

Guidelines for Completing the *Authority to Drill* Application

There are a number of provisions for the drilling of a well in the onshore region of Nova Scotia; which are addressed under the authority of the *Petroleum Resources Act*, the *Petroleum Resources Act Regulations* and the *Onshore Petroleum Drilling Regulations*. Copies of these are available electronically on our website; www.gov.ns.ca/energy. (look under "About the Department", and click on the wording "Legislation & Regulations").

For the approval to drill a well, there are a number of required documents and materials which must be filed and in place prior to the approval being issued. Under the *Drilling Regulations*, Section 10, there is a requirement for the filing of an application. "**not less than 45 calendar days prior to spud**". This time frame can be, and usually is, waived by the Administrator given that there has been continued contact and communication to achieve the required documentation.

A complete Application for Authority to Drill shall include, but may not be limited to, the following;

- 1) an Application fee of \$112.10 (fee increase effective April 1, 2009)
Cheque made payable to; *The Minister of Finance, Province of Nova Scotia*
- 2) survey plat of the intended location (2 copies)
- 3) a copy of the surface access consent/permission
- 4) the *Authority to Drill a Well* form which provides a summary of the drilling plans

The detailed drilling plan and prognosis shall include, but are not be limited to, the following;

- well information geological prognosis and discussion
- detailed drilling procedures including mud program, casing design and program and cementing program.
- drilling rig specifications.
- gas detection equipment and location of sensors, etc.
- well control equipment, configuration and layout schematics are required.
- well control kick and blow out control procedures (if not included in the Emergency Response Plan).
- well evaluation details (as appropriate).
- suspension/abandonment plan/program.

NOTE: Section 23 of the Drilling Regulations requires;
"Every operator shall conduct the drilling, re-entry, suspension, completion and abandonment of a well that is in accordance with current petroleum standards and good oilfield practice".

5) Drilling Equipment

We require a letter from the Drilling contractor indicating that their equipment is "Fit for Purpose". We also require a copy of their CAODC or other certification documentation illustrating that the equipment has been checked and has met a specific drilling standard.

6) Emergency Response Plan

While many companies have such a procedural manual for dealing with such responses, we require the plan be tailored to the specific site in Nova Scotia to include local contacts, etc.

7) A list of contractors for various services, as is known at the time of submission of the program. Visit the OTANS website at www.otans.com for their membership directory.

Additional Notes;

1) Financial security must be in place. This normally is the responsibility of the rights holder.

2) Approval of the application will involve a third-party drilling engineer to review the program as provided on paper, this expense is sent on to the operator.

3) Once the equipment arrives on site, normally there is an inspection by a third party drilling engineer to ensure the equipment and configuration is as per the plan. These inspections are charged back to the companies for cost recovery purposes. This will also include any additional inspections required throughout the well program (ie: testing, abandonments, etc.) where seen as appropriate by the Administrator.

4) This inspection is required once the BOP's have been nipped up and **prior** to drilling out the surface casing. Since arrangements have to be made for the inspection, an operations forecast should be provided to allow sufficient time for this to be conducted so as to prevent unnecessary stand-by.

5) Appropriate drilling crew will be asked to provide proof of current and valid level of BOP certification.

6) Daily reports are required. The reports shall provide details of the last 24 hours operations, a forecast of the next 24 hours, and a geological report which shall include depths (md and tvd), lithologic descriptions, shows, etc.

These reports shall be given by Fax (902) 424 -5126 or emailed to the Administrator; Kim Doane doaneka@gov.ns.ca

7) Any modification or change to the planned activity must be approved by the Administrator.

8) Any plan to alter the condition of a well; suspension, completion and/or abandonment, requires prior notice to the Administrator (see Sec 10, Drilling Regulations for the time frames). These forms are also available online.

Guideline last modified: April 3, 2009

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