

ALBERTA ENVIRONMENTAL APPEALS BOARD

BOARD FILE NUMBER 23-046

APPELLANT BIGHILL CREEK PRESERVATION SOCIETY

RESPONDENTS MOUNTAIN ASH LIMITED PARTNERSHIP and DIRECTOR OF ALBERTA ENVIRONMENT AND PROTECTED AREAS

DOCUMENT **WRITTEN SUBMISSION OF THE APPELLANT ON DIRECTLY AFFECTED AND IN SUPPORT OF AN APPLICATION FOR A STAY UNDER SECTION 97 OF THE *ENVIRONMENTAL PROTECTION AND ENHANCEMENT ACT* (ALBERTA)**

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Other Appellants: To be distributed by the Board

I. INTRODUCTION

1. The following abbreviations are used in this Submission:
 - a. Appellant – Bighill Creek Preservation Society;
 - b. Approval - Approval No. DAUT0012841 dated July 20, 2023 issued by the Director under the *Water Act* authorizing MALP to (1) place, construct, operate, maintain, remove, disturb works, in or on any land, water or water body, (2) maintain, remove or disturb ground, vegetation or other material in or on any land, water or water body and (3) alter flow, direction of flow or level of water, all for the purpose of aggregate extraction at NW-31-026-03-W5, SW-31-026-03-W5 in Rocky View County, Alberta;
 - c. Board - Alberta Environmental Appeals Board;
 - d. Director – Designated Director under the *Water Act*;
 - e. *EPEA* – *Environmental Protection and Enhancement Act*, RSA 2000 c E-12;
 - f. Fennell Report - *Mountain Ash Limited Partnership Summit Gravel Pit: Review of hydrogeology, geochemistry, fish and aquatics, and climate change* (January 2021) 57 pp (attached to this submission in **APPENDIX B**);
 - g. MALP – Mountain Ash Limited Partnership;
 - h. *Normtek - Normtek Radiation Services Ltd. v Alberta Environmental Appeals Board*, 2020 ABCA 456;
 - i. Notice of Appeal – Notice of Appeal dated July 26, 2023 filed by the Appellant with the Board under the *Water Act* and *EPEA*;
 - j. Park – Big Hill Springs Provincial Park;
 - k. *Water Act* – *Water Act*, RSA 2000, c W-3.

2. Bighill Creek Preservation Society is an Alberta-based registered society with a mandate to develop a watershed plan for the entire Bighill Creek drainage and to ensure the long-term preservation of the ecological and historical values of the region.

3. The Appellant has an established record of conservation-related work in furtherance of its mandate. A full articulation of the Appellant's work is found on its website at www.bighillcreek.ca.

4. Big Hill Springs Provincial Park, one of Alberta's original provincial parks, lies at the approximate centre of the Bighill creek watershed. The Appellant's work is solely dedicated to advocating for the preservation of the Park's ecological integrity, including the nationally significant thermal springs located at the Park.

5. The Appellant is actively engaged in community outreach and education with respect to the cultural and ecological values of the Park. The Appellant has made presentations to Rocky View County and the Town of Cochrane (through which Bighill Creek flows). In addition, the Appellant has participated in seminars, such as those sponsored by the Bow River Basin Council and community events including the Municipal District of Big Horn's annual program "Living In The Natural Environment". The Appellant has pursued its mandate by engaging in public education at the Cochrane Farmers Market and the Park. These presentations have highlighted the cultural and ecological attributes of the thermal springs, the Park and Bighill Creek which provide current as well as future respite, educational and recreational opportunities for local and regional citizens. In 2016, the Appellant assumed stewardship of the Rocky View County environmental reserves in the Bighill Creek. The work of the Appellant has also included the following:

- In the preparation of a comprehensive Watershed Plan for Bighill Creek, the Appellant raised funds for and commissioned the following studies, some of which are ongoing:
 - Bighill Creek Water Analysis Baseline Studies, Dr. Ymene Fouli, 2018-2019
 - Electrofishing Investigations in Bighill Creek, Trout Unlimited Canada, June 2018
 - Riparian Health Assessment, Bighill Creek, Cows and Fish Alberta, 2018
 - Aquatic Biomonitoring at Bighill Creek, Tobin Benedict, 2019
 - Preliminary DNA Data, Bighill Creek AB, University of Guelph, December 2019

- Bighill Creek Water and Sediment Quality Baseline Study, Dr. Ymene Fouli, 2019-2020
 - Benthic Macro-Invertebrate Biomonitoring Study, Bighill Creek, Tobin Benedict, Jan. 2020
 - Temperature logger installations/monitoring at seven locations, Trout Unlimited report, 2020
- The Appellant has participated in Rocky View County planning and regulatory processes impacting the Park and Bighill Creek:
 - commented to Rocky View Council Recreation and Parks Master Plan, 2020
 - submission to Rocky View Council County on Rocky View Municipal Plan, 2021
 - submission to Rocky View Council re Bylaw C8051-2020, 2021

6. The Appellant filed a statement of concern under the *Water Act* with Alberta Environment and Protected Areas in relation to the application by MALP for the Approval, and the statement of concern was accepted by the Director on May 31, 2022. This letter of acceptance is included as an attachment to the Appellant's Notice of Appeal filed with the Board in this matter.

