File No. 1633
Board Order 1633-3

May 24, 2011

SURFACE RIGHTS BOARD

IN THE MATTER OF THE PETROLEUM AND NATURAL GAS ACT, R.S.B.C., C. 361 AS AMENDED

AND IN THE MATTER OF

NE ¼ Section 17, Township 79, Range 14, W6M Peace River District;
NW ¼ Section 17, Township 79, Range 14, W6M Peace River District;
NW ¼ Section 21, Township 79, Range 14, W6M Peace River District except Plan H782;
NE ¼ Section 16, Township 79, Range 14, W6M Peace River District;
SW ¼ Section 5, Township 80, Range 14, W6M Peace River District;
NW ¼ Section 5, Township 80, Range 14, W6M Peace River District;
SW ¼ Section 8, Township 80, Range 14, W6M Peace River District;
NW ¼ Section 16, Township 79, Range 14, W6M Peace River District except Plan H782

(The "Lands")

BETWEEN:

ARC PETROLEUM INC.

(APPLICANT)

AND:

JOHN MILLER AND MARY MILLER

(RESPONDENTS)

BOARD ORDER

Heard:	February 16 and 17, 2011 at Dawson Creek
Appearances:	Rick Williams, Barrister and Solicitor, and Andrea Fiedler for the Applicant
	Elvin Gowman, Anne Clayton, Mary Miller, and John Miller for the Respondents
Panel:	Cheryl Vickers

INTRODUCTION

[1] In accordance with the *Petroleum and Natural Gas Act*, by Order dated June 7, 2010, the Board granted ARC Petroleum Inc. (ARC) right of entry to specified portions of the Lands, owned by John and Mary Miller, for the purpose of constructing and operating wellsites or flowlines (Order 1633-2). The Board ordered ARC to pay a security deposit and make partial payment to the Millers for entry, occupation and use of the Lands. The mediator refused further mediation requiring that the determination of compensation be arbitrated.

[2] I was appointed arbitrator. The parties agreed to attempt a mediated settlement, with myself facilitating discussions, and agreed that if resolution of compensation could not be reached, that I should determine the compensation payable. Unfortunately, the parties were unable to come to terms on the compensation payable, necessitating the arbitration and this decision to determine compensation.

[3] ARC has withdrawn its application with respect to one of the proposed flowlines for which right of entry was granted, and the Board's entry order will be amended to rescind the right of entry associated with that flowline. As of the date of arbitration, the Oil and Gas Commission (OGC) had not yet permitted two of the proposed wellsites for which the Board granted right of entry, and the determination of compensation with respect to those wellsites was not part of the arbitration.

ISSUES

[4] The issues are to determine the amount of compensation payable to the Millers by ARC for entry, occupation and use of the Lands for those oil and gas installations that have been approved by the OGC, and to determine the amount of costs payable by ARC to the Millers.

Preliminary Issue

[5] The Millers argued that the Board should state a case to the Supreme Court of British Columbia to get an opinion on the application of section 1(a) of the Surface Lease Regulation, and that the Board should stay rendering its decision in this arbitration until the Court rendered its opinion. The Millers did not propose a specific question of law that they wanted referred to the Court for an opinion, but I understand their submission to be that section 1(a) of the Surface Lease Regulation precludes the Board's jurisdiction to grant entry where there is an existing wellsite surface lease and additional land is required for additional wells. This issue was raised and argued by the Millers as a preliminary issue prior to the mediation of these applications. The Board determined in a decision rendered May 5, 2010 (Order 1633-1) that the Surface Lease Regulation did not preclude its jurisdiction in these applications. The Millers did not seek judicial review of that decision. If the Millers were of the view that the Board had erred in that determination, their remedy was to seek judicial review. They did not, and the Board is not inclined to state a case for the opinion of the court at this stage of the proceedings.

[6] In any event, I question whether the Board has the jurisdiction to do as the Millers request. Section 43 of the *Administrative Tribunals Act*, which allows a tribunal to refer a question of law to the court in the form of a stated case, does not apply to the Surface Rights Board.

BACKGROUND

[7] The Lands are used by the Millers for agricultural purposes and are located within the Agricultural Land Reserve (ALR). The Millers no longer farm the Lands themselves, but lease them to Mrs. Miller's son, Tim Pavlis, for that purpose. In the last several years, the Lands have been cultivated with canola or wheat. The Lands are cultivated using a "zero till" practice.

Wellsites

[8] The Board granted right of entry to the NE ¼ 17-79-14 W6M for the construction, drilling, completion and operation of two wells, at 9-17-79-14 W6M, where there is already an existing wellsite. These new wells will be referred to as C9-17 and D9-17. The OGC approved these wells on February 26, 2010 and March 4, 2010, respectively.

[9] NE ¼ 17-79-14-W6M is owned by Mary Miller. In December, 2001, Mrs. Miller and the predecessor to ARC, Star Oil and Gas Ltd. (Star), entered a Surface Lease giving Star access to construct and operate a wellsite at 9-17-79-14 W6M and providing initial and annual compensation to Mrs. Miller. The area of land covered by the surface lease was 5.16 acres. The Surface Lease was amended in 2007 to increase the area of occupation to 7.09 acres and to allow

for the drilling of two additional wells, A9-17 and B9-17. ARC requires, and has entry authorized for, an additional 1.53 acres adjacent to the existing lease area in order to construct and operate wells C9-17 and D9-17, for a total occupied area of 8.62 acres. Construction of the wellpad extension was completed in early July, 2010 but the wells have not yet been drilled. They are expected to be drilled in the summer of 2011.

[10] In their negotiations to try and settle compensation for the additional area of occupation required to construct wellsites C9-17 and D9-17, the parties discussed amending the current lease to consolidate the areas of occupation and provide compensation, but were unable to agree to the terms of a consolidated surface lease agreement. Nor were they able to agree on the terms of a new surface lease agreement solely with respect to the additional 1.53 acres required for the two new wells.

[11] The Board granted entry to the NE ¼ 16-79-14 W6M for the construction, drilling, completion and operation of a well at 10-16-79-14 W6M where there is already an existing wellsite. This new well will be referred to as A10-16. The OGC approved this well on June 8, 2010.

