City Council Oversight Committee meeting. Staff will be available for questions and comments at that time.

Attachments: City of Williamsburg Ordinance
Draft Ordinance for Variance Procedure

Ordinance from City of Williamsburg

Sec. 21-619. Increase in residential occupancy for single-family detached dwellings.

- (a) The residential occupancy in a single-family detached dwelling may be increased from three unrelated persons to four unrelated persons with administrative approval by the zoning administrator or his/her designee, and subject to the following:
 - (1) The application shall include: a floor plan showing the location, name, dimensions and floor area of all rooms; and a plot plan showing the location of the dwelling, the location of on- and off-site parking, the lot coverage of the driveways and parking areas, and the location of trash and recycling containers.
 - (2) The single-family detached dwelling unit shall be the only dwelling unit on the lot.
 - (3) The single-family detached dwelling unit shall be located in a rental inspection district that has been established in accordance with Chapter 5, Building and Building Regulations, Article VII, Identification and Inspection of Rental Dwelling Units.
 - (4) The dwelling unit shall have a floor area of at least 2,000 square feet of living space, excluding garages, unfinished basements, or other unfinished areas.
 - (5) Four parking spaces shall be provided. Parking spaces may be off-street in accordance with Article V, Parking, or located along the frontage of the adjoining public street and contiguous to the lot. The minimum length of a parking space located on an adjoining public street shall be 18 feet, and shall not include curb cuts for driveways.
 - (6) Trash and recycling containers shall be enclosed by a fence or wall.
 - (7) The requirements of the Virginia Uniform Statewide Property Maintenance Code and the rental inspection program as set forth in Article VII of Chapter 5 (where applicable) shall be met at all times. Said inspection(s) must be complete before a certificate of occupancy is issued for the increase in occupancy.
- (b) Upon the zoning administrator's determination that all of the requirements of subparagraph (a) of this section have been met, the zoning administrator shall provide a conditional certificate of occupancy, at which point, the owner or agent may proceed to lease the property to no more than four unrelated persons. The conditional certificate is intended as a temporary certificate demonstrating that all the pre-occupancy conditions of subparagraph (a) have been met, and shall include an expiration date of no longer than 30 days from the date of the proposed occupancy date in the application, after which time, the dwelling may not be occupied by four unrelated people unless the owner and occupants have satisfactorily completed the additional requirements as hereinbelow

provided. The zoning administrator may grant a 30-day extension of the conditional certificate of occupancy upon good cause shown and with a written request by the owner.

- (1) Prior to occupancy, the owner shall provide the zoning administrator with a copy of the written lease for the four occupants containing the names of the occupants, and the telephone numbers for the occupants. Only occupants that are signatories to the lease shall reside in the dwelling. If the occupants of the dwelling change during the duration of the lease, or if a new lease is executed, the owner shall provide the zoning administrator or his/her designee with a copy of the updated lease, and the name and telephone number of the new occupant(s) and the fourth unrelated person shall not occupy the dwelling prior to the new lease and occupant information is provided to the zoning administrator or his/her designee. The owner may redact from the lease the yearly and monthly rental amount prior to submitting the lease to the zoning administrator or his/her designee.

All subleases must be in writing. The sublease must clearly state the name and telephone number of the vacating tenant, the name and telephone number of the new tenant, and must contain the starting and ending date of the sublease. The owner or tenant shall provide a copy of the sublease to the zoning administrator prior to the effective date of the sublease.

The owner or agent shall distribute to each of the occupants a pamphlet provided by the zoning administrator or his/her designee which outlines the requirements of this section at least seven days prior to occupancy of the dwelling by the occupants and shall file with the zoning administrator or his/her designee an affidavit that said pamphlet has been provided to the occupants, including the date of when the pamphlet was provided.

- (2) The zoning administrator or his/her designee shall provide to the owner, and the owner shall return to the zoning administrator or his/her designee a form wherein the occupants acknowledge that they have read and understand and agree to comply with the requirements of the program, which form shall be signed by all of the occupants of the property including new occupants at change of tenancy, and returned to the zoning administrator or his/her designee prior to the occupancy of the dwelling.
- (3) The dwelling shall be inspected by the zoning administrator or his/her designee on an annual basis. The initial inspection shall occur upon occupancy of the property or as soon thereafter as practicable. Subsequent inspections shall occur annually if the property continues to be occupied by more than three unrelated people under this section. The zoning administrator or his/her designee shall arrange to inspect the property with the owner and/or occupants, which inspection shall be permitted by the owner and/or occupants, should the property be occupied at the time of the inspection.

- (4) A certificate of occupancy shall be issued by the zoning administrator or his/her designee when all of the required conditions have been met. The duration of the certificate of occupancy shall not exceed four years, and shall expire on May 31 of the fourth year. Renewal shall require the issuance of a new certificate of occupancy.
 - (5) Repeated, founded complaints of excessive noise, litter, or other violations of this chapter, Chapter 12, the Virginia Uniform Statewide Building Code, or the Virginia Statewide Fire Prevention Code, as such are amended from time to time, or other behaviors at the dwelling constituting a nuisance under the City Code and Code of Virginia as amended from time to time, shall be cause for the revocation of the certificate of occupancy granted herein. Complaints shall be deemed to be founded when after an investigation by the police, fire marshal, building inspector, zoning administrator, or other appropriate member of city staff, said member of staff determines that it is more probable than not that the violation has occurred.
 - (6) If the zoning administrator or his/her designee receives a complaint that more than the permitted number of occupants are residing at the dwelling, and after investigation the zoning administrator or his/her designee deems the complaint to have been made in good faith, and with reasonable cause, then the zoning administrator shall provide notice to the occupants of the property that an inspection of the property has been scheduled, and provide the time wherein the property shall be inspected. Posting of the notice on the front door of the property by the zoning administrator or his/her designee shall constitute sufficient notice. The zoning administrator or his/her designee will make reasonable efforts to contact the owner and provide the owner with the notice that the property will be inspected. However, failure of the owner to receive notice that the property is scheduled for an inspection shall not cause the inspection to be postponed or cancelled. The occupants of the property shall permit the inspection of every room of the dwelling for the sole purpose of determining the number of people residing at the property. No inspection pursuant to this section shall be conducted by the zoning administrator or his/her designee with less than 24 hours' notice to the occupants that such an inspection has been scheduled.
- (c) If at any time the dwelling does not meet the requirements of the applicable regulations, or the owner, agent or occupants of the property fail to fully comply with the provisions of this section, the certificate of occupancy shall be revoked and the normal occupancy limit of three persons shall be enforced. Any owner or agent, whose certificate under this section has been revoked under this paragraph, shall not be eligible to receive a new certificate for that dwelling for a period of four calendar years. A certificate may be applied for after the four-year period of time, or, an application may be submitted by the owner or agent for that dwelling prior to that four-year period of time if the property has been sold by the previous owner to a third party purchaser in an arms length transaction. The four-year period will continue if such sale was made to a legal entity of which the

previous owner or agent has any ownership stake or made to a close family member of the previous owner or agent.