7. The Appellant's statement on how it is directly affected by the Approval is attached as **APPENDIX A.**

8. The Appellant engaged Dr. Jon Fennell, an experienced hydrogeologist, to provide an expert report to ascertain the potential impacts of the MAPL mine on water quality and quantity as discharged from the aquifer at the thermal spring in the Park. In the Fennell Report, Dr. Fennell's evaluation determined the mine would create a real risk of contamination of groundwater from weathering and leaching of chemicals as such as arsenic, cadmium, chromium, selenium. The Fennell Report noted that MAPL testing indicated the presence of the potential toxins identified above at concentrations above those listed for the protection of freshwater aquatic life.

9. The Fennell Report concluded that the high risk and irreparable nature of this foreseeable harm required that no gravel mining should be permitted within 1.6 kilometers of the Park and any mine located within an additional 800 meters of the Park should be required to maintain at least 4 meters of gravel between mining operations and groundwater. The Fennell Report is attached in **APPENDIX B**.

10. Alberta government officials responsible for provincial parks have also expressed concern about the impact of the MALP mining on the Park. In a letter submitted to Rocky View County on February 17, 2021, Alberta Environment and Parks specifically referenced the concerns raised in the Fennell Report and observes that the MALP impact assessment failed to fully assess impacts of the mine to groundwater quality and exposure to contaminants. A copy of the Alberta Environment and Parks letter dated February 17, 2021 and another letter by the department dated February 16, 2021 which also references the need to protect the Park from adverse impacts of gravel mining, are attached as **APPENDIX C**.

II. LEGAL ARGUMENT ON THE INTERPRETATION OF “DIRECTLY AFFECTED” IN *EPEA* AND THE *WATER ACT*

A. General Context and a Purposive Interpretation of EPEA

11. Public participation became a key component of resources and environmental decision-making in the 1960s and the subject has since received significant worldwide attention.

12. The concept of public participation is essentially a means to facilitate deliberative democracy and give persons an opportunity to influence the exercise of statutory power held by government officials.

13. The 1990s saw the right to public participation in resources and environmental decision-making referenced and implemented by international law. The 1992 United Nations Rio Declaration expressly endorses public participation in environmental issues. Similarly, Article 6 of the Aarhus Convention calls for states to establish a legal right to public participation in resources and environmental decision-making. This right to participate is to extend to any person with an interest in the decision.

14. In Alberta, several major project controversies in the 1980s, including disputes over the Oldman River dam and the Alpac pulp mill, brought these international developments to the provincial scale, and ultimately led Alberta to commission a taskforce in 1990 to recommend reforms to Alberta legislation governing environmental and resource project decision-making.

15. One of the taskforce recommendations was for Alberta to enhance and systematize public participation in environmental and resource development decision-making. As described above, calls for an enhanced public voice in project decision-making and a more systematic and transparent decision-making process were taking place at this time both across Canada and internationally. These developments, together with local project controversies, had significant influence on public policy deliberations in Alberta in the early 1990s. This culminated with the enactment of *EPEA* on September 1, 1993.

16. The Minister of Environment captured the essence of the purposes underlying *EPEA* during its first reading in the Legislature as Bill 23 in May 1992, including in particular, an enhanced and transparent process for public participation in environmental and resource project decision-making:

Mr. Speaker, this is a great honour for me as this comprehensive legislation is the culmination of more than 28 months of consultation with Albertans who literally helped write this Bill. Highlights of this legislation include a one-window approval approach for business, a clarified environmental impact assessment process, increased public consultation and participation in all aspects of environmental protection and enhancement, provision for market-based approaches to achieve environmental protection goals, provisions to address cleanup of contaminated sites, and an enhanced enforcement regime. Bill 23 consolidates nine separate environmental Acts and provides for the protection, improvement, and wise use of our environment now and into the future.

...