[12] NE ¼ 16-79-14 W6M is owned by John Miller. In June 2002, Mr. Miller and Star entered a Surface Lease giving Star access to construct and operate a wellsite at 10-16-79-14 W6M and providing initial and annual compensation to Mr. Miller. The area of land covered by the Surface Lease is 6.74 acres. ARC requires, and has entry authorized for, an additional 1.58 acres adjacent to the existing lease area in order to construct and operate A10-16, for a total occupied area of 8.32 acres. The wellpad extension has not yet been constructed. Construction is planned for May 2011 with the well scheduled to be drilled in June 2011.

[13] The wells C9-17, D9-17 and A10-16 will be drilled on existing well pads using prior disturbances and existing road access.

[14] The Millers argued that the Board should order the consolidation of the existing surface leases with new terms of entry for the additional areas required for the additional wells, and to determine compensation for entry, occupation and use of the consolidated areas. The Board may authorize entry to land if it is satisfied that entry is required for an "oil and gas activity" as defined in the *Oil and Gas Activities Act*. Oil and gas activities include the exploration for, development and production of petroleum and natural gas, or in other words, the construction and operation of a wellsite. The Board does not have the jurisdiction to consolidate or harmonize an existing surface lease with an additional area of land required for another oil and gas activity. If the Board authorizes entry for another oil and gas activity, in the absence of agreement by the parties, the Board must then determine the compensation payable as a result of the entry for that particular oil and gas activity.

[15] With respect to ARC's application for entry, occupation and use of land to construct and operate wells C9-17 and D9-17, the Board authorized the entry, occupation and use of NE ¼ 17-79-14 W6M for that purpose. As the parties have been unable to negotiate a surface lease or agree on the compensation payable for the entry, occupation and use of land required to construct and operate C9-17 and D9-17, the Board must determine the amount payable. The existing surface lease covers the compensation for the previously leased 7.09 acres for the purpose of the existing wellsites. The Board must determine the compensation payable for occupation of an additional 1.53 acres and arising from the construction and operation of the two additional wells.

[16] Similarly, with respect to ARC's application for entry, occupation and use of land to construct and operate well A10-16, the Board authorized the entry occupation and use of NE ¼ 16-79-14 W6M for that purpose. As the parties have been unable to negotiate a surface lease or agree on the compensation payable for the entry, occupation and use of land required to construct and operate A10-16, the Board must determine the amount payable. The existing surface lease covers compensation for the previously leased 6.74 acres for the purpose of the existing wellsite. The Board must determine the compensation payable for occupation of an additional 1.58 acres and arising from the construction and operation of an additional well.

[17] The Board's entry order of June 7, 2010 ordered ARC to pay $20,000.00 to the Miller's as partial payment for their loss and damage associated with the wellsites C9-17, D9-17 and A10-16, as well as for two other proposed wells (A5-80 and B5-80) that are not the subject of this arbitration.

Flowlines

[18] The Board granted entry for the construction and operation of flowlines on the Lands and for temporary workspace as indicated in Individual Ownership Plans attached to the Entry Orders. Two of the proposed flowlines for which entry to the Lands was granted have been constructed. ARC has withdrawn its application with respect to one of the proposed flowlines, and one proposed flowline has not yet been constructed. The Board's Entry Order will be amended to rescind right of entry for the construction and operation of the flowline from 9-8-80-14 to 5-5-80-14 W6M. As ARC entered portions of the Lands to survey for the proposed flowline that was later not proceeded with, the Millers seek compensation for the entry.

[19] The flowline right of way on NW ¼ 17-79-14 W6M and NE ¼ 17-79-14 W6M (owned by Mary Miller), for a segment of the flowline from 15-26-78-15 W6M to 9-17-79-14 W6M comprises 4.52 acres. Temporary workspace comprises .14 acres. The OGC approved the flowline on May 28, 2010. Construction has been completed and the right of way left for reseeding in the spring of 2011.

[20] The flowline right of way on NW ¼ 21-79-14 W6M except plan H782, NE ¼ 17-79-14-W6M (owned by Mary Miller), and NW ¼ 16-79-14 W6M except plan H782 (owned by John Miller) for a segment of the flowline from 9-17-79-14 W6M to 11-28-79-14 W6M comprises 9.89 acres. Temporary workspace comprises .73 acres. The OGC approved the flowline on May 18, 2010. Construction has been completed and the right of way has been left ready for reseeding in the spring of 2011.

[21] The flowline right of way on SW ¼ 5-80-14 W6M, NW ¼ 5-80-14 W6M, and SW ¼ 8-80-14 W6M (owned by John Miller) for a segment of the flowline from 5-5-80-14 W6M to 1-31 79-14 W6M comprises 3.29 acres. Temporary workspace comprises .12 acres. The OGC approved the flowline in February 2011. Construction is expected to proceed in the summer of 2011.

[22] The flowline rights of way are 20 metres wide. The buried flowlines within the rights of way are either 10 inches or 12 inches in diameter. The flowlines have been, or will be constructed to a depth of 1.5 metres. Once completed, the rights of ways can continue to be used for agricultural purposes.

[23] The Board's entry order of June 7, 2010 ordered ARC to pay $35,000.00 to the Millers as partial payment for their loss and damage associated with the flowlines described above as well as for a proposed flowline from 9-8-80-14 to 5-5-80-14, for which ARC's application is withdrawn and entry is no longer required.

PRINCIPLES OF COMPENSATION

[24] A person who enters, occupies or uses private land for an oil and gas or related activity, is liable to compensate the owner of the land for loss or damage caused by the entry. When the parties are unable to agree on the amount of compensation payable, either through direct negotiation or with the assistance of the Board in mediation, the Board must arbitrate the amount payable. In doing so, the Board must determine compensation in accordance with the *Petroleum and Natural Gas Act* and principles of compensation established by the Courts that are binding upon the Board. Section 154 of the *PNGA* lists various factors the Board may consider in determining an amount to be paid to a landowner. They are:

(a) the compulsory aspect of the entry;
(b) the value of the applicable land;
(c) a person's loss of right or profit with respect to the land;
(d) temporary and permanent damage from the right of entry;
(e) compensation for severance;
(f) compensation for nuisance and disturbance from the right of entry;
(g) the effect, if any, of other rights of entry with respect to the land;
(h) money previously paid for entry, occupation or use;

(i) the terms of any surface lease or agreement submitted to the Board or to which the Board has access;
(j) previous orders of the Board;
(k) other factors the Board considers applicable;
(l) and other factors or criteria established by regulation.

