Potential Impacts of Agrium's Operation on State of Alaska Revenues

Prepared for:
Agrium Inc.

Prepared by:
McDowell GROUP
Juneau • Anchorage

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Reopening of the Agrium Kenai Nitrogen Operations will generate new tax and royalty payments to the State of Alaska. As a major purchaser of Cook Inlet natural gas, Agrium will stimulate royalty payments and production taxes. Further, profitable operation of the Kenai nitrogen facility will result in corporate income tax payments by Agrium to the State of Alaska. This brief study of Agrium's revenue impacts on the State of Alaska supplements a May 2013 McDowell Group report, *The Economic Benefits of Reopening the Agrium Kenai Nitrogen Plant.*

This supplement provides an overview of annual revenue impacts under a single-train operation. Based on assumptions and calculations described below, State of Alaska revenues from royalties and production taxes (less tax credits) would be $15.0 million under a single-train production scenario.

Supply of Cook Inlet Gas to Agrium

While in operation, Agrium typically purchased 15 to 25 percent of Cook Inlet's annual production of gas. With the reopening of Agrium's facility, a single-train scenario requiring 28 billion cubic feet (bcf) of gas per year would use the equivalent of approximately 25 percent of Cook Inlet's gas production.

With increased exploration in the region, and as new fields are developed or considered for development, gas producers are seeking new or expanded markets. A commitment from Agrium to purchase large volumes of gas will provide a critical market to support current exploration and development efforts. While gas to feed the Kenai nitrogen operations may eventually come from a combination of existing and new Cook Inlet gas production, this study's underlying assumption is that annual Cook Inlet gas production ultimately will increase by the amount consumed by Agrium each year.

The rate of taxation on fields supplying gas to Agrium will differ depending on when those fields initially started producing. It is not possible to predict which specific fields (such as Beluga or Kitchen Lights) would provide gas to Agrium; however, for modeling purposes, it is assumed gas supply would come from a field that started production after April 1, 2006.

State Gas Production Revenue

Gas produced for the Agrium plant would be assessed a production tax and generate incremental royalty gas for the State of Alaska, as described below.

Royalty Gas Payments

While the rate may vary, the State of Alaska typically receives 12.5 percent of gas produced from State leases in Cook Inlet. The State can take ownership of this gas in a number of ways, but generally receives it in the form of royalty payments equal to the well-head value of the gas produced.

Production Taxes

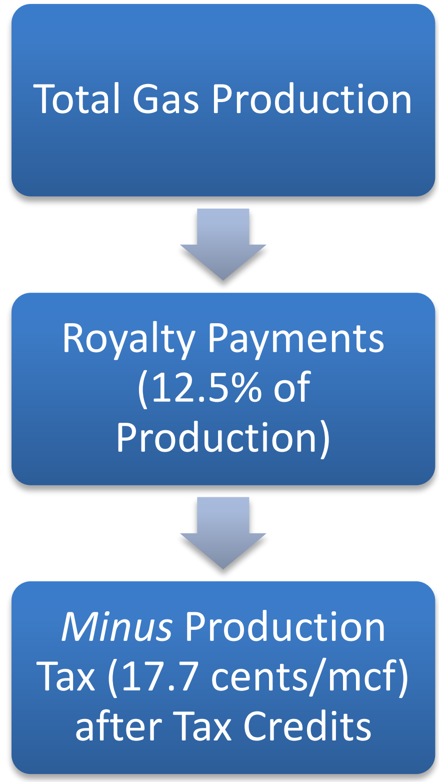
Production taxes are levied on the Production Tax Value (PTV) of the gas, which is the remaining 87.5 percent of gross production (well-head) value after the royalty share and qualified expenses are deducted. (Qualified expenses include any gas used during its production, as well as some capital and operating costs.)

The amount of the production tax is dependent on the date the field in question originally produced gas:

- If the property supplying the purchased gas began producing prior to April 1, 2006, the production tax is the lesser of 35 percent or the rate that was in place during the previous 12 months.

- If the property supplying the purchased gas began producing after April 1, 2006, the production tax is the lesser of 35 percent or $0.177/thousand cubic feet (mcf). This application of the tax was used in McDowell Group's calculations, which are presented in the table below.

Cook Inlet Natural Gas Production Taxes and Royalty Payments



Tax Credits

Finally, if the producer purchases or earns qualifying tax credits, these tax credits are subtracted from the production tax owed to the State of Alaska. These credits allow producers to deduct certain exploration and production expenses. The following is a list of tax credits for which a Cook Inlet gas producer may qualify:

- *Small Producer Tax Credit* – a maximum of $12 million to companies with a relatively small statewide presence. Most Cook Inlet producers qualify for this tax credit, which often reduces their tax liability to zero.