Sec. _____. Increase in residential occupancy for Quasi-Unit Quarters.

- (a) The residential occupancy in a quasi-unit quarter may be increased from three unrelated persons to four unrelated persons with administrative approval by the Planning Director or his designee subject to satisfaction of the following requirements:
 - (1) Submission of an application by an owner or agent that includes: a floor plan showing the location, name, dimensions and floor area of all rooms; and a plot plan showing the location of the dwelling, the location of on- and off-site parking, the lot coverage of the driveways and parking areas, and the location of trash and recycling containers.
 - (2) The dwelling unit shall have a floor area of at least _____ square feet of living space, excluding garages, unfinished basements, or other unfinished areas.
 - (3) _____ parking spaces shall be provided per quasi-unit quarter with a requested increase in occupancy. These spaces must comply with the standards contained in _____. Not more than ____ of the required parking spaces may be on-street in accordance with Article V, Parking, or located along the frontage of the adjoining public street and contiguous to the lot. The minimum length of a parking space located on an adjoining public street shall be 18 feet, and shall not include curb cuts for driveways.
 - (4) Trash and recycling containers shall be enclosed by a fence or wall.
 - (5) The requirements of the International Property Maintenance Code, as adopted by the City of Norman, shall be met at all times. The quasi-unit quarter with the requested increase in occupancy must pass an inspection for compliance by the City of Norman Code Enforcement Division prior to approval for the increase in occupancy.
 - (6) Written approval from at least _____ percent (____%) of property owners located within ____ feet of the quasi-unit quarter with the requested occupancy increase. Written approval from these property owners shall be obtained according to the following requirements:
 - (a) Approvals shall be on a form approved by the Planning Director.
 - (b) The original signature of each property owner, including the typed or printed name of the property owner and a notation that the property owner either supports or opposes the increase in occupancy.
 - (c) An affidavit by the owner or agent circulating the form that the owner or agent provided each property owner with a copy of the application for occupancy increase at the time the property owner signed the form.

- (d) The Planning Director shall count a property owner's failure to sign the form as opposition to the occupancy increase, unless the owner or agent demonstrates that the owner or agent attempted to contact the affected person as required by subsection _____.
 - (e) An owner or agent who is unable to obtain the signature of a property owner on the form shall mail to the property owner by certified mail, return receipt requested, a portion of the form requesting the person's signature and a copy of the application for occupancy increase. An owner or agent must include a pre-addressed, postage paid, return envelope with the form. The owner or agent must address by the return envelope and certified mail receipt to the Planning and Community Development Department. An owner or agent must deliver to the Planning and Community Development Department all unclaimed notice envelopes that are returned to the applicant.
- (b) Upon the Planning Director's determination that all of the requirements of subparagraph (a) of this section have been met, the Planning Director shall provide a conditional certificate of occupancy, at which point, the owner or agent may proceed to occupy the property with no more than four unrelated persons. The conditional certificate is intended as a temporary certificate demonstrating that all the pre-occupancy conditions of subparagraph (a) have been met, and shall include an expiration date of no longer than 30 days from the date of the proposed occupancy date in the application, after which time, the dwelling may not be occupied by four unrelated people unless the owner and occupants have satisfactorily completed the additional requirements as hereinbelow provided. The Planning Director may grant a 30-day extension of the conditional certificate of occupancy upon good cause shown and with a written request by the owner.

- (1) Prior to occupancy, the owner shall provide the Planning Director with the names and the telephone numbers for the occupants. Only these persons shall reside in the dwelling. If the occupants of the dwelling change during the duration of the conditional certificate of occupancy, the owner shall provide the Planning Director or his/her designee with a copy of the updated occupant names and phone numbers, and the fourth unrelated person shall not occupy the dwelling until this information is provided to the Planning Director or his/her designee.

The owner or agent shall distribute to each of the occupants a pamphlet provided by the Planning Director or his/her designee which outlines the requirements of this section at least seven days prior to occupancy of the dwelling by the occupants and shall file with the Planning Director or his/her designee an affidavit that said pamphlet has been provided to the occupants, including the date of when the pamphlet was provided.

- (2) The Planning Director or his/her designee shall provide to the owner, and the owner shall return to the Planning Director or his/her designee a form wherein the occupants acknowledge that they have read and understand and agree to comply

with the requirements of the program, which form shall be signed by all of the occupants of the property including new occupants at change of tenancy, and returned to the Planning Director or his/her designee prior to the occupancy of the dwelling.

- (3) The dwelling shall be inspected by the Planning Director or his/her designee on an annual basis. The initial inspection shall occur upon occupancy of the property or as soon thereafter as practicable. Subsequent inspections shall occur annually if the property continues to be occupied by more than three unrelated people under this section. The Planning Director or his/her designee shall arrange to inspect the property with the owner and/or occupants, which inspection shall be permitted by the owner and/or occupants, should the property be occupied at the time of the inspection.
- (4) A certificate of occupancy shall be issued by the Planning Director or his/her designee when all of the required conditions have been met. The duration of the certificate of occupancy shall not exceed four years, and shall expire on May 31 of the fourth year. Renewal shall require the issuance of a new certificate of occupancy.
- (5) Repeated, founded complaints of excessive noise, litter, or other violations of this Code of Ordinances or state or federal law, shall be cause for the revocation of the certificate of occupancy granted herein. Complaints shall be deemed to be founded when after an investigation by the police, fire marshal, building inspector, Planning Director, or other appropriate member of city staff, said member of staff determines that it is more probable than not that the violation has occurred.
- (6) If the Planning Director or his/her designee receives a complaint that more than the permitted number of occupants are residing at the dwelling, and after investigation the Planning Director or his/her designee deems the complaint to have been made in good faith, and with reasonable cause, then the Planning Director shall provide notice to the occupants of the property that an inspection of the property has been scheduled, and provide the time wherein the property shall be inspected. Posting of the notice on the front door of the property by the Planning Director or his/her designee shall constitute sufficient notice. The Planning Director or his/her designee will make reasonable efforts to contact the owner and provide the owner with the notice that the property will be inspected. However, failure of the owner to receive notice that the property is scheduled for an inspection shall not cause the inspection to be postponed or cancelled. The occupants of the property shall permit the inspection of every room of the dwelling for the sole purpose of determining the number of people residing at the property. No inspection pursuant to this section shall be conducted by the Planning Director or his/her designee with less than 24 hours' notice to the occupants that such an inspection has been scheduled.

