



**ITEM 2:
VARIANCES TO CHAPTER 42 FOR
LANGLEY NO.1 WELL SITE**



History of Langley No.1 Well Site

- SUP Approved: January 13, 2011
- Right of Entry Granted: June 14, 2011
- New Oil and Gas Codes Adopted: August 9, 2011
- Project is underway in accordance with SUP as approved by City Council
- Variances are needed to issue Drilling Permit (a conditional permit)
- Will begin drilling Thursday or Friday (weather permitting)

Why the Name Change?

- Prior applications were titled “South Hammock” based upon the lease name
- “Langley No.1 Well” is the actual name of the well in accordance with the application to the Texas Railroad Commission



Steps we've taken...

- Hired three 3rd party consultants to assist in review
 - ESA Consulting: Safety Compliance
 - West Engineering: Mechanical and Electrical Compliance
 - Teacups: Design Compliance
- Staff and consultants fully trained by Forza to be granted full access to the site during all operations
- Active coordination and on-site review as drilling rig has been installed (City staff and consultants)
- Conducted neighborhood meeting on 3/19
- Regularly checking nuisances (light and noise)



Why the Variances?

- Transition from the old code to the new code
- It is a highly complex, new code and all parties are learning
 - New to us...
 - New to the industry...
- Permit, if variances are approved, will be conditional based upon ability to meet conditions related to:
 - Safety management documents
 - Verification of pressure control equipment

The mission remains the same!

- Ensure that League City offers the highest level of safety to our residents
- Protection by maintaining the highest level of standards for safety
- Nabors and Forza comments on-site confirm safety efforts:
 - Active level of involvement by City staff
 - Depth of review/scrutiny by staff and consultants
 - Effort to understand operations and safety procedures



Variance 1: Safety Management

- ESA Consulting reviewed safety documentation from Forza and Nabors
- Nabors (Drill Rig Operators) complies with the very large majority of requirements
- Forza (Site and Incident Management) complies with incident related requirements, but does not meet the majority of requirements
- A “bridging” document combines the safety protocols for the two organizations
- Code requires both to have fully functional SEMS

Requested Variance:

To require the applicant to cover costs associated with a 3rd party safety consultant firm to be housed on site until an equivalent set of documents is provided that fully complies with the specific safety management language of the ordinance.



Variance 2: Final Inspections

- Degasser serves to remove gas from the mud and materials that are raised from the well
- Requirement for design package allows for staff/consultant to calculate circulating capacity
- Some design packages are proprietary
- Staff has gathered sufficient information from the vendor to provide Teacups with information to calculate circulating capacity without seeing the design package

Requested Variance:

To waive requirement for a design package for a low pressure degasser or poor boy degasser (Section 42-121) with the understanding that the applicant will provide sufficient information to enable and support calculation of circulating capacity prior to placement of equipment in service.



Variance 3: Distancing and Setbacks

- Distances were established by approval of the Special Use Permit prior to the new ordinance (300 foot setback)
- Measured distance to closest habitable structure is approximately 310 feet from the well bore

Requested Variance:

To allow for setbacks (Section 42-134) to be reduced to 300 feet as per the requirements in place at the time of the Special Use Permit.



Variance 4: Well Control Equipment and Procedures

- Section 42-143 requires that all components of the pressure control equipment be certified at a minimum of once per year and requires a four ram stack on the blowout preventer
- Rig 409 is not configured appropriately for a four ram stack
- The choke manifold and blowout preventer do not meet city standards
 - Forza is renting equipment that more appropriately meets city standards
 - Equipment will meet industrially accepted standard of five year certification
 - Will be tested prior to arrival on site
- Two phase verification process on pressure control equipment



Requested Variance:

To accept (for this particular instance and on a one-time only basis) pressure control equipment that utilizes a three ram stack and is fully certified within the last five years with the understanding that all other requirements related to this section of the ordinance are met. To meet this requirement, prior to placing the pressure control equipment in service, the applicant needs to:

- *Complete the certification package for all equipment that comprises the pressure control system, and*
- *Provide documentation of the last inspection for all equipment, including:*
 - *Open annular and ram type BOPs (blowout preventers) and perform visual inspection of all components*
 - *Documentation of installation of OEM (original equipment manufacturer) new rubber goods*
 - *Inspection records documenting all critical dimensions, including ram block bores and ring grooves*
 - *NDT (non-destructive testing) and dimensional inspection of ram blocks*
 - *Pressure test*



Variance 5: Hoisting and Rigging Equipment

- Some of the load path equipment brought on site is due for inspection April 10th, 2012
- Ordinance requires that no equipment certification expires during the expected time of use
- Equipment was in storage for a period of two months in which it did not incur any wear and tear

Requested Variance:

To allow for use of hoisting equipment (Section 42-144) that is currently on site and that expires during the expected time of use on the well with the understanding that it is inspected and approved by West Engineering.



Variance 6: Bond and Irrevocable Letter of Credit

- Approved code requires a bond or irrevocable letter of credit to cover city expenses, including consultant support
- City and Forza have discussed an alternative reimbursement strategy, given the short time frame
- Estimate without 3rd party inspector related to safety management variance: \$40,000
- ROUGH Estimate with 3rd party inspector for safety management variance: \$300,000

Requested Variance:

To waive the requirement for a bond or irrevocable letter of credit (Section 42-162) with the understanding that the applicant agrees to coordinate with staff to establish an alternative method of reimbursement for city expenses related to this application.