- *Well Lease Expenditure Credit* – 40 percent of well-lease expenditures, predominantly qualifying exploration costs.

- *Qualified Capital Credit* – 20 percent of qualifying capital expenditures.

- *Loss Carryforward Credit* – 25 percent of a financial loss from the previous year.

Potential Revenue Scenario

Assuming most Cook Inlet producers would qualify for a Small Producer Tax Credit, the main revenue flowing to the State from Agrium gas purchases would result from the 12.5 percent royalty share. The table below provides a revenue scenario based on single-train production at Agrium's facility.

These calculations assume a wellhead gas-value of $5.70/mcf and further assume supply comes from a field that started production after April 1, 2006. In addition, it is anticipated that approximately 25 percent of the gas used for production will come from non-State leases, and 10 percent of value at the point of production qualifies as lease expenses. This model does not assume any other tax credits beyond the Small Producer Tax Credit.

Summary of Annual Royalty and Production Tax Revenue Impacts Under a Single-Train Production Scenario

	Single-Train Scenario
Gross Production (bcf)	28
Production from State of Alaska leases	21
Royalty Payment	
Minus Royalty Gas (bcf) (12.5% of gross production)	(2.6)
Net Producer Gas (bcf)	18.4
Royalty Payment ($5,700,000/bcf)	$14,962,500
Production Tax Payment	
Value at Point of Production ($5,700,000/bcf)	$104,737,500
Minus Qualified Lease Expenses	($10,473,750)
Equals Production Tax Value (PTV)	$94,263,750
Production Tax Payment ($177,000/bcf)	$3,252,375
Small Producer Tax Credits (up to $12 M maximum)	($3,252,375)
Total State Revenue Impact (Royalty Payment *plus* Production Tax Payment *minus* Small Producer Tax Credit)	**$14,962,500**

Corporate Income Tax

The State of Alaska levies an income tax on corporations that ranges from 0 to 9.4 percent of taxable income. This tax liability depends on a number of factors, including the amount of federal taxes paid, whether the company is active outside Alaska, and whether it is an oil and gas company. For purposes of this analysis, it is assumed Agrium would be taxed at a rate of 9.4 percent.

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The gas purchased by Agrium would result in at least two corporate income tax payments to the State. First, Agrium would pay income tax based on the factors mentioned above. Second, the producer of the gas presumably would also pay a corporate income tax to the State of Alaska.

State Revenue Economic Multiplier Effects

Taxes and royalty payments to the State of Alaska by Agrium and its gas supplier(s) would become part of a much larger pool of taxes and royalties generated by Alaska's oil and gas industry. Oil- and gas-related revenues account for the vast majority of all State of Alaska unrestricted General Fund revenue (88 percent in FY2014). These revenues are used to fund a broad range of agency operations, programs, and projects.

As the State spends these taxes and revenues (including those that would be generated directly or indirectly by Agrium's Kenai operations), jobs and wages are generated across Alaska.

It is possible to estimate the direct, indirect, and induced employment and wage impacts of State revenue Agrium would generate. Based on modeling previously conducted by McDowell Group for the Alaska Oil and Gas Association, $1 million in tax and royalty payments translates (as it is spent by state government) into 9.6 jobs and $475,000 in annual wages, including all multiplier effects.[1]

The following table illustrates the jobs and wages that would be associated with taxes and royalties generated by Agrium's Kenai operations. For purposes of these calculations, total single-train revenues are estimated at $15.0 million. This estimate represents total royalty payments plus conservative upward adjustments to account for corporate income tax payments by Agrium and the gas supplier(s).

Jobs and Wages Associated with Taxes and Royalties Generated by Agrium's Kenai Nitrogen Operations

	Single-Train Scenario
Taxes and Royalties Paid	$15.0 million
Employment	140 jobs
Annual Wages*	$7.1 million

In addition to the jobs and wages presented in the table above, under a single-train production scenario, McDowell Group's 2013 study of the reopening of Agrium's Kenai plant estimated 140 direct jobs required to operate the plant with annual direct wages of $14 million.[2]

[1] McDowell Group 2014, *The Role of Oil and Gas Industry in the Alaska's Economy.*
[2] McDowell Group 2013, *The Economic Benefits of Reopening the Agrium Kenai Nitrogen Plant.*