

**Fort Worth League of Neighborhoods Recommendations on 2008 Revisions
to City of Fort Worth Gas Drilling Ordinance**

This year, the Fort Worth League of Neighborhood Associations (FWLNA) identified gas drilling to be one of the most important challenges facing Fort Worth neighborhoods.

In conjunction with the League of Women Voters of Tarrant County, FWLNA made the commitment to provide education to the general public through a series of five forums that featured information on urban gas drilling issues presented by a wide range of field experts, from gas industry representatives and attorneys to scientists and nationally-recognized environmentalists.

The comprehensive coverage of urban gas drilling topics on FWLNA's website (www.fwlina.org) was commended by Time magazine earlier this year as an important community resource.

In October, FWLNA convened a special President's Summit on Urban Gas Drilling to conduct a formal survey of neighborhood association Presidents in order to better understand their concerns and points of view.

As advocates for neighborhoods throughout Fort Worth, FWLNA presents the following position statements in response to the proposed revisions to the City's gas drilling ordinance.

We endorse the recommendations of the Gas Drilling Task Force as amended by City staff recommendations. We endorse the recommendations of the Gas Drilling Task Force Minority Members where they differ from the Task Force recommendations. In addition, our recommendations go farther than any of the other three (GDTF, GDTF Minority, or Staff) in some instances and are outlined below.

1. **Noise**

1. On the measurement of ambient noise level, we support the minority report suggestion that the City seek a second opinion about measuring “ambient” similar to other municipalities which take peak noises out of the average and measure on the LQ 90 scale.

2. The definition of ambient should exclude “any energy industry noise.” If existing or future energy industry noise is not excluded we will get a “creeping ambient,” that is, the noise levels will continue to increase with each additional new energy industry facility or operation.

3. All gas drilling activity noise should be trapped and attenuated at the source of the noise.

4. All noise limits and measurements should be in dBA with the exception of Low Frequency Noise which should be in dBC.
5. Establish a standard ambient noise level rather than having the operator measure for 72 hours. The variables affecting measurements are enormous, from excessive wind, the dawn chorus of birds, a dog barking, lawnmowers, to any other non-typical noise sources which can vary the results by 20+ decibels rendering them useless from the standpoint of ensuring a quiet environment for residents. An ambient survey can still be used, as currently defined, but only if the operator can demonstrate that there are extenuating circumstances whereby it is no longer a typical ambient condition.
6. Compliance measurements (including complaints) should be where people live (25 ft from the residence) and not property lines as these could be some distance from the receiver and too harsh on industry.
7. The low frequency noise limits in Ordinance Section B, # 2(d) should be simplified to read “Shall not exceed 65 dBC at any residence.”
8. The temporary adjustments in Ordinance Section B, # 4 are meaningless because they are almost impossible to catch. There are so many things that can cause noise, we cannot reasonably separate one activity from the other. Consider more practical examples for adjustments if required.
9. Consider architectural standards for all energy facility buildings within 600 feet of residential right of way to blend in with the area.
10. We encourage ongoing analysis of the effects of low frequency noise and its contribution to potentially detrimental effects on public health. We encourage adoption of appropriate ordinance measures to mitigate for these effects once known.

2. **Compressors**

1. All compressors (including line compressors and lift compressors) should be fully housed, with roofs, regardless of their proximity to residences or commercial uses (including industrial uses) and should include appropriate mufflers.
2. As mitigation to the deleterious effects of low frequency noise, fully enclosed compressors should also have noise attenuating mufflers, emission control, and ventilation control.
3. Line Compressors located in I, J, K districts that contain or abut a residential use must meet the noise level recommended in the residential use for compliance.
4. Line compressors should be set back 600 feet from residential use

5. Auxiliary compressor equipment setback should be no less than 200 feet from the property line of any Protected Use or occupied building.
6. For all compressors, the permit should be referred to the Gas Drilling Review Committee.

3. Protected Uses and Definitions

A. PROTECTED USES:

1. Trinity Trails

- a. We support the trails being designated as a Special Protected Use with a 600 foot protection to be measured from the center line of the Trails.
- b. The Trinity Trails should not be used for drilling thoroughfares.