- (c) If at any time the dwelling does not meet the requirements of the applicable regulations, or the owner, agent or occupants of the property fail to fully comply with the provisions of this section, the certificate of occupancy shall be revoked and the normal occupancy limit of three persons shall be enforced. Any owner or agent, whose certificate under this section has been revoked under this paragraph, shall not be eligible to receive a new certificate for that dwelling for a period of four calendar years. A certificate may be applied for after the four-year period of time, or, an application may be submitted by the owner or agent for that dwelling prior to that four-year period of time if the property has been sold by the previous owner to a third party purchaser in an arms length transaction. The four-year period will continue if such sale was made to a legal entity of which the previous owner or agent has any ownership stake or made to a close family member of the previous owner or agent.

Item 2

OIL AND GAS WELL DRILLING



office memorandum

TO: City Council Oversight Committee

FROM: Susan Connors, AICP, Director, Planning and Community Development Department *SC*

DATE: May 8, 2014

RE: Oil and Gas Well Site Security and Fencing

At the November 13th Oversight Committee meeting the committee members had a brief discussion regarding oil well site security. The Committee requested that staff prepare information on the City of Norman's well site safety policy. In December staff prepared and submitted information to the Committee regarding fencing and security. Much of that information is repeated in this memo, but is updated as appropriate.

BACKGROUND

The first oil and gas ordinance in Norman was Ordinance O-8283-69 approved in 1983. It did have a requirement to fence at Sec 13-1508 (c). The language read "Any person who completes any well as a producer shall have the obligation to enclose said well, together with its surface facilities, by a fence sufficiently high and properly built so as to ordinarily keep persons and animals out of the enclosure; provided that, in non-platted areas, the Oil and Gas Inspector, at his discretion, may waive the requirement of any fence or may designate the type of fence to be erected. Fences must be kept locked at all times when workers of permittee are not present. A duplicate set of keys to said lock shall be filed with the Oil and Gas Inspector."

In November 1985 that section of the ordinance was amended to read as follows:

"Any person who completes any well as a producer shall enclose said well, together with its surface facilities, by a fence at least six (6) feet high and constructed of a material and in a manner so as to be impregnable to children and animals under ordinary or foreseeable circumstances. Fences must be kept locked at all times when workers of the permittee are not present. A duplicate set of keys to said lock shall be filed with the Oil and Gas Inspector." By ordinance O-9394-43 in 1994 that section of the ordinance was amended again to read as follows:

"Any person who completes any well as a producer shall enclose said well, together with its surface facilities, by a fence at least six (6) feet high and constructed of a material and in a manner so as to be impregnable to children and animals under ordinary or foreseeable circumstances; provided that, where the well site is greater than 600 feet from a dwelling or business structure, the Oil and Gas Inspector may waive the requirement of a fence or may designate

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the type of fence to be erected. Fences must be kept locked at all times when workers of the permittee are not present. A duplicate set of keys to said lock shall be filed with the Oil and Gas Inspector.”

The above paragraph is the current regulatory language in the City Code.

DISCUSSION:

There are currently 163 permitted wells within the Norman city limits. Of the 163 wells, 125 are active pumping, 18 are inactive, 16 are saltwater injection, 4 are saltwater supply and 1 is a saltwater disposal. A map of the Active Wells is attached.

The current City regulations require 6-foot chain-link fencing. Eight wells are completely fenced with 6-foot chain-link or equal, seven wells have 6-foot chain-link or equal fencing separately around the pumping unit and the tanks, and various other wells have 6-foot chain-link or equal around only the well or the tanks.

All well sites in Norman do have fencing, but not all have fences that are six feet high because in some instances the height was waived due to their distance from dwellings or businesses. They do, however, meet the ordinance standards that were in effect at the time of drilling. Each site is regularly inspected and some are inspected more frequently if they have any issues.

The subdivision ordinance requires that the fencing for an oil well must be shown on the preliminary plat. The subdivision language is as follows:

Sec. 19-303.U. In the instance where there is one (1) or more active oil and/or gas well(s), lease road(s), tank batteries, flow liens, gas sales lines, dead man anchors or any other related equipment, located within a proposed preliminary plat, any and all such items shall be shown on the submitted preliminary plat. Both existing conditions and any proposed changes to the existing conditions must be indicated on the preliminary plat. The information shall include, but not be limited to well access, size of the well location, including appurtenant equipment, any change in lay out or operations of the well site such as relocation of the lease road or moving of the tank batteries and flow liens, fencing, easements for flow lines, gas sales line, communication cables, and electric power lines. The information must also stipulate the parties responsible for constructing any lease road and approach and fencing. Easements necessary to provide for flow lines, gas sales lines, power supply lines and communication cables must be designated in writing. All information required must be shown on a site plan that has been reviewed and approved for compliance with oil and gas ordinances. A copy of the site plan shall be provided to the oil and gas inspector to become part of the well records until such time of the plugging and restoration of well locations(s) has been completed. Oil well operators shall be notified by the oil and gas inspector of

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any predevelopment informational meetings(s) as an interested party where a preliminary plat contains a well(s), lease road, tank battery, flow line, gas sales line, dead man anchors, or any other related equipment that they operate. Notice shall be given in the same format as property owners within the required notice area.

In 2009 staff collected information regarding oil and gas well ordinance information from several Oklahoma cities and has updated that information for this meeting. That information is attached for your review.

RECOMMENDATION:

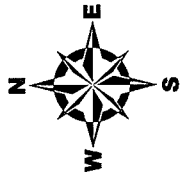
The regulations of the Norman Code could be amended to be more in line with other cities' regulations regarding fencing, screening and security. The following changes are recommended:

1. Require 6-foot tall chain-link fencing with 3 strands of barbed wire at the top around the well and the tanks batteries which are within 600 feet of any structure unless waived by the land owner.
2. Landscaping could be required to screen the well sites, but only when they are visible from a public street. Norman regulations do not allow the drilling of a well on platted property, so most wells are located on agricultural land.
3. Identify the well operator as the party responsible for maintaining the fencing.
4. Fences shall not be required on drill sites during initial drilling, completion or reworking operations as long as twenty-four (24) hour on-site supervision is provided. However, a secured entrance gate on the access road containing a lock (accessible to appropriate city staff) shall be required and all gates are to be kept locked when the Operator or his employees are not on the premises.
5. Amend the Code so that all existing wells would need to comply with the current fencing requirements with one year from the date of the approval of the amendment.

CONCLUSION:

Staff submits the above information and attachments for the Oversight Committee's consideration and discussion at their May 14, 2013 meeting. Staff will be available to answer questions at that time.

Active Wells



Friendship
Deer Creek

Stella

Bethel

Indian Hills

Franklin

Tecumseh

Rock Creek

Robinson

Alameda St

Lindsay

State Hwy 9

Cedar Lane

Post Oak

Classen

Imhoff

Constitution

Jenkins

Chautauque

Chenoweth

Berry

Magee

Franklin

Rock Creek

Robinson

Main

Indian Hills

132nd E

120th E

108th E

84th E

72nd E

60th E

48th E

36th E

24th E

12th E

12th W

14th W

16th W

18th W

20th W

22nd W

24th W

26th W

28th W

30th W

32nd W

34th W

36th W

38th W

40th W

42nd W

44th W

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Oil & Gas Ordinance Information
Various Oklahoma Cities and Fort Worth, TX

Yukon

The Yukon ordinance is similar to Norman's, but has a fire code reference, and a more descriptive fence requirement.