[25] There are no factors or criteria established by regulation. Not all of the above factors will be relevant in every case.

[26] The landowner's right to compensation is for compensation to the extent of loss or damage incurred or reasonably foreseeable as a result of the entry. It is not a right to remuneration beyond the loss or damage incurred (*Western Industrial Clay Products Ltd. v. Mediation and Arbitration Board*, 2001 BCSC 1458).

[27] There is a compulsory aspect to an entry to private land for oil and gas activity, in that a landowner does not have the ability to refuse entry if a company needs access. A landowner, therefore, loses the right to control the use of their land to the extent it is required for an oil and gas activity. The Court has recognized that the loss of intangible rights, such as the loss of quiet enjoyment, or the loss of the right to decide whether land may be used for oil and gas activity, is incapable of valuation in terms of money, and that any value placed on these rights will seem arbitrary (*Dome Petroleum Ltd. v. Juell* [1982] B.C.J. No. 1510 (BCSC)). The Court has also acknowledged that a "taking" under the *Petroleum and Natural Gas Act* is not an expropriation, although expropriation principles may apply in determining compensation, and that no land or legal interest is taken from the landowner. The landowner continues to hold the fee simple and, consequently, it is appropriate that the Board consider the landowner's residual and reversionary interest (*Dome v. Juell, supra*; *Scurry Rainbow Oil v. Lamoureux* [1985] B.C.J. No. 1430 (BCSC)). The upper limit of compensation for the taking itself, is the value of the land; if the landowner receives full value for the land then no additional payment is required for the compulsory aspect of the taking (*Western Clay Products, supra*).

[28] In determining the amount of compensation payable by ARC to the Millers, I must apply the principles of compensation binding on the Board to the circumstances of this case. The question I must ask is: what is the loss sustained by the Millers as a result of ARC's entry, occupation and use of the Lands, and what is the appropriate compensation for that loss? Essentially, compensation includes compensation for loss of rights and compensation for loss of profit, damages and nuisance and disturbance.

EVIDENCE AND ANALYSIS

[29] Both parties filed documentary evidence marked as Exhibits 1 through 14. In addition, I heard evidence from Mary and John Miller with respect to the use of

the Lands, the impact of the ARC entries, and nuisance and disturbance experienced as a result of ARC's entries. I heard evidence from Andrea Fiedler of ARC, respecting the negotiations with the Millers and the compensation paid by ARC for surface access to other properties on these flowline routes. I heard expert evidence from John Wasmuth, a qualified appraiser and agrologist and Anne Clayton, a qualified appraiser. Both Mr. Wasmuth and Ms. Clayton gave opinion evidence as to the market value of the Lands. Mr. Wasmuth provided an opinion with respect to the value of probable crop loss. Ms. Clayton provided evidence with respect to other wellsite agreements or negotiations and other pipeline right of way agreements of which she was aware.

[30] I will review and discuss the evidence and argument as it relates to the various factors set out in section 154 of the *Petroleum and Natural Gas Act* that the Board may consider in determining compensation.

Compulsory Aspect of the Entry/Loss of Rights

[31] The intangible loss of rights may be compensated for even in the absence of any tangible damage to the land or loss of profit arising from an entry (*Imperial Oil Resources Limited v. Forrester*, MAB 1591-2). Compensation for loss of rights typically includes consideration of the compulsory aspect of the taking, the value of land, and the owner's residual or reversionary interest in the land. A right of entry is not granted in perpetuity but only for so long as surface access is necessary for the particular oil and gas activity. A landowner remains the fee simple owner and retains entitlement to the unencumbered fee and to exclusive possession when entry is no longer required. To the extent the landowner may continue to use the encumbered land, as in the case of a flowline right of way, there is residual value to the landowner. Authority from Alberta suggests that the reversionary/residual interest in a pipeline easement to be 75% of the value of the land (*Dome Petroleum Limited v. Grekul, et al* [1983] A.J. No. 994).

[32] An amount for compulsory aspect of the taking is intended to be a purely arbitrary amount to compensate for the loss of the landowner to decide whether his or her land is to be used for an oil and gas purpose. Compensation for this factor is not capable of precise calculation in accordance with some standard (*Dome v. Juell*, supra). There are no legislated or regulated criteria or standards in determining compensation for this factor.

[33] Sometimes the Board has compensated for the compulsory aspect of the taking on a per acre basis in addition to compensation for other factors (See for example *Encana Corporation v. Merrick*, Order 1599-2 and *Encana Corporation v. Jorgenson*, Order 1621-2 where compensation for entry associated with the construction and operation of a flowline included a payment of $500/acre specifically to acknowledge the compulsory aspect of the taking.) Sometimes this factor is not separately compensated for, but included in a per acre rate for compensation that also considers the value of the land. (See for example, *Arc Petroleum v. Piper*, Order 1598-2, *Imperial Oil v. Forrester*, Order 1591-2, and

Spectra Energy v. Vause, Order 420A). Sometimes the Board has ordered a lump sum payment to acknowledge the compulsory aspect of the taking. (See for example *Talisman Energy v. Eagle Eye Mountain*, Order 1653-1 and *Terra Energy v. Rhyason Ranch*, Order 403A.)

[34] In determining compensation in this case, I will include compensation for the compulsory aspect of the taking and loss of rights in a single per acre rate that also considers the value of the land.

Value of the Land

[35] Mr. Wasmuth and Ms. Clayton agreed the highest and best use of the Lands is for agricultural use. Mr. Wasmuth's analysis of comparable sales led him to conclude market value of $1,050/acre. Ms. Clayton's analysis of comparable sales led her to conclude market value of $1,200 to $1,350 per acre. Both appraiser's used the April 2010 transaction of two ¼ sections in 11-79-15 W6M, which Mr. Wasmuth analyzed as a combined sale of 297.63 acres with an average price per acre of $1,205. Ms. Clayton's evidence was that the transaction was of two separate titles, one of 140 acres at $997 per acre and one of 158 acres at $1,386/acre. The larger, higher value parcel is more comparable to the Miller's property as it has the same soil classification. Mr. Wasmuth provided evidence that several of the 2008 transactions provided by Ms. Clayton were not normal market transactions. The 2010 transactions of parcels with similar soil classification indicate a range of value of $913 to $1,628 per acre with an average price of approximately $1,100/acre. Placing most weight on these sales, I find the probable market value of the Lands at the time of the taking was in the range of $1,100 to $1,200/acre.

