

May 28, 2018

Kim Grout, Chief Executive Officer Provincial Agricultural Land Commission 133 - 4940 Canada Way Burnaby, BC V5G 4K6

2017-18 ALC-OGC Delegation Agreement Annual Activity Report Re:

Dear Kim Grout

The information presented in this document represents the annual report as required under Section V of the Agricultural Land Commission (ALC) - BC Oil and Gas Commission (OGC) Delegation Agreement (Delegation Agreement) for the fiscal year of 2017-18. Section V requires the OGC to report annually on the following elements:

The area affected by each type of oil and gas activity, ancillary 1. activity, and the total area affected

Table 1 shows the area of ALR land affected by oil and gas activity by type broken down by activity within crown and private lands. The table also tabulates the total area affected by oil and gas activity for the 2017-18 fiscal year.

Oil and Cas Astivity	Area	a (ha)	Total Area (ha)
Oil and Gas Activity	Crown	Private	Total Area (ha)
Pipelines	106	314	420
Wellsites	70	262	332
Roads	23	38	62
Other (Ancillary)	115	274	389
Total	315	888	1,203

Table 1 - The ALR area affected by oil and gas activity type and the total ALR area affected on Crown and private land

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As a comparison, 1,691 ha of new surface land use (SLU) clearing occurred in the 2017-18 fiscal year. Therefore, oil and gas activities within the ALR area account for 71.1% of the total oil and gas activity within northeast British Columbia for the 2017-18 fiscal year.

2. The area affected by oil and gas activities and ancillary activities in each land capability class

The area affected by oil and gas activities in each capability class according to the Land Capability Classification for Agriculture in British Columbia classification system is shown in Table 2.

Agricultural Land	Area	(ha)	Total Area (ha)	
Capability	Crown	Private	Total Area (ha)	
1	0	0	0	
2	6	97	104	
3	90	192	283	
4	65	326	391	
5	148	267	415	
6	2	3	5	
7	1	2	3	
Total	312	888	1,200	

Table 2 – The ALR area affected by oil and gas activity by agricultural land capability classification on Crown and private land

The data source used were 1:50,000 agricultural capability maps from the ALC offices; digitized in a geo-database format.

It should be noted that the total area indicated in Table 2, is less than the total area as shown in Table 1. The difference between the totals may be due in part to activities that were located within Class O (organic materials) on Crown Lands, which is not represented in the above table.

3. The area affected by oil and gas activities and ancillary activities by land cover categories

Table 3 shows the area affected by oil and gas activities in four land cover categories, including forest, shrub, bryoid-herb and clearing.

Oil and Gas		Total			
Activity	Forest	Shrub	Bryoid- Herb	Clearing	Area (ha)
Pipelines	181	14	225	0	419
Wellsites	148	13	171	0	332
Roads	30	4	27	0	62
Other (Ancillary)	199	12	176	0	386
Total	558	43	599	0	1,199

Table 3 – The ALR area affected by oil and gas activity by land cover classification

Land cover types representing forested and shrub areas, as well as cultivated/pasture lands from the BC Vegetation Resource Inventory were used for this analysis. Any discrepancy in the area between this table and Table 1 may be due in part to development occurring on land not qualifying for the above noted classifications (i.e., rock).

4. The area of private land and crown land developed for oil and gas activities and ancillary activities

Table 1 shows the breakdown of area developed for oil and gas activities on both Crown and private land. Specifically, 315 ha of ALR land was developed for oil and gas activities on Crown land and 888 ha of ALR land was developed for oil and gas activities on private land with the 2017-18 fiscal year.

5. Summary of the cumulative footprint of oil and gas activities

The following tables demonstrate the cumulative footprint of oil and gas activities, and ancillary activities in each of the categories and subcategories specified in bullet points 1 to 4 expressed in hectares and as a percentage of

the overall area of ALR Lands in each category and subcategory. Note that the footprint summary does not factor in reclaimed sites/areas. This is a summary of the entire oil and gas footprint on ALR land in northeast BC whether or not some of that area has been reclaimed.

Oil and	Total Area	Area	Area (ha)		Area (%) [†]	
Gas Activity	(ha)	Crown	Private	Crown	Private	Area (%) [†]
Pipelines	8,295	4,356	3,939	0.33	0.29	0.62
Wellsites	10,519	3,631	6,888	0.27	0.52	0.79
Roads	3,111	2,201	909	0.17	0.07	0.24
Other (Ancillary)	2,819	1,241	1,577	0.09	0.12	0.21
Total						
No Surface Land Use [‡]	1,308,473	593,963	714,510	44.55	53.59	98.14
Total	1,333,216	605,392	727,823	45.41	54.59	100

Table 4 – The cumulative ALR area affected by oil and gas activity type on Crown and private land

[‡] - The "No surface land use" category is specific to oil and gas activity. This does not account for other surface land uses.