The seventh principle is the opportunities made available through this Act for citizens to provide advice on decisions affecting the environment. In other words, Mr. Speaker, this Act, Bill 23, is not just a set of laws; it really is an environmental agenda. It's an environmental agenda that will be amended and probably changed through the course of time but only through the input of the citizens of Alberta. Basically this principle allows the facilitation of public access and service by providing a single-window approach to Alberta Environment making for more streamlined administrative procedures. It includes an access to information section, a requirement for state-of-the-environment reporting, increased public consultation and participation in all

aspects of environmental protection and enhancement activities, provisions supporting studies on the environment, a library, education materials, public consultation in the development of guidelines, objectives, and regulations, public consultation in the environmental impact assessment process and the approvals process, opportunities for appeals for parties directly affected by decisions through the creation of an environmental appeal board. This board will provide an independent review of the decisions made by directors and other people within the department to provide a system of checks and balances on those decisions. This principle also provides for allowing for requests by citizens for investigations and contraventions.¹

17. *EPEA* is now Alberta's primary environmental statute.
18. Section 2 of *EPEA* codifies the purposes of the legislation, two of which explicitly reference public participation in environmental decision-making:

2 The purpose of this Act is to support and promote the protection, enhancement and wise use of the environment while recognizing the following:

- (a) the protection of the environment is essential to the integrity of ecosystems and human health and to the well-being of society;
- (b) the need for Alberta's economic growth and prosperity in an environmentally responsible manner and the need to integrate environmental protection and economic decisions in the earliest stages of planning;
- (c) the principle of sustainable development, which ensures that the use of resources and the environment today does not impair prospects for their use by future generations;
- (d) the importance of preventing and mitigating the environmental impact of development and of government policies, programs and decisions;
- (e) the need for Government leadership in areas of environmental research, technology and protection standards;
- (f) the shared responsibility of all Alberta citizens for ensuring the protection, enhancement and wise use of the environment through individual actions;
- (g) the opportunities made available through this Act for citizens to provide advice on decisions affecting the environment;
- (h) the responsibility to work co-operatively with governments of other jurisdictions to prevent and minimize transboundary environmental impacts;
- (i) the responsibility of polluters to pay for the costs of their actions;

¹ Alberta, Legislative Assembly, *Hansard* 22nd Leg, 4th Sess (11 May and 4 June 1992) at 805, 1184 (Ralph Klein).

(j) the important role of comprehensive and responsive action in administering this Act.

19. Other entitlements under *EPEA* to public participation in environmental decision-making include the following:

- a. input to an advisory committee established by the Minister;
- b. consultation on the development of ambient environmental quality objectives;
- c. comments on draft terms of reference for an environmental impact assessment;
- d. consultation on proposed regulations pertaining to the release of substances.

20. Section 2 of the *Water Act* similarly codifies public participation in resources and environmental decision-making:

2 The purpose of this Act is to support and promote the conservation and management of water, including the wise allocation and use of water, while recognizing

- (a) the need to manage and conserve water resources to sustain our environment and to ensure a healthy environment and high quality of life in the present and the future;
- (b) the need for Alberta's economic growth and prosperity;
- (c) the need for an integrated approach and comprehensive, flexible administration and management systems based on sound planning, regulatory actions and market forces;
- (d) the shared responsibility of all residents of Alberta for the conservation and wise use of water and their role in providing advice with respect to water management planning and decision-making;
- (e) the importance of working co-operatively with the governments of other jurisdictions with respect to trans-boundary water management;
- (f) the important role of comprehensive and responsive action in administering this Act.

21. The purpose of the public participation provisions in *EPEA* was explored in *Pembina Institute v Alberta (Environment and Sustainable Resources Development)*, where Justice Marceau stated.

The emphasis is on public consultation, setting up administrative procedures to promote “access to information” and increase public consultation and participation in all aspects of environmental reporting and enhancement activities.²

22. The Board is established as a statutory appellate body under Part 4 of *EPEA*. Section 90(2) provides that the Board shall hear appeals as provided for by *EPEA* and the *Water Act*, including appeals from decisions made by the Director to issue the Approval.

23. In *Normtek*, the Court of Appeal summarized the role of the Board as follows:

The Environmental Appeal Board is not a regulator like some of the Province’s energy boards. The Environmental Appeal Board is essentially an independent commission of inquiry reporting to the Minister. Vis-à-vis what are known as specified activity approvals, the Environmental Appeal Board has one function and one function only and that is to hear appeals by parties directly affected by Directors’ decisions (s 90(2)). The Board reports to the Minister what it hears and makes non-binding recommendations (s 99(1)). Under the *Environmental Protection and Enhancement Act* the Minister, assisted by his Directors, is the regulator. The Board was established to provide the Minister with independent and expert advice with respect to such regulation by reporting to the Minister a summary of the representations which were made to it and any recommendations it might have as a result of those representations (s 99(1)).