[36] Considering the court's instruction that the residual and reversionary interests should be taken into account, the acknowledgement that compensation for compulsory aspect of the entry and loss of intangible rights will of necessity be arbitrary, that compensation equivalent to the full value of the land includes compensation for the compulsory aspect of the taking, and that compensation for these factors cannot exceed the value of the land, I find the value of the land provides an appropriate benchmark upon which to determine compensation for the compulsory aspect of the taking and loss of rights. Compensation at this level suggests that the value of the compulsory aspect of the taking and loss of intangible rights equates to the difference between the market value of the fee simple interest in the land and the owners residual and reversionary interest. I acknowledge that this assumption is not based on any evidentiary foundation, and is likely, in fact, incapable of proof. It acknowledges however that although the landowner has a residual/reversionary interest, there is still compensation owing for the compulsory aspect of the taking and loss of intangible rights, and provides an objective basis, namely the market value of the land, that can be demonstrated with evidence, upon which to determine compensation for these factors.

[37] I find a payment of $1,200/acre, equivalent to the probable upper limit of market value for the land, compensates for the loss of rights associated with the entries and considers both the residual/reversionary interest and the compulsory aspect of the taking.

Loss of Profit

[38] Mr. Wasmuth provided evidence on average yields and prices for canola and wheat from 2005 to 2010. The indicated 2010 yields of 30 bushels/acre for canola and 40 bushels/acre for wheat represent the upper end of preliminary yield estimates. The 2010 price for canola ranged from a low of $10.61/bushel to a high of $10.97/bushel; the six year average was $8.73/bushel to $9.00/bushel. The 2010 price for wheat was $7.32/bushel, with a six year average of $6.07/bushel.

[39] Mr. Wasmuth's evidence was that 2010 was a drought year. He estimated the Miller's actual 2010 canola yields to be 10 – 15 bushels/acre and wheat yields to be 25-35 bushels/acre. Further, he estimated that canola yields would continue to decline going forward as, in his opinion, an optimal rotation of canola with other crops was not being practiced. His evidence was that in the Peace, the probability of crop failure is one year in five. Mr. Miller disputed this evidence saying that in 40 years as a farmer, he had never had a crop failure.

[40] In Mr. Wasmuth's opinion, a payment of 1 ½ to 2 times the expected annual crop loss would fully compensate for any expected damages and considers the zero till nature of the property. His evidence was that crop loss payments calculated on the basis of yield times price represent gross revenue and do not account for the input costs of seed, fertilizer, pesticides and fuel. His evidence was that normal input costs are 70-90% of gross revenue. In good years, input costs may fall to 50% of revenue, and in drought years may exceed revenues. His evidence was that the practice of zero tilling results in lower input costs, principally as a result of using less fuel, but that that growing canola in successive years increases input costs because of increased use of pesticides and fungicides.

[41] Mrs. Miller provided photographs depicting the crop loss from the corners where farm equipment has to turn. The more turns required to farm around oil and gas installations results in larger areas of crop loss. Mr. Wasmuth calculated a loss of approximately .02 acres on a corner turn.

[42] Mrs. Miller's evidence was that crop is lost from both the right of way and the temporary workspace and that crop loss extends beyond three years. She provided photographs depicting a cultivated right of way area in the fourth year demonstrating a lesser crop on the right of way. ARC did not dispute that crop loss was payable for the temporary workspace, but argued crop loss at $300 per acre paid at 100% for the first year, 50% for the second year and 25% for the third year was more than adequate to compensate for estimated crop loss.

[43] Mrs. Miller was highly critical of Mr. Wasmuth's estimates of probable crop loss but neither she nor Mr. Miller provided evidence of actual or anticipated crop loss, or of actual or anticipated yields or income from the Lands. Mr. Pavlis, who actually farms the Lands, did not give evidence. It appears from the photographic evidence provided by Mrs. Miller that wheat was grown on NW ¼ 16-79-14 in 2010 and that canola was grown on NE ¼ 17-79-14 and NW ¼ 17-79-14. There is no evidence before me as to which crop was grown on the other affected ¼ sections in 2010. Nor is there evidence as to which crop Mr. Pavlis anticipates cultivating on each of the various quarter sections in the coming years.

[44] Mrs. Miller argued that decreased production as a result of increased pipeline activity impacts the average production for crop insurance purposes, further impacting farmers. There is no evidence to support this assertion or quantify the impact of pipeline rights of way on average crop production or the potential downstream loss associated with reduced crop insurance payments.

[45] The only evidence before me with which crop loss can be estimated is the evidence provided by Mr. Wasmuth. On the basis of that evidence, using the upper ends of the ranges for both yield and price, the gross revenue from a canola crop in 2010 would have been $329.10/acre (30 bu/acre x $10.97/bu) and the gross revenue from a wheat crop would have been $292.80/acre (40 bu/acre x $7.32). If input costs are taken into account, the estimated loss of profit would be less than half those amounts. On the evidence before me, I find $300/acre more than adequately covers for the probable loss of profit from the land in the first year, and on an annual basis for the wellsite areas.

[46] As to the duration of the crop loss for the flowline and temporary work space areas, in the absence of more precise evidence, I accept Mr. Wasmuth's estimates of 50% for the second year and 25% for the third year. There is some evidence of a likelihood of crop loss extending to a fourth year, and I find crop loss should be compensated at 25% for the fourth year.

