# Gas Well Setbacks

### CODE OF ORDINANCES

- Regulations predate the Denton Development Code: first addressed in Section 35-503 of Code of Ordinances via Ordinance 2001-465
  - Allowed by right within Agriculture or Industrial zoning
  - Cannot not be closer than 500 ft. from a place of assembly, institution, or school.
  - Could have residential structure within 250 to 500 ft. if residential owner agreed in writing.

- •Added to Denton Development Code via Ordinance 2002-040
  - By right in RD-5, RC, NR-1, NR-2, RCC-N, RCC-D, EC-C, EC-I, IC-E, and IC-G Zoning Districts
  - Wellhead cannot not be closer than 500 ft. from a place of assembly, institution or school or within 500 ft. of a previously platted subdivision where one or more lots have structures.
  - Could have residential structure within 250 to 500 ft. if residential owner agreed in writing

- Ordinance 2004-059
  - Added Watershed Protection Permit requirements and standards (allowed encroachment in flood fringe\* and riparian ESAs designated as poor)
  - Allowed gas well development within flood fringe of floodplains.
  - By right in RD-5, RC, NR-1, NR-2, RCC-N, RCC-D, EC-C, EC-I, IC-E, and IC-G Zoning Districts
  - Wellhead cannot not be closer than 500 ft. from a place of assembly, institution or school or within 500 ft. of a previously platted subdivision where one or more lots have structures.
  - Could have residential structure within 250 to 500 ft. if residential owner agreed in writing

<sup>\*</sup>The floodway is the channel of the river or stream and the adjacent land that must remain free from obstruction so that the 100-year flood can be conveyed downstream. The flood fringe is the remaining portion of the floodplain. FEMA regulations allow some development in the flood fringe with elevation and flood proofing

- Ordinance 2005-223
  - Added methodology for consumptive use of roads using equivalent single axle loads
  - Setback section was modified, but only to replace the term "road repair agreement" with "road damage remediation agreement"

#### Ordinance 2010-181

- Defined "protected use" as any dwelling, church, public park, public library, hospital, pre - kindergarten, kindergarten or elementary, middle or high school, public pool, public transit center, senior center, public recreation center, hotel or motel.
- Setback increased to 1,000 ft. from protected use or within 1,000 ft. of any lot within a previously platted residential subdivision where one or more lots has one or more structures. This can be reduced by the Zoning Board of Adjustment, but not less than 500 ft.
- The 1,000 foot setback can be reduced if all property owners of a protected use sign a notarized waiver consenting to the reduction. The minimum separation distance shall not be less than 250 ft.
- Minimum separation of 500 ft. from all other features.

#### Ordinance 2013-014

- Setbacks increased to 1,200 ft. from a protected use or previously platted residential subdivision where one or more lots has one or more structures. This can be reduced by the Zoning Board of Adjustment, but not less than 500 ft.
- A protected use can be located as close as 250 ft. from a pre-existing Drilling and Production Site.
- Separation distances measured from the boundary of the Drilling and Production Site identified on the Gas Well Development Site Plan, in a straight line, without regard to intervening structures or objects, to the closest exterior point of any structure occupied by a Protected Use, or the closest lot line of any undeveloped lot within a previously platted residential subdivision where 1 or more lots have 1 or more structures.

#### Ordinance 2015-133

- First time the term "reverse setback" was codified
- Setback decreased to 1,000 ft.
- Setbacks moved to new section of DDC (35.5.10), making setbacks a component of zoning regulations
- Expanded 300 ft. separation of Fire Code from Group A,E, or I (Assembly, Education, or Institutional) uses to all protected uses and established measurement to be from any equipment on the gas well site, not just the wellhead.
- For existing residential subdivision, the reverse setback is measured from closest exterior point of proposed structure to boundary of gas well development site
- For proposed residential subdivision plat, the reverse setback is measured from any undeveloped lot boundary to the closest boundary of the gas well development site plan. If no site plan has been approved, from the closest boundary of the existing drilling and production site.
- The reverse setback for all other habitable structures shall be the distance prescribed by the Fire Code.
- Protected use must maintain 300 ft. between closest exterior point of building of the proposed structure and any equipment on the gas well drilling or production site that stores flammable or combustible liquid or gas