2. Lake Worth

We support the designations of Lake Worth and its immediate watershed and any bodies of water that are part of the Fort Worth water supply as environmentally sensitive areas (ESAs), a specific, newly designated category of Special Protected Uses.

B. DEFINITIONS:

1. Definition of “Public Building”

We support the following definition:

Public building means all buildings used or designed to and intended to be used for auditoriums, museums, and libraries, theaters, assembly halls, mortuary chapel, dance halls, exhibition halls, museums, gymnasiums, bowling lanes, libraries skating rinks, courtrooms, restaurants (with occupancy greater than 50), stores and shopping centers.

We suggest Council consider adding the following uses for protection as public buildings:

1. Jails;
2. Courthouses;
3. Municipal buildings;
4. Office buildings greater than two stories or occupied by more than 150 people; and

5. Sports stadiums.

2. Definition of “Public Park”

We support retaining the current ordinance definition of public park:

"Public park means any land area dedicated to and/or maintained by the City for traditional park-like recreational purposes, but shall not include privately owned amusement parks or privately owned or privately managed golf courses."

4. **Setbacks & Notice**

1. Equipment setback. We agree with the staff recommendation of a 200 foot setback of equipment from the property line.
2. No well bore ever to be closer than 200 feet from any structure.
3. The City should review its policies and practices for notices and signage to ensure that citizens are adequately informed with factual information regarding proposed activities.
4. We support changing the distance calculation from a well site for schools so that the calculation begins at the property line of the school rather than the building line. However, we would go further to also support that change for ALL schools, including those within another Protected Use (such as a school located on the grounds of a church). We believe that the same protection should be afforded to all children attending any school, not just those who attend schools which are stand alone facilities.

5. **Gas Drilling Review Committee**

This committee should include neighborhood representation and should be established to provide an opportunity for public comments and public discussion with City staff and industry representatives. This committee should review proposed locations of all well sites (including non-high impact wells subject to administrative review), pipelines, compressor stations and truck routes. Before granting permits for non-high impact wells, residential property owners should be notified that such administrative permission is pending and should be invited to comment on these well sites, pipeline locations, compressor stations and truck routes. This notification should include residential property owners closest to these sites as well as neighborhood associations closest to these proposed sites (well sites, pipelines locations, compressor stations and truck routes).

6. Pipelines

Health and safety issues surrounding pipelines are many and varied. We support the formation of a committee of pipeline experts (sources for those experts could include cities where oil or gas pipelines exist such as Austin or Houston, the Pipeline Safety Trust, the Office of Pipeline Safety of the U.S. Department of Transportation, the Texas Railroad Commission, etc.) who would review the city's current ordinances and regulations on pipelines and present recommendations on pipelines to the City Council to insure best practices are used by the industry and that the health and safety of citizens of Fort Worth are adequately protected from pipeline effects.

We support the recommendation to use City of Fort Worth right of way as the location for pipelines instead of the private property (i.e., front or back yards) of residential property owners.

We also support:

1. Research and implementation of "pipeline corridors" such as in Houston and Austin to facilitate orderly development of the city and pipeline routes.
2. Minimal duplication of lines (encourage companies to share lines).
3. Requirement of odorization and corrosion inhibitors.
 - a. Corrosion inhibitors should be required to be injected at the wellhead of gas wells. The chemical composition of the corrosion inhibitors should be required to be disclosed; testing should be required to ensure that corrosion inhibitor chemicals do not leak from pipelines.
4. Additional review and consideration of the Southlake and Flower Mound ordinances.
5. Regulation of flow lines, consistent with State and Federal requirements.
6. Requirement of full scale maps of any pipelines to be installed.
7. Referral of proposed pipeline routes to the Gas Drilling Review Committee.
8. Inclusion of pipeline route in application for drilling permit.
9. Minimum bury depths of 20 feet or more within densely populated areas of the City.
10. All pipelines within city limits be built to the dense population pipeline standards, because Fort Worth will continue to grow and develop over the life of these activities.
11. Assurance of fiscal responsibility for repairs, maintenance and accidents for the life of the pipelines.
12. Require boring of pipelines where possible.

7. **Waivers:**

If a gas drilling company wishes to drill closer than 600 feet from a protected use, no owner waivers or compensation for waivers should be permitted to allow such drilling. Only the City Council should have the power to grant such a waiver.