[47] Mrs. Miller provided examples of agreements paying crop loss at $400 and $450/acre and argued the same should be paid for these entries. The evidence before me does not support that the Millers have actually experienced crop loss at that level or are likely to experience that level of loss in the coming years. Just because others have agreed to payment at a certain level does not mean that payment need apply in every circumstance. The circumstances behind these other agreements are not known. It may be that the agreed crop loss figure reflects evidence a landowner was able to provide a company to support actual loss. It may be that a company was willing to pay an amount for crop loss higher than the evidence might support in order to secure an agreement quickly, avoid a lengthy dispute, or avoid the cost and time of arbitration. In a negotiated or mediated agreement, parties may agree to whatever they want. If an agreement cannot be reached and the Board is required to arbitrate compensation for loss,

the Board is constricted to determine compensation that conforms with the evidence before it and to the law. The evidence before me does not support actual or probable crop loss as high as $400/acre.

Severance

[48] Mrs. Miller gave evidence respecting the difficulties in farming a small area south of the flowline right of way on NE ¼ 17-79-14. In the initial year following construction of the right of way, the agricultural equipment cannot cross the right of way, effectively severing this small area. As a result, additional time is required in cultivating and harvesting this area as a result of having to make additional turns with the farm equipment. She was not able to estimate the additional time required. Mr. Pavlis, who actually farms the Lands, did not give evidence.

[49] Mr. Wasmuth estimated the increased time for farming NE ¼ 17-79-14 at ½ hour to ¾ hour in a growing season. He estimated the area severed in the first year as a result of the flowline at approximately 5 acres. Based on his own farming experience, his evidence was this area could still be farmed.

[50] There is no land that is severed in the sense that it can no longer be farmed at all and becomes unusable. Additional time incurred in farming the Lands as a result of having to operate equipment around oil and gas installations can be compensated as nuisance and disturbance.

Temporary and Permanent Damage

[51] Mrs. Miller's evidence was that as a result of ARC's activities on NW ¼ 16-79-14, the Saskatoon berries were wiped out. Mrs. Miller said top soil stripping was not done properly resulting in top soil loss. She did not provide evidence with which to quantify this damage.

[52] Mrs. Miller also gave evidence that even after abandonment of a pipeline, the pipe typically remains in the ground and liability may accrue to the landowner as a result. The evidence is that if a landowner disturbs an abandoned pipeline after it has received an abandonment certificate due to the landowner's desire to use the lands, then the landowner is required to ensure pipeline disturbance is corrected to a standard acceptable to the Oil and Gas Commission. The Millers argued the landowners do not a have a true reversionary interest because the pipeline stays in the ground forever, and while the right of way may be discharged, there will always be a notation on title advising of the presence of a deactivated pipeline. At present, the right of way area may continue to be used for agricultural purposes. Any potential future loss as a result of the presence of the pipeline is entirely speculative and cannot be known or quantified at this time. If there is future loss or damage caused by the presence of the pipeline, such loss or damage may be addressed at that time.

Nuisance and Disturbance

[53] In addition to the evidence respecting the additional time required to farm around the oil and gas installations, Mrs. Miller provided detailed itemization of her contact with ARC from February 2009 to December 2009 when ARC filed its applications with the Board, and for her time spent in dealing with the Board's applications. She envisages that there will be increased use of the access roads on the Lands for the drilling of the new wells, resulting in additional noise and dust.

[54] I accept there has been and will be some nuisance and disturbance in the form of noise, dust and traffic while the wellsites and flowlines are constructed, but cannot precisely quantify this loss with the evidence before me. None of the entries are within close proximity to the Miller's home, and there is no evidence as to how, or to what extent, dust and noise from the entries impacts the Millers.

[55] ARC did not take serious issue with Mrs. Miller's evidence of her time involved in dealing with ARC. To the extent the Millers spent time discussing access and negotiating terms and compensation, irrespective of any applications to the Board, this time is compensable as nuisance and disturbance. But for ARC's request for entry, the Millers could have used their time in other pursuits.

[56] While the evidence provided by Mrs. Miller itemizes her activities associated with ARC's request for entry, it does not always include the amount of time involved. My best estimate from the evidence before me is that Mrs. Miller has spent approximately 15 hours of her time, from ARC's initial request for entry in dealing with ARC's need for entry for both the wellsites and flowlines (exclusive of time spent in the Board's processes which is to be included in a payment for Costs).

[57] Some loss for nuisance and disturbance, for example for time spent, can be tracked and accounted for, and some nuisance and disturbance, for example for noise and dust, is not capable of precise quantification and must be arbitrarily acknowledged. I find an initial payment of $2,000 per wellsite adequately compensates for nuisance and disturbance associated with the construction of the wellsites, and $1,000 annually for each of the wellsite areas adequately compensates for ongoing nuisance and disturbance. I find an initial payment of $2,000 per entry adequately accounts for the nuisance and disturbance associated with the construction and operation of the flowlines.

Terms of Other Agreements

Wellsites

[58] Ms. Clayton gave evidence of a 2009 multi-well lease and an unaccepted multi-wellsite offer of which she was aware. She was not at liberty to identify the parties involved or provide copies of the surface lease or offer. The surface

lease agreement was for 7.78 acres and contemplated six wellsites. Her evidence was the total initial right of entry payment was $54,302 inclusive of cash, "in kind" work and contracts, and the annual rent for the pad and first well was $11,704 (comprised of cash and "in kind" value). Her evidence was that each additional wellsite was to be compensated at $2,000 for right of entry, plus annual rent of $500.

[59] Ms. Fiedler's evidence was that ARC drilled approximately 100 wells in north east British Columbia in the last 5 years. She said the average compensation agreed was $950/acre plus $300/acre crop loss, and an amount for nuisance, determined on a case by case basis, but typically around $2,000.

Pipelines

[60] Ms. Clayton provided evidence in the form of a model comparing compensation paid for three pipelines: Nova Gas Trans Canada Line, Spectra South Peace Pipeline, and the Enbridge Alberta Clipper Line, which have 20 metre, 18 metre and 20 metre rights of way respectively. The model was based on an 804.5 metre right of way comprising 3.68 acres and .58 acres of temporary workspace.

