



Agenda

- Development impacts of industrial drill sites in urban areas
- Noise
- Air Quality

Impacts on Development

- **Current Procedure**
 - Per Ordinance 07-071, gas drilling use defined and allowed in all zoning districts
 - SUPs expire two years after approval
 - Drilling allowed indefinitely if first well drilled within 2 years
 - Setback distance measured from defined protected uses and not commercial development

Municipal Development Comparison

- **Fort Worth**
 - Open to private property, City Council must first approve use of public lands
- **Mansfield**
 - Allowed through zoning in any district, as long as the setback distances can be met
- **Burleson**
 - Permissible if located in a manner to fully meet ordinance requirements. Otherwise, requires Gas Well Ordinance Variance Request approved by City Council
- **Grand Prairie**
 - Must meet ordinance or requires variance
- **Denton**
 - Approved gas well development plat

Impacts on Development

- **Considerations**
 - Possible zoning or overlay limitations to allowed use tables regarding drilling
 - Continue discussion of SUP time limits, as presented in Phase I discussions
 - Expand definition of protected use term
 - Add setback distances to non-protected use buildings and structures

Noise

- **Current Procedure**
 - Ambient level established prior to drilling
 - Typically a 24-hour average reading
 - Allowances over ambient level for various activities
 - 3 dB during nighttime drilling
 - 5 dB during daytime drilling or other activities
 - 7 dB during fracing
 - Maintain ambient during production

Municipal Noise Comparison

- **Fort Worth**
 - 72-hour ambient, noise management plan, pure tones, low frequency, permitted increases
- **Mansfield**
 - 72-hour ambient, pure tones, low frequency, permitted increases
- **Burleson**
 - 72-hour ambient, noise management plan, pure tones, low frequency, permitted increases
- **Grand Prairie**
 - 48-hour ambient, noise abatement study, pure tones, permitted increases
- **Denton**
 - Adequate nuisance prevention measures to control noise

Noise

- **Considerations**
 - Longer sample period to establish ambient level
 - Daytime and nighttime ambient levels
 - Noise mitigation plan submitted with application
 - Regulate low frequency noise octaves

Air Quality

- **Current Procedure**
 - No comprehensive test in Arlington
 - TCEQ tests Arlington wells on-call basis and 2009 study included one site (Carrizo's UTA Drill Site)
 - BSEEC study included one well site in Arlington (XTO's Rose Drill Site)

Municipal Air Quality Comparison

- **Fort Worth**
 - Ongoing air quality study at nearly 75 percent of facilities
- **Mansfield**
 - not performing any tests, TCEQ checked 5 of drill sites (one with a comp station), negative results
 - City Council added a condition to an SUP requiring an air quality check before drilling and another test after drilling
- **Burleson**
 - TCEQ performs tests on-call, no reported issues
- **Grand Prairie**
 - Awaiting results from outside tests, rely on TCEQ
- **Denton**
 - Not performing tests, rely on TCEQ

Air Quality

- **Considerations**
 - Longer term analysis of drilling activities to identify impact for a site during all stages, including compression
 - Measure emissions for key compounds: VOCs (BTEX), formaldehyde, and nitrogen oxides
 - Clearly distinguish on-site emissions from upwind fluxes of the measured pollutants
 - Remote sensing techniques that can operate in the field continuously for prolonged time periods
 - Continue discussions with City Council

QUESTIONS?