Agricultural Land	Total Area (ha)	Area Affected (ha)		Total Area	Total Area
Capability	Alea (lia)	Crown	Private	Affected (ha)	Affected (%) [†]
Organic (O)	14,408	64	18	82	0.57
1	440	0	2	2	0.45
2	114,479	67	1,450	1,517	1.32
3	397,129	2,839	3,646	6,485	1.63
4	456,339	4,376	4,662	9,038	1.98
5	304,503	3,801	3,292	7,093	2.33
6	15,841	50	105	155	0.98
7	30,078	233	139	372	1.24
Total	1,333,216	11,429	13,314	24,744	1.86

Table 5 – The cumulative ALR area affected for all oil and gas activity by agricultural land capability classification on Crown and private land

^{† -} Percent area is calculated against Total ALR Area

[†] - Total Area Affected (%) is calculated against Total Area of each Agricultural Land Capability class, respectively.

Oil and		Land Cover Categories (ha)					Total
Gas Activity	Forest	Shrub	Bryoid- Herb	Clearing	Rock	No Land Class	Area (ha) Per Activity
Pipelines	4,554	710	2,995	6	0	70	8,295
Wellsites	3,523	836	5,977	153	0	30	10,519
Roads	1,939	316	834	2	0	19	3,111
Other (Ancillary)	1,494	188	1,088	1	0	49	2,819
Total Area (ha)	11,509	2,051	10,854	161	0	168	24,743
Total SLU (%)*	46.52	8.29	43.87	0.65	0	0.68	100
No SLU [‡]	736,416	84,273	449,460	1,384	34	36,905	1,308,473
Total	747,926	86,324	460,314	1,545	34	37,072	1,333,216

Table 6 – The cumulative ALR area affected by oil and gas activity by land cover classification

6. The number of sections where the footprint of oil and gas activities and related activities exceeds 20 ha and the total number of sections within the Identified ALR Lands

The Delegation Agreement identifies oil and gas and ancillary activities that require a decision from the OGC under the ALC Act. Item 2 in Appendix I of the Agreement specifies a section threshold of 20 ha whereby further proposed oil and gas activity on the section would be moved into the decision process.

Please note the following specific to land section information as it relates to the ALR:

- 3,644 sections in the Peace River Block contain ALR land.
- 49 of the above sections contain more than 20 ha of oil and gas and ancillary activities, excluding pipelines.

[‡] - No surface land use is specific to oil and gas activity. This does not account for other surface land uses.

^{* -} Represents the proportion of total oil and gas footprint located in each land cover category.

7. Information on activities exempted from application for permission for non-farm use pursuant to Part II of this Agreement

The Delegation Agreement identifies oil and gas and ancillary activities that are exempt from requiring permission for non-farm use provided conditions outlined in Part II of the Agreement have been met. These activities, specified in Appendix I of the Agreement are as follows:

- Item 1 the combined total area of existing and proposed oil and gas activities and ancillary activities is less than 20 ha.
- Item 3 pipelines.
- Item 5 oil and gas facility, camp, sump, borrow pit or water storage site less than 3 ha.

The were 299 Schedule As submitted for exempted activities in the 2017-18 fiscal year, which must be submitted for most exempted activities.

Oil and gas and ancillary activities exempted from ALC Act application still require approval from the OGC under oil and gas legislation, however, in most cases, ancillary activities located on private land do not.

8. The total number of applications for permission for non-farm use received by the OGC, the OGC Commissioner and/or the OGC Deputy Commissioner and the decision made on each application

The Delegation Agreement identifies oil and gas and ancillary activities that require a decision from the OGC under the ALC Act. These activities, specified in Appendix I of the Agreement are as follows:

- Item 2 the combined total area of existing and proposed oil and gas activities and ancillary activities is greater than 20 ha.
- Item 4 electric powerline that is not immediately adjacent to an access road.
- Item 6 oil and gas facility, camp, sump, borrow pit or water storage site greater than 3 ha.

The following table summarizes the applications involving a decision by the OGC in the 2017-18 fiscal year:

Summary Activity	Total
Applications Submitted	53
Applications Approved	44
Total Area of Non-farm Use Approved (ha)	285.1
Applications Triggering Item 2 of Appendix I*	27
Applications Triggering Item 4 of Appendix I*	6
Applications Triggering Item 6 of Appendix I*	18

Table 6 - Summary of applications involving OGC decisions

9. The total number of Schedule B reports received by the OGC and the total area identified as reclaimed in those reports

The OGC requires activity owners to submit a post-reclamation site assessment report as set out in Schedule B of the Delegation Agreement for the following situations:

- when ALR land is no longer required for an oil and gas activity; and
- within the defined timeline as set forth in Sections 4.3.2 and 6.3.2 of the Delegation Agreement.