[61] All three of these pipelines are transmission lines under the jurisdiction of the National Energy Board. The rights of way contain pipelines that are 36 inches in diameter. The Nova Gas line was constructed in 2010 and much of it is within British Columbia, not far from ARC's line. The Spectra line is also fairly recent and part of it is within British Columbia. The Alberta Clipper line extends from Hardesty Alberta to Gretna Manitoba. The Miller's evidence included a generic copy of the 2007 agreement between Enbridge Pipeline Inc. and landowners along the Alberta Clipper Line. Copies of the Spectra and Nova Gas agreements were not provided. Ms. Clayton's evidence was that the agreements contained confidentiality clauses, and for that reason, she could not make them available. Neither she nor the Millers were parties to these agreements, or involved in their negotiation.

[62] Ms. Clayton's evidence was that in all cases compensation included a "trenching" or "ditching" fee of $35/linear metre ($45/metre for two pipes in the Enbridge Agreement). The Spectra and Nova Gas agreements compensated for the right of way at $950/acre, and Enbridge compensated at 150% of the market value of the land but no less than $800/acre. Spectra paid crop loss at $500/acre, half in advance and half on completion. Nova Gas paid a one time crop loss of $1,300/acre and the Enbridge crop loss varied from $1,275 to $1,750/acre with additional payments if going through wet land. Nova paid 100% (ie $950/acre) for temporary workspace; Spectra and Enbridge each paid 50% ($475/acre). Spectra and Enbridge compensated for inconvenience at $375/acre and provided a $1,000 signing bonus. Ms. Clayton calculated the total compensation packages at $45.29 to $53.75 per lineal foot of right of way or $9,902 to $11,751/acre.

[63] The sample Enbridge Agreement includes a clause whereby landowners give Enbridge a full and final release of damages and provide indemnification for related parties' claims. Landowners agree not to engage in opposition of any kind to the pipeline project and agree not to participate in the public hearing process. The Enbridge agreement characterizes the $35 (or$45) linear foot payment as an early signing incentive not additional compensation. The agreement indicates this payment will not be made for agreements signed after a specified date.

[64] Ms. Fiedler's evidence was that all of the other landowners along the ARC flowlines that are the subject of this arbitration were paid $950/acre for loss of rights and $300 for crop loss at 100% for the first year, 50% for the second year and 25% for the third year.

[65] The Millers argued that the Nova Gas, Spectra and Enbridge agreements constitute a "pattern of dealings" for the compensation of flowlines and that the Board should compensate the Millers for these flowlines in comparable terms.

[66] I do not accept that the evidence provided of the Nova Gas, Spectra and Enbridge agreements establish a pattern of dealings upon which the Board should place great weight in determining the compensation payable in this case. Other than a generic copy of the Enbridge agreement, I do not have copies of the agreements, and I do not have evidence as to the circumstances of their negotiation or the nature of the properties involved. The agreements are not in respect of flowlines within the jurisdiction of the Board, but pipelines within the jurisdiction of the National Energy Board, for which the process of acquiring rights to land is different than under the *Petroleum and Natural Gas Act*. Although the width of the rights of way is similar, the buried pipeline is considerably larger. It appears from the Enbridge agreement that the substantial "trenching" or "ditching" fee was an early signing incentive not intended to compensate landowners for actual loss. Without the trenching or ditching fee, the agreements are reasonably in line with ARC's agreements with landowners for other segments of their flowlines and other agreements in evidence before me. It is predominantly the trenching or ditching fee that provides additional compensation beyond what was paid by ARC to other landowners affected by this flowline and what is typically paid for flowline rights of way in this province. The additional payment is characterized as a signing bonus in the Enbridge Agreement, and the reason for it in the Spectra and Nova Gas Agreements is not evident on the evidence before me. It is possible that the different process for the acquisition of land for pipelines under the jurisdiction of the National Energy Board places a market value on entry over and above actual or foreseeable loss, which is all that is compensable under the *Petroleum and Natural Gas Act.* There is no evidence before me to substantiate actual or reasonably foreseeable loss from these flowline entries equating to $35 per lineal meter of right of way.

[67] The burden is on the party tendering the evidence as a pattern of dealings to establish that the agreements show an established pattern for cases with

similar facts. To a large extent, the facts surrounding these agreements are not in evidence, and to the extent the facts surrounding the agreements are in evidence, they are for the most part not similar to the facts of this case in that the nature of the pipeline and legislative framework for acquisition of rights are different. The evidence falls short of demonstrating an established pattern of dealings for determining flowline compensation in British Columbia.

Compensation for Wellsites

[68] Compensation for ARC's entry, occupation and use of the Lands for the construction and operation of the wellsites includes an initial payment to compensate for loss of rights, loss of profit, damage, and nuisance and disturbance, and an annual payment to compensate for annual loss of profits, and nuisance and disturbance.

[69] The Millers requested compensation on the basis that the area for the new entry be harmonized with the existing leases. As I have already indicated, the Board does not have the jurisdiction to harmonize a new entry with an existing surface lease.

[70] Applying my findings discussed above in relation to the various factors the Board may consider, I calculate initial and annual compensation for the entry associated with wellsites C9-17 and D9-17 as follows:

		Initial	Annual
For compulsory aspect of the taking/loss of rights/value of the land:	$1,200/acre x1.53 acres =	$1,836.00	
For loss of profit:	$300/acre x 1.53 acres =	$459.00	$459.00
For damage/nuisance and disturbance	$2,000/wellsite =	$4,000.00	
For nuisance and disturbance			$1,000.00
Total initial payment:		$6,295.00	
Total annual payment:			$1,459.00

[71] Stepping back and considering the compensation globally in light of the evidence before me and the principles of compensation binding upon me, I conclude that an initial payment of $6,300.00 and annual payments of $1,500.00 compensates the Millers for their actual and reasonably foreseeable loss associated with ARC's entry to NE ¼ 17-79-14 W6M to construct and operate wellsites C9-17 and D9-17.

[72] I calculate initial and annual compensation for the entry associated with wellsite A10-16 as follows:

		Initial	Annual
For compulsory aspect of the taking/loss of rights/value of the land:	$1,200/acre x1.58 acres =	$1,896.00	
For loss of profit:	$300/acre x 1.58 acres =	$474.00	$474.00
For damage/nuisance and disturbance	$2,000/wellsite =	$2,000.00	
For nuisance and disturbance			$1,000.00
Total initial payment:		$4,370.00	
Total annual payment:			$1,474.00

[73] Stepping back and considering the compensation globally in light of the evidence before me and the principles of compensation binding upon me, I conclude that an initial payment of $4,500.00 and annual payments of $1,500.00 compensates the Millers for their actual and reasonably foreseeable loss associated with ARC's entry to NE ¼ 16-79-14 W6M to construct and operate wellsite A10-16.