Fencing is required around tank batteries, booster pumps, compressor stations, pipeline above ground appurtenances, and well heads. All fences must be woven wire, not less than 9 gauge, chain link wire mesh of not more than 2", at least 6' high with locked gates. Angular extensions outward secured by 3 strands of barbed wire shall be placed on top of the fence.

Permits are issued by staff. City Council has the authority to revoke or suspend permits.

Duncan

If minimum set back requirements are met, a permit may be issued in any zoning district. The set back is 150' from a surface property boundary line other than a street right of way, or within 400' of a residence, commercial building, church, school, building intended for human occupancy or fresh water well. The distance is measured from the proposed permanent enclosure of the facility.

All surface facilities associated with oil and gas production shall be secured by a fence of not less than 6' in height provided with 3 strands of barbed wire affixed to the top therefore. The fence must be 9 gauge wire mesh material, with openings no larger than 4". Fence and gate shall be kept locked. Fencing may be a single enclosure or multiple surface facilities.

All surface equipment shall be painted and maintained in a good state of condition, operation, and appearance.

Permits are issued by staff.

Shawnee

Well locations are approved by corporation commission rules. However, the owners of more than 80 percent of the surface area exclusive of streets and alleys within 300 feet, and 90 percent of such owners within 150 feet, of the proposed well site have consented in writing to the drilling of such well at such location.

All pumps, tanks, and equipment shall be enclosed on all sides by either a sight-proof wooden stockade fence at least six feet in height, or a woven wire fence of not less than nine gauge chain link wire mesh of not less than 2 inches, at least six feet high, with additional angular extensions outward secured by three strands of barbed wire.

City Commission approved permits.

Mustang

Permits require a public hearing at Planning Commission and City Council. Surface owner agreements are required in writing, or if negotiations in good faith have not resulted in agreement with a surface owner, a petition filed in District Court may be submitted.

No well shall be drilled within 600 feet of the outside wall of any public, religious, or school building. No well shall be any closer than 300 feet to a dwelling without first obtaining written permission from all property owners whose property is within 300 feet. The distance shall be calculated from the well bore to the closest exterior point of the wall. In addition tanks must be set no closer than 50 feet to a non-fireproof building or to the outside of block lines; provided, however, that the application in writing may be made to the Chief of the Fire Department, and if approved by him and City Council, tanks may be set at a nearer distance if allowed. The distance may be increased by the City Council after consideration of topography, occupancy, adjoining property, or construction of buildings, etc.

Fencing and/or screening are required if a well site is situated less than 600 feet from any dwelling. The fence and/or screening shall consist of a sturdy opaque fence and/or dense decorative planting not less than eight feet in height. If a well site is greater than 600 feet from a dwelling, the well and all related equipment requires either a sight-proof wooden stockade fence at least six feet in height or a woven wire fence of not less than nine-gauge chain link wire mesh of not more than two inches, at least six feet high, with an additional extension outwardly secured by three strands of barbed wire.

Edmond

A special use permit is required to be reviewed by the Planning Commission and approved by the City Council.

There is no height or style requirement on fences, and no fence is required in non-urban areas.

Any platting of the property constitutes agreement by the developer to fence the well site at the developer's expense.

Moore

Staff recommends issuance of permits to City Council.

Fencing is required to be six to eight feet in height, with the type of fence based on location, but all are required to have barbed wire along the top. Landscaping is also required with evergreens to be used as screening. Within 300 feet of a residentially zoned property including RE and R-4, the fencing must be a wood fence with no more than ½ inch between slats. As an alternative, a chain link fence could be used with landscaped screening.

All equipment must be painted and kept in good repair to eliminate rust and/or corrosion.

New storage tanks can not be permitted within 600 feet of a dwelling, house, established business structure, street, highway, industry, church or school.

Oklahoma City

The Board of Adjustment must grant a variance with conditions for permits to be issued.

No well shall be drilled nor shall any tank battery, well facilities or equipment be located and no permit shall be issued for a well to be drilled at any location which is nearer than 300 feet to an occupied or unoccupied dwelling or other building used or designed and intended to be used for human occupancy unless the applicant obtains written permission for the location of the well from all owners and lessees whose dwelling or other subject building is within 300 feet of the proposed well. The same information relates to public building, religious building or school building within 600 feet of the proposed well.

Fencing is required around a well with its surface facilities by a sight-proof fence sufficiently high and properly built to keep persons and animals out of the enclosure. All gates shall be kept locked when authorized persons are not within the enclosure. The inspector may determine that a different type of fence may be required that still meets the objectives. Well sites within 600 feet of an occupied dwelling must add screening with berms or landscaping six feet in height plus fencing. Oklahoma City allows the applicant to request by letter an exemption from the sight proofing and screening.

Equipment is required to be painted and kept in good repair.

Fire prevention section is included.

Norman

Inspector issues permits.

Fencing six feet high and constructed in a manner as to be impregnable to children and animals under ordinary and foreseeable circumstances; provided where the well is greater than 600 feet from a dwelling or business structure, the oil and gas inspector may waive the requirement of a fence or may designate the type of fence to be erected. Fences shall be locked at all times when workers of the permittee are not present.

Drilling is prohibited in areas that contain ten acres or less unless written consent of surface owner is obtained; contained or described by any approved final plat; contained or described by an approved certificate of survey as per section 19-607 (subdivision regulations); or zoned parkland, parkland district, or planned unit development district.

Drilling also prohibited within 600 feet of any dwelling or business structure unless waived by the land owner.

Do not require equipment to be painted.

No fire prevention section.