Table 9 shows the Schedule B Reports received by the OGC in the 2017-18 fiscal year, as well as the total area reclaimed as described in those reports.

Oil and Gas Activity Type	Number of Schedule Bs Submitted	Total Area Reclaimed (ha)*
Pipelines	507	1980.25
Wells	24	45
Total	531	2025.25

Table 7 – The total number of Schedule B reports received by the OGC and the total area identified as reclaimed in those reports

The Commission is responsible for evaluating and recording the Schedule B Reports upon submission as per the criteria set forth in Sections 4.3.2 and 6.3.2 of the Delegation Agreement.

^{*}The total area reclaimed is an estimate based on the best available information at the time of this report

Total number of inspections, investigations and enforcement actions conducted by the OGC pursuant to Part V of the Delegation Agreement

As authorized under section 56(1) of the ALC Act, the OGC will conduct inspections and undertake investigative activities accordingly. Further, section 52(1) of the ALC Act provides authority to issue enforcement orders. The number of inspections, investigations and enforcements are shown in Table 10.

Туре	Total
Inspections	1,694
Investigations	0
Enforcement Actions	33

Table 8 - Total number of inspections and investigations conducted by the OGC

Details of the investigations and enforcement actions are described in the following section.

11. Summary of individual investigations and enforcement actions

As a result of an internal audit specific to Section 50 of the ALC Act (whereby an activity owner has failed to meet the requisites of the Schedule B), the OGC's Compliance and Enforcement (C&E) group issued a total of 33 orders during the 2017-18 fiscal year.

The following list shows the recipient companies who were issued an order and the total outstanding Schedule B reports associated with each of the recipient companies:

- Aduro Resources Ltd. (11)
- ARC Resources Ltd. (37)
- Bonavista Energy Corp. (27)
- Bonterra Energy Corp. (12)
- Canadian Natural Resources Ltd. (80)

- Canbriam Energy Inc. (10)
- Cequence Energy Ltd. (5)
- Chinook Energy Inc. (10)
- ConocoPhillips Canada Operations Ltd. (1)
- Crew Energy Inc. (17)
- Direct Energy Marketing Ltd. (12)
- Encana Services Company Ltd. (15)
- Glenogle Energy Inc. (2)
- Huron Resources Corp. (2)
- Kelt Exploration (LNG) Ltd. (8)
- KXL Exploration Ltd. (2)
- Laucrotta Exploration Inc. (8)
- Murphy Oil Company Ltd. (2)
- Pavilion Energy (3)
- Pengrowth Energy Corp. (12)
- Plateau Pipeline Inc. (2)
- Prairie Provident Resources Canada Ltd. (1)
- Progress Energy (8)
- Shell Canada Ltd. (10)
- TAQA North Ltd. (2)
- Tervita Corporation (3)
- Tourmaline Oil Corp. (10)
- Venturion Oil Ltd. (5)
- Veresen Midstream (1)
- West Lake Energy (1)
- Westcoast Energy Inc. (1)
- Whitecap Resources Ltd. (3)
- Yoho Resources Inc. (1)

The following items apply to all recipient companies:

b. Land owner contact information:

Various land owners

c. Location of the oil and gas activity or ancillary activity:

Various pipeline locations

d. Description of the issue or concern:

This order was in response to actions in contravention of Section 50 of the ALC Act whereby the activity owner failed to meet the requisites of Schedule B. Specifically, the activity owner has failed to submit Schedule B reports within the appropriate timeframe (i.e., pipelines installed for greater than 24 months) or the report submitted was not to the satisfaction of the OGC.

e. Resolution of the issue or concern.

The order issued indicated that the activity owner was required to complete a work plan for remaining assessments and/or reclamation works within a designated timeframe. The plan would include:

- reclamation strategies in accordance with Schedule A
 recommendations (where available) and/or the requirements set out in
 Schedule B of the Delegation Agreement; and
- a time frame for completion of the reclamation works.

Further, the order requires the submission of a Schedule B report to the satisfaction of the OGC no later than December 31 of the calendar year following completion of the reclamation work.

At the time of this report, a number of orders have been terminated as the order requirements were met and no further action was needed. These include:

- Aduro Resources Ltd.
- Chinook Energy Inc.
- CononoPhillips Canada Operations Ltd.
- Huron Resources Corp.
- Kelt Explorations (LNG) Ltd.

- KXL exploration Ltd.
- Veresen Midstream
- Westcoast Energy Inc.
- Whitecap Resources Inc.
- Yoho Resources Inc.

The remaining orders are in various stages of completion with the requirements for some activities completed, while others activities were assessed and determined to require further action, and a work plan was subsequently submitted to the satisfaction of the OGC.

Please contact the undersigned should you have any questions about this report. Sincerely,

Ben Rauscher, Environmental Specialist BC Oil and Gas Commission Ben.Rauscher@BCOGC.ca