

INSTRUCTIONS FOR OIL AND GAS FLOODPLAIN DEVELOPMENT

No development shall occur in the floodplain until a floodplain permit is issued or you have received a letter from the Floodplain Administrator giving you permission to begin work prior to issuance of the permit.

Fill out and sign the permit application form (both pages).

Required documents upon submission of permit application for approval:

- Detailed set of design plans and development specifications, including flood protection measures (drainage plan, retention pond, floodproofing, elevation measures) signed and sealed by certified engineer, architect or surveyor.
- Preconstruction elevation in the form of either pre-construction elevation certificate or a letter signed and sealed by certified engineer, or surveyor establishing preconstruction conditions.
- An estimated base flood elevation (BFE) of proposed project site. The floodplain administrator can assist with this if needed.
- Copy of Spill Prevention and Counter Measures Plan (if applicable).
- Emergency Evacuation Plan (if applicable).

Required documents upon project completion to complete and closeout permit:

- Finished construction elevation or floodproofing certification of any equipment or pad sites elevated at or above the BFE.
- For pipeline burial, a certificate of burial depth is required. Elevation or flood proofing certification will be required for above ground valves.
- For drilling and production sites, a compliance certificate listing production equipment on site is required.
- Copies of other required permits from State or Federal including Water Use Permit from Oklahoma Water Resource Board (if needed), 404 or Section 10 permit from US Army Corps of Engineers (if needed), Professional Installation of septic tank, propane tank (if needed) etc.
- No Rise Certificate if encroaching on a floodway.
- LOMA/LOMC approved by FEMA (if applicable).

All structures and pieces of equipment in the 1% chance/100-year floodplain must be designed in a manner to reduce or eliminate flood damage, e.g. anchoring, or elevated.

Permit Application for
Proposed Oil and Gas Development on Lands Located Within
Designated Floodplain Areas in Unincorporated Canadian County

To comply with the **Canadian County Floodplain Regulations** and to minimize potential flood damage, you must agree to construct your proposed development in accordance with the National Flood Insurance Program by following provisions:

1. For **ALL STRUCTURES**, the foundation and the materials used must be flood-resistant and constructed to withstand the pressures, velocities, impact, and uplift forces associated with the 1% Chance flood.
2. All **UTILITY** supply lines, outlets switches, and equipment must be installed as to minimize damage from potential flooding. Water and sewer connections must have automatic back flow devices installed. **(See FEMA P-348 Protecting Building Utility Systems From Flood Damage)**.
3. You must submit certification by a **CERTIFIED ENGINEER, ARCHITECT, OR LAND SURVEYOR**, that elevation and/or flood proofing requirements have been met. Failure to provide the required certification is a violation of this permit.
4. The Developer/Owner is required to remove and/or dispose of accumulated or piled debris, construction materials, and/or trash from the floodplain area during development and after development is complete to prevent floating debris downstream.
5. **Other provisions** – See attached Instructions.

AUTHORIZATION:

I have read or had explained to me and understand the above special provisions for floodplain development. Authorization is hereby granted to the permitting authority and their agents or designees, singularly or jointly, to enter upon the property described on the application during daylight hours for the purpose of making inspections or for any reason consistent with the issuing authority's floodplain management regulation. I further verify that the information provided by me on the application is true and accurate to the best of my knowledge and belief.

Signature of Applicant

Specific Guidelines for Development

Pipelines must be buried and maintained at least 48 inches, 72 inches under rivers and creeks. Above ground valves and meter runs may require a flood debris protection fence.

If the drilling and/or production site is in or encroaching on the floodway, you must demonstrate through an engineering study that there will be no increase in flood heights during the discharge of the 1% Chance flood caused by development and submit a no rise certification.

Flood protection measures must include the following: 1. Tank batteries and other equipment installed at the site in the floodplain shall be tied down to prevent flotation and lateral movement. 2. Protection around any vulnerable equipment such as the well head must be installed to keep flood debris from damaging equipment which could release product into floodwaters or send equipment floating downstream (may be required in high velocity flood areas only, at the discretion of the floodplain administrator).

Drill site pad and road to well do not need to be elevated but should not obstruct the natural flow of water (i.e. install culverts and flood control devices as needed). **An adequate culvert must be installed in the right-of-way where the lease road meets the county road. Please contact the district foreman and work out the details prior to application submission.**

A closed pit system is required.

Any material stored on the site that is highly volatile, flammable, explosive, toxic, or water reactive should be protected to at least the level of the 500-year flood.

Tree and brush debris may need to be removed from the floodplain or burned.

This office must be notified if equipment is added after completion. If site is sold or assigned this office must be notified. A recomple will only need a permit if new production equipment is added to an existing site.