Fort Worth, TX

SEC. 15-43. FENCES

- A. **Fences.** All pad sites and off-site fracture ponds shall be secured with a permanent fence with a secured gate and Knox box as follows:
1. The fence shall be at least six (6) feet in height;
 2. Support posts shall be set in concrete and shall be imbedded into the ground to a depth sufficient to maintain the stability of the fence; provided, however, so long as stability of the fence is maintained, temporary fence posts shall not be required to be set in concrete;
 3. The site shall be completely enclosed by a permanent dark green or black steel chain link or wrought iron fence on at least two sides of the pad site, one of which will face the City's right-of-way, if applicable. A solid masonry fence may be constructed on the remaining two sides of the pad site;
 4. The chain link fence shall have a minimum thickness of eleven (11) gauge;
 5. Posts and rails shall be standard black or dark green welded pipe;
 6. Tension rods shall be three-eighths-inch round steel bolt stock. Adjustable tighteners shall be turnbuckle or equivalent having a six-inch minimum take-up. Tension bars shall have a minimum thickness of one-fourth by three-fourths inch; and
 7. Fences shall not be required on drill sites during initial drilling, completion or reworking operations as long as twenty-four (24) hour on-site supervision is provided. A secured entrance gate on the access road containing a Knox box shall be required and all gates are to be kept locked when the Operator or his employees are not on the premises.
- B. **Gate specifications.** All chain link fences shall be equipped with at least one (1) gate. The gate shall meet the following specifications:
1. Each gate shall be not less than twelve (12) feet wide and be composed of two (2) gates, each of which is not less than six (6) feet wide, or one (1) sliding gate not less than twelve (12) feet wide. If two (2) gates are used, gates shall latch and lock in the center of the span;
 2. The gates shall be of black or dark green chain link construction that meets the applicable specifications, or of other approved material that are at least as secure as a chain link fence and shall be included in the chain link or wrought iron portion of the fence;
 3. The gates shall be provided with a combination catch and locking attachment device for a padlock, and shall be kept locked except when being used for access to the site;
 4. Gates shall be designed so that they do not interfere or obstruct the public rights-of-way; and
 5. Operator must provide the Fire Chief with a "Knox Padlock" or "Knox Box with a key" to access the well site to be used only in case of an emergency.



office memorandum

TO: Oversight Committee Members

FROM: Susan Connors, AICP, Director, Planning and Community Development *SCC*

DATE: May 8, 2014

RE: Public Body Approval of Drilling Permit Applications

BACKGROUND

During discussions at the April 30, 2014, joint Council Finance and Oversight Committee meeting, Council members requested that staff explore possible options for City Council consideration of drilling permits. Additionally, it was requested that staff review options for Council consideration of drilling permits as they relate to Council approval in urban areas and administrative approval of permits in rural areas, and also drilling permits as they relate to drilling operations in the Lake Thunderbird watershed areas. Further staff research into the details and implications of enacting these amendments will be needed.

ANALYSIS

Outlined in the sections below are drilling permit approval processes as required in the City Ordinances for Norman, Oklahoma City, Edmond and Moore.

One distinction that the Norman Ordinance contains that is not outlined in the other Ordinances surveyed is the restriction of drilling on approved final-platted property or properties with approved Certificate of Surveys (COS). Additionally, the Norman Ordinance restricts drilling on properties zoned for parkland and Planned Unit Developments (PUD).

The Ordinances surveyed for other municipalities as outlined below do not draw this distinction, and, therefore, could allow a drilling permit applicant to potentially be approved for drilling operations on final-platted property, regardless of tract size or zoning.

Norman

The City's Gas and Mineral Production Ordinance does not require a Council approval for a Special Use Permit for drilling operations or specifically restrict drilling to a specific designated zoning area. The Ordinance does, however, prohibit drilling on parcels less than 10 acres, unless there is consent from the surface owner. Additionally, there are restrictions that prohibit drilling in properties zoned as parkland, in a parkland district or in a Planned Unit Development (PUD). Drilling is also prohibited in areas

Public Body Approval of Drilling Permit Applications

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contained or described by approved Final Plats and Rural Certificate of Surveys (COS). These restrictions result in a majority of the drilling taking place in A-2, un-platted and non-COS properties.

Further restrictions placed on drilling operations under our Ordinance include:

- No internal combustion engine drilling operations within 600 ft. from any dwelling or business structure (unless waived by the landowner)
- No drilling or operations within 600 ft. from any church or school (unless waived by the landowner)
- No drilling or operations within 300 ft. of any producing freshwater well

Oklahoma City

The City of Oklahoma City has two processes for approval of drilling permits. The first process allows for administrative approval of permits for drilling operations in the City's U-7 zone (Oil and Gas District). This district is generally in and around the I-35/I-235 area.

In the event that the drilling operation will take place outside of the U-7 zone, applicants can apply to the City's Board of Adjustments for a variance to drill. From staff discussions with City of OKC staff, we have learned that a majority of the new drilling permits that have been coming forward for approval recently have been going through the Board of Adjustments for a variance.

Further restrictions placed on drilling operations under the OKC Ordinance include:

- Drilling prohibited within 300 ft. of occupied or unoccupied dwelling (unless waived by landowner)
- Drilling prohibited within 600 ft. of religious buildings, school buildings or public buildings (unless waived by property owners and lessees).
- Drilling prohibited within 300 ft. of any freshwater well
- Additional restrictions are applied to drilling operations related to drilling in watershed areas of Oklahoma City Water Reservoirs, other areas near the reservoirs and areas near Arcadia Lake. These regulations relate to specific setback distances, spill control plans, protection dikes, pipe casing requirements, equipment specifications and additional controls for any drilling permit issued for these areas.

Edmond

The City of Edmond requires drilling permit applicants to obtain a Special Use Permit from the Edmond City Council (w/Planning Commission review) prior to applying for a drilling permit.

Further restrictions placed on drilling operations under the Edmond Ordinance include:

- Drilling is prohibited within 300 ft. of any residence, commercial building or producing fresh water well. This distance can be reduced to 200 ft. with written consent of property owners within the radius. Water well separation distances cannot be reduced.

Moore

The City of Moore Ordinance requires City Council approval before a drilling permit is issued. Drilling is not restricted to a specific zoning area.

Further restrictions placed on drilling operations under our Ordinance include:

- Drilling operations and production tanks are prohibited within 600 ft. of any church, school building, residence, industry, commercial building, public or private water well or any other “structure where people congregate”.
- Drilling operations and production tanks are prohibited within 600 ft. of a public or private water well.



office memorandum

TO: Oversight Committee Members

FROM: Susan Connors, AICP, Director, Planning and Community Development *SC*

DATE: May 8, 2014

RE: Gas Flares at Oil Well Sites

BACKGROUND

City Staff was asked to provide information on the gas flares that are located at oil well sites in the City. Gas flaring is the process by which excess natural gas is released from an oil field and burned. The excess gas can be produced during drilling and extraction of oil. This "associated gas", a waste by-product under these circumstances, can be used to generate electricity; however, necessary infrastructure, a suitable market and sufficient price structure must be in place before waste becomes energy. Especially in areas lacking pipelines and other gas transportation infrastructure, vast amounts of such associated gas are commonly flared as waste or unusable gas. The flaring of associated gas may occur at the top of a vertical flare stack or in some states it may occur in a ground-level flare in an earthen pit. The Oklahoma Corporation Commission will not allow ground-level flares in an earthen pit.

The recent burn ban that was established by the Governor Fallin on May 5th exempts gas vents and flares associated with the extraction of oil and gas from the ban as long as the top of the vent pipe is raised well above the surrounding vegetation.

The City of Norman oil and gas regulations incorporate the National Fire Protection Association (NFPA) standards used by the Norman Fire Department, and the Oklahoma Corporation Commission mirrors the NFPA standards in their regulations.

ANALYSIS

Because natural gas is valuable, companies would rather capture rather than flare it. However, there are several reasons why it may be necessary to flare gas during drilling, production or processing.