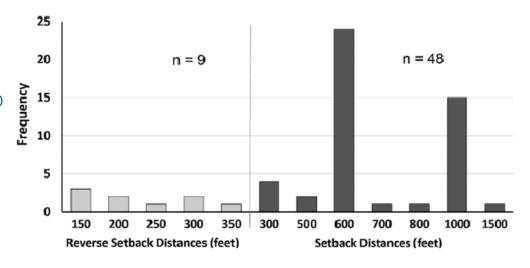
# Setback History Summary

Ordinance	Restrictions for drilling and production by right	Protected Use* Setback	Reverse Setback
2001-465	Agriculture and Industrial Zoning Districts	500 ft.	Not applicable
2002-040	RD-5, RC, NR-1, NR-2, RCC-N, RCC-D, EC-C, EC-I, IC-E, and IC-G Zones	500 ft.	Not applicable
2004-059	RD-5, RC, NR-1, NR-2, RCC-N, RCC-D, EC-C, EC-I, IC-E, and IC-G Zones	500 ft.	Not applicable
2005-223	RD-5, RC, NR-1, NR-2, RCC-N, RCC-D, EC-C, EC-I, IC-E, and IC-G Zones	500 ft.	Not applicable
2010-181	Protected Uses	1,000 ft.	Not applicable
2010-196	Protected Uses	1,000 ft.	250 ft.
2013-014	Protected Uses	1,200 ft.	250 ft.
2015-133	Protected Uses	1,000 ft.	250 ft.

<sup>\*</sup>The term "protected use" was introduced in the 2010-181 ordinance. Prior to this, protections for similar uses was based on fire code definitions of residential structure, place of assembly, institution, or school

## Setback Distances: Tarrant and Denton Counties

- Fry et al: 48 municipalities surveyed
- Setbacks: 30 municipalities (62.5%) are 600 ft. or less; 18 (37.5%) are greater than 600ft. Most common setback greater than 600 ft. is 1000 ft.
- 9 have reverse setbacks
- 5 municipalities (56%) have reverse setbacks of 250 ft. or less, and 4 (44%) have greater than 250 ft.
- Measurement methods are important. "Wellhead to wall" vs. "equipment to wall" vs. "site boundary to wall or additional boundary"
- Denton staff survey of 38 DFW municipalities
- 27 (81%) have setback distances that are 600 ft. or less; 11 (19%) greater than 600 ft.
- Most common setback greater than 600 ft. is 1,000 ft.
- One city has a setback distance exceeding 1,000 ft. (Flower Mound; 1,500 ft).



From Fry et. al., (2017). Suburbanization and shale gas wells: Patterns, planning perspectives, and reverse setback policies. Landscape and Urban Planning 168:9–21.

### Legal perspectives on setbacks

- •HB 40 allows a city to impose "reasonable setbacks", but the term is not defined. During one of the 2015 Legislative Committee meetings, a legislator from a West Texas city stated that 1,000 feet was a reasonable setback for cities to use. Aside from this statement, no one else offered an opinion on what was "reasonable".
- •City Staff and outside attorneys analyzed the number and location of existing gas well pad sites and residential housing growth trends within Denton. Then they analyzed the implications of setbacks distance length against HB 40 and the risk of a federal and state constitutional "Takings Claims". The resulting recommendation was for new gas well pad sites to meet a 1,000-foot setback from Protected Uses.
- •Although reverse setbacks were not addressed by HB 40, there are still legal risks associated with increasing the reverse setback distance.
- •During the adoption of the 2015 ordinance, Property owners, real estate professionals, and builders voiced opposition to increasing reverse setback distances beyond 250 ft. Several claimed publicly that increasing the reverse setback would make a greater case for "Takings claims" against the City. After further legal analysis, the City's attorneys recommended that the reverse setback remain at 250 ft. That distance was adopted as a part of the 2015 Gas Well Ordinance amendments.
- •Risks associated with mandating a longer distance for reverse setbacks include litigation and risks for legislative preemption, which would likely be driven by real estate, development, land owner, and mineral interests.

### **Options**

- Status quo with setbacks and reverse setbacks remaining the same
- •Increase setbacks or reverse setbacks (risks include litigation / takings claims, and legislative preemption).
- Possibility of trading density increases for increased reverse setback distances.

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Questions / Comments