8. **Environmental Issues:**

We support further study by a panel of experts on air, water and waste and seeking best practices for mitigation of environmental effects before final passage of the Ordinance revisions and make the following suggestions:

1. Hire an Environmental Quality Assurance Director/Inspector Manager to oversee environmental issues associated with gas drilling in Fort Worth.
2. An annual report on drilling technological and environmental advances should be prepared for presentation to the Fort Worth City Council and the Gas Drilling Review Committee.
3. Public disclosure of all contaminants and waste handling practices.
4. Require recycling of waste water. No waste water facilities should be allowed on public land.
5. Allowing drilling and/or pipeline companies to use City right of way for saltwater pipelines is premature until results of the gas drilling water recycling pilot project are presented to the public and the City Council.
6. Require random and periodic sampling of frac fluids, drilling muds and waste water being hauled away from well sites. These samples should be tested in labs and the results should be reported publicly (perhaps on the City Page in the Fort Worth Star-Telegram and on the City's website.)
7. There should be specific management for flowback water from fracking. There should be full disclosure of what is in the flowback water going in and coming out of the process, including chemical and radiological analysis for radium 226 & 228. If hazardous, then this water should be managed appropriately based on chemical constituents.
8. Lake Worth, other bodies of water and their immediate watershed areas that are part of Fort Worth's water supply should be designated as "Environmentally Sensitive Areas"-- ESAs. An additional permit and control category for ESAs should be established which would allow gas drilling and gathering-related activities only in safe proximity to these areas and which are designed to eliminate, as much as possible, any negative environmental impacts resulting from such activities. Particular emphasis should be placed on the need for identification and control measures for all chemicals used in these activities including highest-order prevention of runoff from the entire site pad including particulate and all identified potentially soluble chemicals. No waste water facilities should be allowed in any immediate watershed for water supply

- reservoirs. All other noted Environmental Issue recommendations should be applied to ESAs. The City of Fort Worth should include all appropriate control measures in its lease documents for ESAs where the city is the lessor of the related minerals.
9. Require closed loop mud systems on all wells within the City.
 10. Require mitigation for air emissions: require green completion, vapor recovery systems and electric compressor motors.
 - a. Use electric motors instead of combustion engines for gas drilling activities
 - b. Attach vapor recovery units to well equipment (including tanks and trucks transporting gas drilling wastes or product)
 - c. Eliminate venting of wells during well completion – adopt “green completion”
 - d. Use EPA’s New Source Performance Standards (NSPS) leak detection systems and schedule leak detection on all well fittings and components
 - e. Eliminate all high-bleed pneumatic devices; replace with air-activated devices on well equipment
 - f. All water trucks, construction machinery, and other mobile sources must meet Texas Emission Reduction Plan (TERP) standards
 11. Locate and map historical and abandoned wells before issuing a gas well permit. Require driller to identify/evaluate all older and abandoned wells within 2 miles of new proposed wells to determine if all abandoned wells are plugged and have integrity.
 12. Further study vibro-acoustic disease to refine the distance and low frequency noise mitigation from line compressors.
 13. Require well plugging insurance or initiation of a City owned “superfund” for future well plugging in the event that operators leave abandoned wells unplugged. Do not rely on the RRC to solve this problem within City limits.
 14. Conduct an Environmental Impact Study including air emissions, soil and water sampling to assure the citizens that proper diligence is being exercised to both prevent and control contamination and pollution. This sampling should be done by independent environmental consultants for the City and paid for by fees from the industry. The findings of the study should be incorporated into the Ordinance to ensure that the citizens of Fort Worth are adequately protected.
 15. Hire sufficient numbers of City gas well inspectors to ensure that all wells inside City of Fort Worth city limits are adequately inspected annually at scheduled and unscheduled times.
 16. All lights associated with drilling activities should focus down and should be shielded to eliminate ambient light.
 17. No flaring of wells should be allowed.
 18. All chemicals and materials on a well site (or site associated with gas drilling) should be in watertight buildings (mud huts) and should be secured. There should be secondary containment (berms and linings) around these containers/mud huts. All should be labeled.
 19. No injection wells should be allowed.
 20. Prohibit annular disposal (disposal of material between casing and drill pipe).