During well production testing after drilling is completed

After a shale oil/gas well is drilled and hydraulically fractured, a temporary flare is used during well production testing. Testing is important in order to determine the pressure, flow and composition of the gas or oil from the well. Flaring at the well site normally lasts for several days or weeks, until the flow of liquids and

Gas Flares at Oil Well Sites

Page 2

gas from the well and pressures are stabilized, but may flare for months depending on the amount of gas in the system.

Flaring at well sites to recover oil

The gas flares are the result of venting off the gas from an oil well during the completion of the well and the pumping process. Gas flares are also the result of having no pipelines available to be able to collect the gas for sale to a gas purchaser. The only option to venting the gas (with or without the gas flare) is piping. If a producer wants to pipe the gas, they have to have a connection point to a major gas line purchasing company or have to put in a scrubber station on site to enable them to sell their gas as processed gas to a company. At the present there are no scrubber stations operated at any of the 164 wells in Norman. A scrubber station is not a requirement in State law. A purchasing company would usually only be interested in installing a pipeline to capture the gas if enough gas is produced which makes it economically feasible. This usually means the well would be venting approximately 500 MCF per day. None of the current oil wells in Norman are producing that much gas.

What are the environmental concerns related to flaring?

Pure natural gas is mostly methane, a clean-burning fuel. However, methane is also a greenhouse gas (GHG) that, when released directly into the air, traps heat in the atmosphere. Because of this, there are concerns about methane and other volatile organic compounds (VOCs) from oil and gas operations. The best option is to capture gas from wells, compressors and processing operations for use. However, in situations where capturing the gas is not possible, it is better from an air quality perspective to burn the gas through a flare system rather than vent it directly into the atmosphere.

Who regulates flaring?

If gas from an oil well is not piped for sale then it must be vented or burned. The Oklahoma Corporation Commission requires operators to obtain a permit for venting or flaring of gas if the amount of gas produced is over 50 MCF (1 MCF = 1000 cubic feet) per day; and if it is over that amount, the operators must flare instead of vent. Burning is safer than venting because it eliminates the gas immediately from the air. The flaring is required because of the potential for explosion and other environmental problems in larger quantities. Even static electricity could trigger an explosion.

The City of Norman Fire Department is made aware of the planned flares and inspects the location with the Oil and Gas Inspector prior to the installation and use of the flares.

How do the New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) recently passed by U.S. EPA affect flaring?

Gas Flares at Oil Well Sites

Page 3

In April 2012, U.S. EPA passed rules to address air emissions from oil and gas exploration, production, processing and transportation. Under the rules, oil and gas well operators are required to reduce air emissions from drilling and hydraulic fracturing.

Beginning in January 2015, U.S. EPA will require that well operators capture the gas which they term “green completions” to control air emissions. Until then, well operators are allowed to direct emissions to a combustion device (e.g., flare) as an alternative to green completions. Green completions are also called reduced emission completions (or RECs). Green completions take place after a well has been hydraulically fractured, when the gas begins to come to the surface through the well. At this stage, gas is combined with residual water from the hydraulic fracturing. What makes the well completion more environmentally friendly, or “green,” is that the gas, as it is separated from the water, is captured for use or sale instead of being released to the atmosphere.

Many larger drilling companies, however, already employ green completions as part of their current practices. There are some exceptions to implementing green completions, including exploratory wells and certain low-pressure wells.

In Oklahoma these new rules will be enforced by ODEQ.

CITY OF NORMAN REGULATIONS

The City of Norman has no Ordinance that prohibits or regulates gas flares (open or enclosed); that is regulated through the Oklahoma Corporation Commission. As indicated in the Background section above, the Commission will not allow the use of ground-level flares in an earthen pit.

The City of Norman Fire Department is made aware of the planned flares and inspects the location with the Oil and Gas Inspector prior to the installation and use of the flares.

**PROPOSED AMENDMENTS TO AIR REGULATIONS
FOR THE OIL AND NATURAL GAS INDUSTRY**

FACT SHEET

OVERVIEW OF ACTION

- On July 28, 2011, the U.S. Environmental Protection Agency (EPA) proposed a suite of highly cost-effective regulations that would reduce harmful air pollution from the oil and natural gas industry while allowing continued, responsible growth in U.S. oil and natural gas production.
- The proposal is based on proven technology and best practices that the oil and gas industry is using in some states today. It includes the first federal air standards for wells that are hydraulically fractured, along with requirements for several other sources of pollution in the oil and gas industry that currently are not regulated at the federal level.
- Today's proposal includes four air regulations for the oil and natural gas industry: a new source performance standard for VOCs; a new source performance standard for sulfur dioxide; an air toxics standard for oil and natural gas production; and an air toxics standard for natural gas transmission and storage.
- The proposal would cut smog-forming volatile organic compound (VOC) emissions by nearly one-fourth across the oil and gas industry, including a nearly 95 percent reduction in VOCs emitted from new and modified hydraulically fractured gas wells. This significant reduction would be accomplished primarily through use of a proven technology to capture natural gas that currently escapes to the air. That gas would then be made available for sale.
- The estimated revenues from selling the gas that currently goes to waste are significant – so much so that today's proposed rule is anticipated to quickly result in a net savings of nearly \$30 million annually, while significantly reducing pollution from this expanding industry.
- The VOC emission reductions from wells, combined with reductions from storage tanks and other equipment, are expected to help reduce ozone levels in areas where oil and gas production occurs. In addition, the reductions would yield a significant environmental co-benefit by reducing methane emissions from new and modified wells. Methane, the primary constituent of natural gas, is a potent greenhouse gas – more than 20 times as potent as carbon dioxide. Oil and natural gas production and processing accounts for nearly 40 percent of all U.S. methane emissions, making the industry the nation's single largest methane source.
- The proposed changes also would reduce cancer risks from emissions of several air toxics such as benzene.
- EPA estimates the following combined annual emission reductions when the proposed amendments are fully implemented:
 - VOCs: 540,000 tons, an industry-wide reduction of 25 percent

- Methane – 3.4 million tons, which is equal to 65 million metric tons of carbon dioxide equivalent (CO₂e), a reduction of about 26 percent.
- Air Toxics –38,000 tons, a reduction of nearly 30 percent.
- The proposed rules would apply to the more than 25,000 wells that are fractured and refractured each year, as well as to storage tanks and other pieces of equipment. As part of today’s proposal, EPA is seeking comment on several steps to reduce the compliance burdens of the rule to industry and to state, local and tribal air agencies.
- Today’s proposal continues EPA’s efforts to support responsible oil and natural gas exploration and production that protects public health and the environment. In June, the Agency signed a memorandum of understanding with the departments of Interior and Agriculture establishing a common process for the agencies to follow in analyzing the potential air quality impacts of proposed oil and gas activities on federally managed public lands. The collaborative approach in the agreement will provide increased certainty, clarity and transparency about requirements on public lands.
- EPA will accept public comment on the proposed amendments for 60 days after publication in the Federal Register. Information on submitting written comments is included at the end of this fact sheet. The Agency also will hold three public hearings on the proposals in the Dallas, Denver, and Pittsburgh areas. Additional information on the hearings will be announced in a separate notice.
- The Clean Air Act requires EPA to periodically review these rules. EPA must take final action by Feb. 28, 2012.

