

COGCC Policy for Electronic Submittal of Directional Surveys and Plans January 1, 2012

As shown on the table below, the combined percentages of directional and horizontal permits have increased from about 9% in 2000 to 79% in 2011. Since the majority of drilling applications currently submitted to the COGCC are for directional and horizontal wells, the importance of viewing an accurate wellbore path from surface to total depth is critical. This policy has therefore been implemented to allow for accurate mapping of directional and horizontal wellbores.

Drilling Permit Applications Filed Since 2000
Data as of December 2, 2012

YEAR	DIRECTIONAL		HORIZONTAL		STRAIGHT		Total Annual
2000	125	9%	1	0%	1241	91%	1367
2001	242	12%		0%	1825	88%	2067
2002	313	17%	6	0%	1495	82%	1814
2003	562	26%	12	1%	1580	73%	2154
2004	896	32%	7	0%	1898	68%	2801
2005	1767	41%	39	1%	2517	58%	4323
2006	2777	47%	44	1%	3028	52%	5849
2007	3654	58%	86	1%	2601	41%	6341
2008	5008	63%	85	1%	2885	36%	7978
2009	3678	72%	146	3%	1311	26%	5135
2010	4195	70%	329	6%	1446	24%	5970
2011	2576	60%	806	19%	883	21%	4265
Grand Total	25793	52%	1561	3%	22710	45%	50064

The Colorado Oil and Gas Conservation Commission (COGCC) Rule 321 requires operators to submit directional survey plans for any well planned to be drilled directionally and as drilled directional survey results to be submitted on wells that have utilized directional drilling technology. In order to facilitate accurate mapping the COGCC now requires that a formatted electronic spreadsheet be submitted as a part of the requirements for filing a Form 2 Application for Permit to Drill, a Form 5 Drilling Completion Report and a Form 4 Sundry Notice for notification of a change of directional drilling plan. By providing detailed location data for wellbores electronically operators and the COGCC will be better able to identify the placement of directional and horizontal well bores.

Directional drilling information shall be submitted for directional, horizontal or highly deviated wellbores as outlined below.

- PDF file of the Directional Plan/Survey including two (2) wellbore deviation plots, one depicting the plan view and one depicting the side view.
- Completed electronic file of the planned or as drilled Directional Data Template. The completed template will include the header data as well as the wellbore survey points in a formatted spreadsheet which is available:

- on the Forms page of the COGCC website or
- within the Attachment tab in eForms 2 and 5 on the COGCC website by clicking the *Import Directional Drilling* button and then the *Download Data Template* button.

The directional data should be submitted through the eForms application. The following summary outlines how to submit directional information for each form.

eForm 2 Application for Permit to Drill:

- Attach PDF of Directional Plan: On the *Attachments* tab click the *New Attachment* button and upload one (1) PDF copy of the proposed Directional Plan which includes the plan and side views.
- Attach a Directional Data Template spreadsheet: On the *Attachments* tab click the *Import Directional Drilling* button; from the *Directional Drilling* window click the *Import Data* button, browse to where the planned directional data template spreadsheet has been saved, and import the completed template.
- Click the *Save Updates* button before closing the window.

Form 4 Sundry Notice:

Since the eForm 4 is not yet available, a request to change a directional plan should be submitted to the COGCC as a paper Form 4 with an attached directional drilling plan. Once the Form 4 is in review by the permit group, the operator will be contacted to submit a completed Directional Drilling Template by email. The template can be downloaded from the Forms page on the COGCC website.

eForm 5 Drilling Completion Report:

- Attach a PDF of Directional Survey: On the *Attachments* tab click the *New Attachment* button and upload one (1) PDF file of the as-drilled Directional Survey.
- Attach a Directional Data Template spreadsheet: On the *Attachments* tab click the *Import Directional Drilling* button; from the *Directional Drilling* window click the *Import Data* button, browse to where the survey directional data template spreadsheet has been saved and import the completed template.
- Click the *Save Updates* button before closing the window.

Non-eForm submittals:

For those unable to file eForm documents please email electronic versions for the Form 2, Form 4 or Form 5 along with PDF copies of the required attachments to the appropriate COGCC permitter.

NOTE:

It shall be the operator's responsibility to ensure that the wellbore complies with the setback requirements in Commission orders or rules prior to producing the well.