

Indian and Northern Affairs Canada

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# Information Letter Changes to Baseline Well Density in Southeast Alberta - Information for First Nations

#### Introduction

In February 2006, the Alberta Energy and Utilities Board (EUB) announced that it will amend the provincial *Oil and Gas Conservation Regulations* to increase the baseline well densities for some formations in the southeast region of Alberta. The area with the increased baseline well densities will be east of the 5<sup>th</sup> meridian and south of township 53 (see attached map). The remainder of Alberta will retain existing baseline well densities.

## **Background**

When the province of Alberta enacted the *Oil and Gas Conservation Regulations*, it established normal spacing units (baseline well densities) for oil at one well per quarter section per pool, and for gas at one well per section per pool. If additional wells are necessary to recover the resource, an operating company must make an application to the EUB to provide evidence to support a higher well density. The application process permits potentially affected subsurface parties to review and comment on an application.

Based on an analysis of existing developments and resource potential, the EUB concluded that greater well densities were needed to optimize oil and gas resource recovery.

### Changes to Baseline Well Densities in Southeast Region of Alberta

The EUB announced that it will amend the *Oil and Gas Conservation Regulations* to increase the baseline well densities for oil wells and gas wells in the southeast region of Alberta. The new baseline well densities are shown in the following table.



Producing formation	Baseline Well Densities	
	Oil wells per quarter section per pool	Gas wells per section per pool
Above Mannville formation	1	4*
Mannville formation	2*	2*
Below Mannville formation	1	1

<sup>\*</sup> Producing formations with increased baseline well densities

If an operating company wishes to have well densities greater than those shown above, it must make an application to the EUB for special spacing units.

The drilling spacing unit (DSU) concept will be retained. For gas formations, pooling of the lands within a one section DSU will continue. For oil formations, pooling of the lands within a quarter-section DSU will continue.

Although the baseline well densities will be increased for some formations, not every DSU will have the maximum allowable number of wells. When a subsurface lease is reviewed for continuance, one producing well can continue the DSU.

Since the DSU is consistent for all formations (one section for gas and quartersection for oil), commingling of gas production from multiple gas zones or commingling of oil production from multiple oil zones can occur without pooling complications. However, pooling complications can still occur in cases where there are mixed lessors if production from a zone with normal DSU is commingled with production from a zone with reduced DSU previously approved by the EUB.

The increased baseline well densities will allow the oil and gas industry the flexibility to drill more wells without making applications to the EUB for holdings and/or special spacing units. Since there will be no minimum interwell distances as with holdings, there is more flexibility for well location selections. This can be advantageous when selecting drilling locations with structural highs, or to avoid surface concerns.

The EUB expects that wells will be drilled using corner target areas. Surface facilities can be placed along section boundaries or fence lines. However, wells drilled along the north or the east edges of a section may raise equity issues because there are no buffer zones when corner target areas are being used.

In terms of timing, the EUB had initially planned on enacting a regulation amendment to increase the baseline well densities for oil wells and gas wells in the southeast region of Alberta during the second quarter of 2006. However, the EUB had also announced other changes in Bulletin 2006-05. Timing for this amendment will be dependent on the availability of staff resources, budget, and competing regulatory priorities.

### **Impacts on First Nations**

Only First Nations with lands in the designated region of southeast Alberta may be impacted by the increased baseline well densities for oil and gas wells. Currently, there are twelve First Nation reserves within this designated region.

#### For More Information

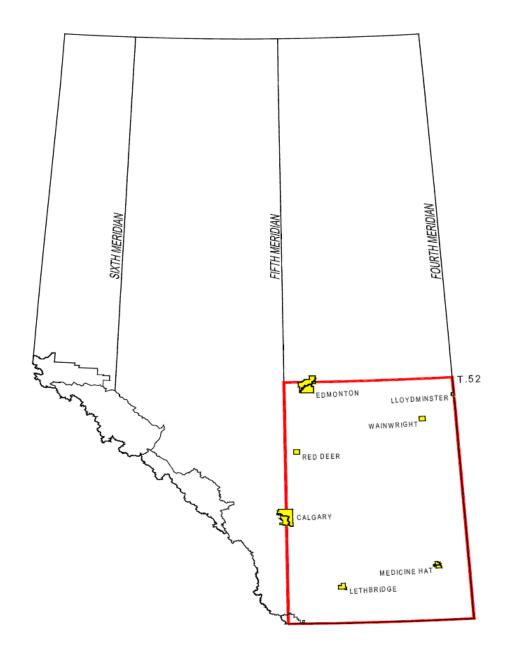
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# Region of Alberta subject to Increased Baseline Well Densities



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