AIR EMISSIONS FROM OIL AND GAS PRODUCTION IN THE U.S.

- In 2009, about 1.1 million wells were producing oil and natural gas in the United States. The wells are located in many areas of the country, including both urban and rural areas.
- The majority of new wells drilled today produce gas, and the majority of those new wells use a process known as hydraulic fracturing or “fracking.” In this process, a mixture of water, chemicals and a proppant (usually sand) is pumped into a well at extremely high pressures to fracture rock and allow natural gas to escape. An estimated 11,400 new wells are fractured each year; another 14,000 are re-fractured to stimulate production or to produce natural gas from a different production zone.
- The gas these wells produce goes to gathering and boosting stations that take it to processing plants. These plants remove contaminants to make the gas ready for the pipelines that deliver it to commercial, industrial and residential customers. Transmission compression stations help move the gas through 1.5 million miles of natural gas pipelines across the United States.
- Some of the largest air emissions in the oil and gas industry occur as natural gas wells that have been fractured are being prepared for production. During a stage of well completion known as “flowback,” fracturing fluids, water, and reservoir gas come to the surface at a high velocity and volume. This mixture includes a high volume of VOCs and methane, along with air toxics such as benzene, ethylbenzene and n-hexane. The typical flowback process lasts from three to 10 days.

- Pollution also is emitted from other processes and equipment in the industry that prepare gas for sale and that assist in moving it through pipelines.

SUMMARY OF PROPOSED REQUIREMENTS

New Source Performance Standards

- The Clean Air Act requires EPA to set new source performance standards (NSPS) for industrial categories that cause, or significantly contribute to, air pollution that may endanger public health or welfare. Oil and gas production, processing, transmission and storage are significant sources of VOCs, which contribute to the formation of ground-level ozone (smog).
- The law requires EPA to review new source performance standards every eight years.

New Source Performance Standards for Volatile Organic Compounds (VOCs)

- The oil and gas industry is a significant source of VOCs, which contribute to the formation of ground-level ozone (smog). EPA's existing NSPS for VOCs were issued in 1985. The existing standards address only VOC leak detection and repair at new and modified natural gas process processing plants, meaning significant sources of VOC emissions in the oil and gas industry currently are not subject to nationwide regulation.
- EPA is proposing new standards for several processes or pieces of equipment used in oil and gas production that have not previously been subject to federal regulation. These include well completions at new hydraulically fractured natural gas wells and at existing wells that are fractured or "re-fractured." These processes are the source of an estimated 500,000 tons of VOC emissions each year.
- The proposal would require VOC reductions from:

- 1) *Completions of new hydraulically fractured natural gas wells and re-completions of existing natural gas wells that are fractured or refractured.***
 - VOC emissions would be minimized through the use of "green completions," also called "reduced emissions completions." In a green completion, special equipment separates gas and liquid hydrocarbons from the flowback that comes from the well as it is being prepared for production. The gas and hydrocarbons can then be treated and sold.
 - Some states, such as Wyoming and Colorado, require green completions, and a number of companies are voluntarily using this process through EPA's Natural Gas STAR program. In addition, green completions have been identified as an option for thousands of new gas wells in the Uintah Basin in Utah to address concerns about air quality impacts associated with natural gas development in the region.
 - EPA estimates that use of this equipment for the three- to 10-day flowback period reduces VOC emissions from completions and recompletions of hydraulically fractured wells by 95 percent.

- When gas cannot be collected, VOCs would be reduced through pit flaring, unless it is a safety hazard.
- Methane, a potent greenhouse gas, also would be significantly reduced as a co-benefit of reducing VOCs.
- The green completion requirements would not apply to exploratory wells or delineation wells (used to define the borders of a natural gas reservoir), because they are not near a sales line. Those wells must use pit flaring to burn off their emissions, unless it is a safety hazard.

2) *Compressors*

- Compression is necessary to move natural gas along a pipeline. The proposed rule would reduce VOC emissions from two types of compressors:
 - *Centrifugal compressors* would have to be equipped with dry seal systems.
 - Owners/operators of *reciprocating compressors* would have to replace rod packing systems every 26,000 hours of operation.

3) *Pneumatic controllers*

- Pneumatic controllers are automated instruments used for maintaining a condition such as liquid level, pressure, and temperature at wells, gas processing plants, compressor stations, among other locations. These controllers often are powered by high-pressure natural gas. These gas-driven pneumatic controllers may release natural gas (including VOCs and methane) with every valve movement, or continuously in some cases.
- EPA is proposing VOC emission limits for pneumatic controllers.
 - For new or replaced pneumatic controllers at gas processing plants, the proposed limits would eliminate VOC emissions. These limits could be met through using controllers that are not gas-driven.
 - For controllers used at other sites, such as compressor stations, the emission limits could be met by using controllers that emit no more than six cubic feet of gas per hour.
- The proposed amendments include exceptions for controllers in applications requiring high-bleed controllers for certain purposes, including operational requirements and safety.

4) *Condensate and crude oil storage tanks*

- Tanks with a throughput of at least 1 barrel per day of condensate or 20 barrels per day of crude oil (equivalent to about 6 tons of VOC emissions per year) must reduce VOC emissions by 95 percent.

5) *Natural gas processing plants*

- EPA is proposing to amend the existing NSPS for natural gas processing plants to strengthen the leak detection and repair requirements that apply to these plants to reduce VOC emissions.

New Source Performance Standards for Sulfur Dioxide

- The new source performance standards for sulfur dioxide (SO₂) were issued in 1985 and apply to natural gas processing plants. The Agency is proposing to strengthen the performance standards for plants processing gas with the highest hydrogen sulfide content (at least 50 percent), in order to further reduce sulfur dioxide emissions from these facilities.

Air Toxics Standards

- Air toxics are pollutants known to, or suspected of, causing cancer and other serious health effects. The Clean Air Act requires EPA to conduct two types of reviews of air toxics standards for major sources:
 - **A residual risk assessment:** This assessment must be conducted one time, eight years after a standard is issued, to determine what risks remain, and whether more protective standards are necessary to protect public health.
 - **A technology review:** This review must be conducted every eight years after an air toxics standard is issued to determine if better emission control practices, processes or technologies have become cost-effective or available that would warrant revising the standard.
 - EPA reviewed both the air toxics standards for oil and natural gas production, and the standards for natural gas transmission and storage. Both of the existing standards were issued in 1999.