[74] The total initial compensation payable, therefore, to the Millers for entry, occupation and use of the Lands for wellsites C9-17, D9-17 and A10-16 is $10,800.00. Annual payments of $3,000.00 are payable commencing June 7, 2011. The Board's Order of June 7, 2010 required partial payment by ARC to the Millers of $20,000.00 on account of compensation owing in relation to these and two other wellsites. Initial compensation for C9-17, D9-17 and A10-16 is fully satisfied by the partial payment. The disposition of the remainder of the partial payment ($9,200.00) cannot be determined until compensation for wellsites A5-5 and B5-5 has either been agreed by the parties or determined by the Board.

Compensation for the Flowlines

[75] Compensation for ARC's entry, occupation and use of the Lands for the construction and operation of the flowlines includes a one-time payment to compensate for loss of rights, loss of profit, damage and nuisance and disturbance.

[76] Applying my findings discussed above in relation to the various factors the Board may consider, I calculate compensation for the entry associated with the flowline from 15-26-78-15 W6M to 9-17-79-14 W6M as follows:

		Initial
For compulsory aspect of the taking/loss of rights/value of the land:	$1,200/acre 4.66 acres =	$5,592.00
For loss of profit for 4 years:	$300/acre x 4.66 acres =	$1,398.00
	$300/ac x 4.66ac x 50% =	$699.00
	$300/ac x 4.66ac x 25% =	$349.50
	$300/ac x 4.66ac x 25% =	$349.50
For damage/nuisance and disturbance	$2,000	$2,000.00
Total payment:		$10,388.00

[77] Stepping back and considering the compensation globally in light of the evidence before me and the principles of compensation binding upon me, I conclude that payment of $10,400.00 compensates the Millers for their actual and reasonably foreseeable loss associated with ARC's entry to NW ¼ 17-79-14 W6M and NE ¼ 17-79-14 W6M to construct and operate a segment of the flowline from 15-26-78-15 W6M to 9-17-79-14 W6M.

[78] I calculate compensation for the entry associated with the flowline from 9-17-79-14 W6M to 11-28-79-14 W6M as follows:

		Initial
For compulsory aspect of the taking/loss of rights/value of the land:	$1,200/acre 10.62 acres =	$12,744.00
For loss of profit for 4 years:	$300/acre x 10.62 acres =	$3,186.00
	$300/ac x 10.62ac x 50% =	$1,593.00
	$300/ac x 10.62ac x 25% =	$796.50
	$300/ac x 10.62ac x 25% =	$796.50
For damage/nuisance and disturbance	$2,000	$2,000.00
Total payment:		$21,116.00

[79] Stepping back and considering the compensation globally in light of the evidence before me and the principles of compensation binding upon me, I conclude that payment of $21,150.00 compensates the Millers for their actual and reasonably foreseeable loss associated with ARC's entry to NW ¼ 21-79-14 W6M except plan H782, NE ¼ 17-79-14 W6M, and NW ¼ 16-79-14 W6M except plan H782 to construct and operate a segment of the flowline from 9-17-79-14 W6M to 11-28-79-14 W6M.

[80] I calculate compensation for the entry associated with the flowline from 5-5-80-14 W6M to 1-31-79-14 W6M as follows:

		Initial
For compulsory aspect of the taking/loss of rights/value of the land:	$1,200/acre 3.41 acres =	$4,092.00
For loss of profit for 4 years:	$300/acre x 3.41 acres =	$1,023.00
	$300/ac x 3.41ac x 50% =	$511.50
	$300/ac x 3.41ac x 25% =	$255.75
	$300/ac x 3.41ac x 25% =	$255.75
For damage/nuisance and disturbance	$2,000	$2,000.00
Total payment:		$8,138.00

[81] Stepping back and considering the compensation globally in light of the evidence before me and the principles of compensation binding upon me, I conclude that payment of $8,150.00 compensates the Millers for their actual and reasonably foreseeable loss associated with ARC's entry to SW ¼ 5-80-14 W6M, NW ¼ 5-80-14 W6M, and SW ¼ 8-80-14 to construct and operate a segment of the flowline from 5-5-80-14 W6M to 1-31-79-14 W6M.

[82] The Millers claimed compensation for the entry for the purposes of surveying the proposed right of way for the flowline from 9-8-80-14 to 5-5-80-14 that ARC has subsequently decided not to proceed with. At the time these entry orders were made, the recently enacted provisions of the *Oil and Gas Activities Act* providing for right of access for the purpose of surveying for a proposed pipeline right of way and the process to be followed to obtain access was not in force, and the Board made entry orders for this activity when parties could not agree to access and terms of access. With the enactment of the *Oil and Gas Activities Act* an entry order for the purpose of surveying a proposed pipeline

right of way is not required, and in the absence of actual damage caused by surveying activity, compensation for access itself is not payable. Access for surveying is typically required for a short period of time. I have no evidence of actual loss to the Millers associated with the entry for the purpose of surveying his proposed right of way. As entry was made, however, by order under the previous legislative regime, I award a nominal payment of $500 as compensation for the compulsory aspect of this entry and loss of rights.

[83] Total compensation owning for the flowlines is $40,200.00. The Board's Order of June 7, 2010 provided a partial payment by ARC to the Millers on account of compensation for the flowlines in the amount of $35,000.00. The balance owing to the Millers is, therefore, $5,200.00.

[84] I have found this decision extremely difficult to write because of the apparent disconnect between the law of compensation for surface access to private land and the expectations of the landowners as to the appropriate level of compensation. The difficulty has been compounded by the knowledge that the parties could have come to terms of compensation in excess of the amounts I have determined. Feeling the compensation offered by ARC to be unacceptably low, the Millers felt compelled to proceed with the arbitration in the hope that the Board could order compensation in line with their expectations. The problem, however, is that their expectations do not conform to the law that is binding on this Board. The Board cannot change the law. It is up to the legislature to consider the difficult public policy issues around oil and gas development and the rights of landowners, and to consider whether the law of compensation reflects an appropriate balancing of the interests of industry, landowners, and the public at large. If it is determined that the principles of compensation binding on the Board do not reflect a balancing of the various interests and are not socially acceptable, then it is for the legislature to address those concerns.