21. We support all efforts to mitigate the impact of gas drilling on our environment as proposed in the 2008 revisions to the gas drilling ordinance provisions. Because the long-term consequences associated with urban gas drilling may not yet be known, we also support 1) the establishment of a panel of experts in urban gas drilling environmental effects which would review the City's ordinance immediately and make recommendations on improvements as well as: 2) regular review (annually or bi-annually) by such an environmental panel to measure how well current City of Fort Worth regulations are working and how they might be improved.
22. Incorporate environmental regulations for the City's gas drilling ordinance as outlined in the October 31, 2008 letter from the Oil and Gas Accountability Project to City staff and Mayor and Council regarding 1) preventing contamination; 2) chemical inventories and air and water monitoring; 3) building in buffer zones and proceeding with caution.

9. **Other Recommendations:**

1. The City should encourage and support the formation of volunteer trained groups (much like Citizens on Patrol) to make photographic inspections of wellsites, etc.
2. Create a landman complaint board and require landmen to register with the City.
3. No valve stations or other gas drilling equipment should be allowed above ground in public parks.
4. Require driller contributions designated for fire departments and hazardous materials handling.
5. Hire a Gas Well Drilling Neighborhood Ombudsman to work with and represent neighborhoods on drilling issues (except leasing) and environmental issues caused by gas drilling. Establish a system so that citizens can communicate with the ombudsman via e-mail. The ombudsman should issue a regular report to City Council members on citizen reported issues with drilling and attendant activities.
6. The City should convene biannually a Gas Drilling Ordinance Task Force (with representation from the Fort Worth League of Neighborhoods, the League of Women Voters of Tarrant County, and City Council district neighborhood representatives) to review provisions of the ordinance and make recommendations to the Fort Worth City Council for revisions to the ordinance.

10. Legislative Goals:

We support the city's plan to take an aggressive approach seeking legislative changes with the state and Railroad Commission including:

1. The addition of adequate numbers of state level gas well inspectors to inspect on an annual basis gas wells in the Barnett Shale; there is also a need for an increase in RRC support staff; additionally, more RRC staff is required to a) review, adequately evaluate, and issue permits; b) observe field activities during the drilling and fracturing processes; and c) perform compliance monitoring during the production phase;
2. Amendment of current laws so that operators are no longer classified as public utilities or common carriers;
3. Legislation which would remove the ability of pipeline companies to use the power of eminent domain to place pipelines in urban settings;
4. There is a need to perform additional review of the Railroad Commission Regulations and Texas Commission on Environmental Quality and Texas Department of Health associated regulations. A specific focus of the review should be on the applicability of the regulations to protect human health and the environment with respect to the Barnett Shale drilling and production activities and procedures. A special emphasis of the Barnett Shale situation should be focused on water resources, water usage and wastewater disposal and reuse.
5. There is a need for a state regulatory requirement that the abandoned/orphan wells and sites in the Barnett Shale be considered and evaluated during the drilling permit review process and during the permit application review process for commercial and centralized facilities.
6. In September 2008, the Texas Railroad Commission moved \$750,000. from the Oil Field Cleanup Fund to assist in processing the backlog of well permit applications. The Legislature should address the critical need to focus on having adequate financial resources in the Oil Field Cleanup Fund as well as to fund permit, field and monitoring staff. One program should not suffer in order to fund the other.
7. The Legislature also needs to address the potential for NORM (Naturally Occurring Radioactive Material) contamination of gas drilling flowback water, produced water, tank and pit bottoms, and tubular and surface equipment in the Barnett Shale and the establishment of appropriate cleanup, treatment and disposal requirements.

Additionally, we support the enlistment of local municipalities in the Barnett Shale to support such legislation. We support also the enlistment of civic organizations, such as the Fort Worth League of Neighborhoods, in cities and counties in the Barnett Shale to support such legislation.

Fort Worth League of Neighborhoods
Gas Drilling Committee:

Libby Willis, Chairman (Oakhurst Neighborhood Association)
Patti Crabtree (Crestwood Neighborhood Association)
Randy Means (Berkeley Place Neighborhood Association)
Christina Patoski (Arlington Heights Neighborhood Association)
Barbara Tumlin (Ryan Place Improvement Association)
Joe Waller (Lake Worth Alliance)

Approved by the Fort Worth League of Neighborhoods Board of Directors
Date: November 12, 2008