Air Toxics Standards for Oil & Natural Gas Production

- EPA's residual risk review found that the current maximum individual cancer risk from oil and natural gas production – is 40 in 1 million, which falls within a range EPA considers acceptable.
- However, the review also found that the level of emissions *allowed* under the existing air toxics standard could drive that risk significantly higher – as high as 400 in 1 million, which EPA does not consider acceptable. To prevent this from occurring, EPA is proposing changes to the standards for major sources to ensure that cancer risk does not increase beyond current levels.
- To address this potential risk, EPA is proposing to remove the 1 ton per year benzene compliance option for large glycol dehydrators (used to remove excess water vapor from natural gas). Under the revised requirements, all large dehydrators would have to reduce air toxics their emissions by 95 percent.
- In addition, EPA is proposing to:
 - Establish emission limits for small glycol dehydrators at major sources. A dehydrator would be considered small if it has an annual average natural gas throughput of less than 3 million cubic feet per day, or actual annual average benzene emissions of less than 1 ton per year.
 - Require all crude oil and condensate tanks at major sources to control their air toxics by

at least 95 percent. In addition, emissions from these tanks will be counted toward determining whether a facility is a major source.

- Tighten the definition of a leak for valves at natural gas processing plants. This change is a result of the technology review.
- The proposed changes to this rule do not apply to sources that are considered “area sources,” meaning they have fewer than 10 tons a year of emissions of a single air toxic and less than 25 tons a year of a combination of toxics. Standards for these sources were issued in 2007.

Air Toxics Standards for Natural Gas Transmission and Storage

- EPA’s technology review of these standards did not identify controls that warranted changes to the current standards. However, the Agency’s residual risk review of these standards estimates the current maximum individual cancer risk from air toxics emissions from natural gas transmission and storage is 90 in 1 million, a risk level that EPA considers acceptable.
- To protect public health with an ample margin of safety, EPA is proposing changes to this standard that would reduce the maximum risk level to 20 in 1 million.
- The proposed changes would remove the 1 ton per year benzene compliance alternative for large glycol dehydrators and establish emission limits for small glycol dehydrators at major sources. For this rule, a glycol dehydrator would be considered small if it has an annual average natural gas throughput of less than 10 million cubic feet per day or annual average benzene emissions of less than 1 ton.

REDUCING COMPLIANCE BURDENS

- To reduce the compliance burden to industry, state and local governments and tribes, EPA also is proposing to exempt certain sources from Title V permitting requirements that would be triggered by the proposed rule.
- The proposed exemption would apply only to sources covered by the NSPS that are not major sources and that do not have to obtain Title V permits for another reason. EPA believes the recordkeeping and reporting requirements included in the proposed standards are sufficient to assure compliance.
- VOC sources generally are considered “non-major” if they emit less than 100 tons per year. That emissions threshold is lower in certain nonattainment areas, however.
- EPA also is seeking comment on additional approaches to provide the industry and regulatory agencies with more efficient and effective tools for maximizing transparency compliance with the proposed regulations. These include submitting performance test results to an EPA electronic database, and third-party compliance verification.

COSTS AND BENEFITS

- Today’s proposed rules would be extremely cost-effective, yielding significant reductions in air pollution at a net savings to the industry. EPA estimates the combined annual costs of meeting the

proposed requirements would be \$754 million in 2015. The estimated value of the natural gas and condensate that would be made available for sale is \$783 million – a net savings of \$29 million when the rules are combined.

- For the new source performance standards, the annual costs are estimated at \$738 million, with the value the natural gas and condensate yielding an annual net savings of \$45 million as a result of those rules.
 - For the air toxics standards, EPA estimates the annual costs of compliance at \$16 million.
- The industry is expected to recover its costs quickly – in about 60 days for green completions, and within about one year for other equipment.
 - The VOCs and air toxics reductions in the proposed rule are expected to improve outdoor air quality, reduce cancer risk from air toxics emissions and reduce health effects associated with exposure to ground-level ozone (smog) and fine particles (particle pollution). Exposure to both pollutants is linked to increased asthma attacks, hospital admissions and emergency room visits, and premature death. These rules also are anticipated to yield significant climate co-benefits by significantly reducing emissions of methane, a potent greenhouse gas. EPA was unable to model health benefit estimates for the rule, due to uncertainties about future locations of oil and gas emissions. Air quality changes associated with air toxics and VOC reductions can be highly localized.
 - Today's proposed rules also would yield significant reductions in methane, a potent greenhouse gas. EPA's Regulatory Impact Analysis for the rule estimates the value of the climate benefits that would result from this reduction at \$1.6 billion annually by 2015. This includes the value of climate-related benefits such as avoided health impacts, crop damage and damage to coastal properties.

BACKGROUND

- In January 2009, WildEarth Guardians and the San Juan Citizens Alliance sued EPA, alleging that the Agency had failed to review the new source performance standards and air toxic standards for the oil and natural gas industry.
- In February 2010, the U.S. Court of Appeals for the D.C. Circuit entered a consent decree that requires EPA to sign proposals related to the review of these standards. EPA must sign the proposal by July 28, 2011 and issue final standards by Feb. 28, 2012.
- EPA's Natural Gas STAR program has been working with U.S. oil and gas companies since 1993 to adopt proven, cost-effective technologies and practices that improve operational efficiency and reduce methane emissions. Many Gas STAR partners already are using the green completions that EPA has proposed to require across the industry. For more information on EPA's Natural Gas STAR program, visit <http://www.epa.gov/gasstar/index.html>

HOW TO COMMENT

- Comments, identified by Docket ID Number EPA-HQ-OAR-2010-0505, may be submitted by one of the following methods:
 - www.regulations.gov: follow the on-line instructions for submitting comments.
 - E-mail: Comments may be sent by electronic mail (e-mail) to a-and-r-Docket@epa.gov.
 - Fax: Fax your comments to: (202) 566-9744.

- Mail: Send your comments to: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mail Code: 2822T, 1200 Pennsylvania Ave., NW, Washington, DC 20460.
- Hand Delivery or Courier: Deliver your comments to: EPA Docket Center, 1301 Constitution Ave., NW, Room 3334, Washington, D.C. 20004. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

FOR MORE INFORMATION

- Today's proposed rule and other background information is available <http://www.epa.gov/airquality/oilandgas>. Information also is available at EPA's electronic public docket and comment system (<http://www.regulations.gov>), using Docket ID Number EPA-HQ-OAR-2010-0505.
- The rule and materials also are available in hard copy at the EPA Docket Center's Public Reading Room, room 3334 in the EPA West Building, located at 1301 Constitution Avenue, NW, Washington, DC. Hours of operation are 8:30 a.m. to 4:30 p.m. eastern time, Monday through Friday, excluding federal holidays.
 - Visitors are required to show photographic identification, pass through a metal detector, and sign the EPA visitor log. All visitor materials will be processed through an X-ray machine as well. Visitors will be provided a badge that must be visible at all times.