[85] In the meantime, parties are free to negotiate compensation without the constraints binding on the Board. Parties are at liberty to negotiate terms of entry that include value for the avoidance of arbitration, the maintenance of relationships, the forbearance from opposition to regulatory process, or any other circumstances that go beyond actual or foreseeable loss or damage to the landowner from the entry. If in the circumstances of a particular negotiation, the parties agree to consideration beyond compensation for loss and damage in order to come to a negotiated settlement they may do so. But if parties cannot agree to the terms of entry and compensation, either on their own or with the assistance of a Board mediator, and the Board is placed in the position of having to arbitrate compensation in accordance with the principles of compensation binding upon it, landowners cannot expect to receive payment beyond compensation for their actual and reasonably foreseeable loss established by evidence.

COSTS

[86] ARC did not dispute the Miller's entitlement to costs, but did take issue with some of the amounts claimed. Mrs. Miller submitted invoices accounting for time spent, disbursements, and kilometers travelled, and charging a flat rate per email sent and received, telephone call made and received, house visits, and conference calls from the house in addition to time spent on these activities. Mrs. Miller billed her time at $82/hour and Mr. Miller's time at $50/hour. The $82/hour rate is the average of hourly rates paid for costs in three other cases. The rate claimed of $1.12/km is the average of the kilometer rate paid in three other cases. Mrs. Miller also provided copies of invoices from Aspen Grove Property Services for Ms. Clayton's time and disbursements, and from Mackoff and Company for legal fees charged to Mr. Gowman in relation to these applications. The Millers' invoices for costs total $40,512.14.

[87] The Board's authority under section 170 of the *Petroleum and Natural Gas Act* is to require the payment of all or part of the actual costs, including reasonable legal and professional fees and disbursements, and reasonable time spent by a party. incurred by a party in connection with an application.

[88] ARC did not dispute the number of hours claimed by Mr. and Mrs. Miller (approximately 171 hours) but submitted they should be paid at $50/hour not the $82/hour claimed for Mrs. Miller's time, and disputed that the flat rate for emails, telephone calls, house visits and conference calls over and above time spent was reimbursable. In addition to the time claimed, ARC agreed to reimburse Mr. and Mrs. Miller for an additional 80 hours for the time spent at the mediation/arbitration at the rate of $50/hour (4 days x 10 hrs/day x 2 people = 80 hours).

[89] On the premise that when a landowner spends time preparing for and participating in Board proceedings they may not be able to engage in other remunerative work, the amount claimed for time should not exceed the rate that could be expected for other remunerative work. In the absence of evidence of the hourly rate actually received by a landowner from their business or employment, the Board has concluded that $50/hour is appropriate, and I find $50/hour is the appropriate hourly rate to apply to the Millers' time.

[90] I find the flat rate for emails, telephone calls, etc, over and above time spent by the landowner on these activities are not actual costs of the landowner and are not compensable.

[91] ARC did not dispute the kilometers claimed, the kilometer rate or any of the disbursements claimed. They agreed to costs of $500 with respect to the withdrawal of one of the flowline applications.

[92] ARC did take issue with elements of the accounts rendered by Aspen Grove and Mackoff and Company, questioning the possible overlap of services and

whether some of Mr. Mackoff's account was properly recoverable as costs of the Board's proceedings as they appeared to be to Mr. Gowman and not to the Millers, and a portion appeared to relate to consultation respecting whether or not to file an application for judicial review from the Board's jurisdiction decision. I was told that although Mr. Gowman retained Mackoff and Company, that retainer was on behalf of the Millers in respect of these applications. ARC also questioned the propriety of some of Ms. Clayton's account in that she appeared to be charging for services as both an expert witness and an advocate. In any event, and despite these concerns, ARC submitted that a payment of $35,000.00 on account of all of Mr. and Mrs. Miller's costs would be reasonable.

[93] Having reviewed the costs accounts I accept ARC's submission that payment of $35,000.00 on account of all of Mr. and Mrs. Millers costs is reasonable. Mr. and Mrs. Miller claimed a total of approximately 171 hours engaged in preparing for and attending the Board's processes in connection with these applications. This time with the additional 80 hours for attendance at the arbitration, at $50/hour equates to $12,550.00 (251 x $50 = $12,550). The total mileage claimed is $799.57 and the disbursements amount to $886.46. The Millers costs associated with their own time and disbursements, therefore, totals $14,236.03. The combined total of the professional accounts rendered by Mackoff and Company and Aspen Grove is $20,211.55. The combined totals are just shy of $35,000.00. On the understanding that responsibility for Mackoff and Company's account falls to the Millers, I find ARC should pay costs to the Millers of $35,000.00.

ORDER

[94] The compensation payable to John and Mary Miller by ARC Petroleum Inc. for access to those portions of the Lands required to construct and operate wellsites C9-17, D9-17 and A10-16 is $10,800.00. This payment is satisfied by the partial payment previously ordered by the Board.

[95] ARC Petroleum Inc. shall pay John and Mary Miller the sum of $3,000.00 annually commencing June 7, 2011 as annual rent for the occupation and use of those portions of the Lands required for the operation of wellsites C9-17, D9-17 and A10-16.

[96] The compensation payable to John and Mary Miller by ARC Petroleum Inc. for access to those portions of the Lands required to construct and operate flowlines15-26-78-15 W6M to 9-17-79-14 W6M, 9-17-79-14 W6M to 11-28-79-14 W6M, and 5-5-80-14 W6M to 1-31-79-14 W6M is $40,200.00. A portion of this compensation is satisfied by the partial payment previously ordered by the Board. ARC Petroleum Inc. shall forthwith pay to John and Mary Miller the sum of $5,200.00, being the balance owing on account of compensation payable for entry occupation and use of those portions of the Lands required for the construction and operation of these flowlines.

[97] ARC Petroleum Inc. shall forthwith pay to John and Mary Miller the sum of $35,000.000 as costs.

Dated: May 24, 2011

For the Board

Cheryl Vickers
Chair