One of the goals of the *Environmental Protection and Enhancement Act*, when it was introduced by then Environment Minister Ralph Klein, was to achieve better environmental decision-making. The Environmental Appeals Board process was set up to help achieve that. By granting standing to those directly affected by Directors’ decisions, the Minister receives the benefit of additional scrutiny which, in the case of directly affected industry participants, provides the Minister with a practical understanding of the effects of conditions of approvals, which industry participants are in a unique position to provide. The integration of environmental protection and economic impacts is one of the *Environmental Protection and Enhancement Act* purposes of the (ss 2(b) and 2(c)) and hearing appeals by those impacted economically helps the Minister achieve that purpose.³

24. The Board is to serve as a forum for Albertans with a direct and genuine interest to question decisions made under *EPEA*, on a broad range of grounds as set out in the legislation, including: human health, safety, economic, technology, regulatory, sustainable development, and environmental protection.

² *Pembina Institute v Alberta (Environment and Sustainable Resources Development)*, 2013 ABQB 567 at para 29 [TAB A].

³ *Normtek* at paras 126 – 127 [TAB B].

25. In the case of an appeal regarding a decision by the Director to issue an approval under the *Water Act*, section 91 of *EPEA* provides that a person who has previously submitted a statement of concern with the Director and is directly affected by the Director's decision, may submit a notice of appeal concerning the Director's decision to the Board.

26. The interpretation and application of the phrase 'directly affected' is the crux of determining who has standing to file an appeal with the Board, however the term is not defined in *EPEA* or the *Water Act*.

27. In *Delta Air Lines Inc. v. Lukács*, the Supreme Court of Canada ruled that a statutory tribunal cannot interpret its power to grant standing in a way that effectively defeats the scheme of the enabling legislation.⁴

28. In *Rizzo & Rizzo Shoes Ltd (Re)*, the Supreme Court of Canada stated that the proper approach to statutory interpretation involves deciphering the intent of the legislator by reading the words of an enactment in their entire context and according to their grammatical and ordinary sense, harmoniously with the scheme and purpose of the legislation and the intention of the legislator.⁵

29. Section 10 of the *Interpretation Act*, RSA 2000, c I-8, provides that an enactment shall be construed as being remedial, and shall be given the fair, large and liberal construction and interpretation that best ensures the attainment of its objects.

30. The importance of reading the words of an enactment in a purposive or contextual manner is concisely summarized by Madam Justices Abella and Karakatsanis in *Telus Communications Inc. v Wellman*:

Statutory interpretation is the art of inferring what words mean. Sometimes the meaning is obvious, either because of the clarity of the language or of its relationship to the legislative context. But sometimes interpreting words literally in isolation, undermines the policy objectives of the statutory scheme. The debate between those who are "textualists" and those who are "intentionalists" was resolved in Canada in 1998 when this Court decided that "there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and

⁴ *Delta Air Lines Inc. v. Lukács*, 2018 SCC 2 at paras 19 – 20 [TAB C].

⁵ *Rizzo & Rizzo Shoes Ltd (Re)*, [1998] 1 SCR 27 at para 21 [TAB D].

ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament.” We do not just look at the words.⁶

31. In *Normtek*, the Court of Appeal ruled that a valid interpretation of legislation must be: plausible in that it complies with the legislative text; efficacious in that it promotes the legislative intent; and matches accepted legal norms in that the interpretation is reasonable and just.⁷

32. The law requires the Board to interpret the phrase “directly affected” in a purposive and generous manner consistent with the objectives of *EPEA* and its statutory function, to borrow the description provide by the Court of Appeal in *Normtek*, as an “independent commission of inquiry reporting to the Minister”.

33. The Appellant submits a purposive reading of *EPEA* and the *Water Act* demonstrates the Legislature intended the Board to be a forum where a person with a genuine interest and a particular expertise in an application for approval under *EPEA* or the *Water Act* can test the findings and conclusions of the Director in a *de novo* hearing conducted by the Board. This is particularly so in the context of *EPEA* and the *Water Act* which requires decisions made by the Director to be in the public interest, and thus the Board as a statutory appellate body charged with overseeing decisions made by the Director should be able to hear an appeal from persons with expertise and ability to bring forth evidence and argument to challenge the merit of the Director’s decision and result in a Board recommendation to the Minister on whether the Director’s decision should be confirmed, quashed, or varied.

B. Interpretation of ‘directly affected’ in *EPEA*

34. The leading authority on the meaning and application of the term ‘directly affected’ in *EPEA* and the *Water Act* is *Normtek*. The Court of Appeal’s decision in *Normtek* is binding on this Board.

35. All judicial and statutory tribunal decisions prior to *Normtek* regarding an interpretation of ‘directly affected’ must be read with caution in light of the Court of Appeal’s ruling in *Normtek*.

⁶ *Telus Communications Inc. v Wellman*, 2019 SCC 19 at para 107 [TAB E].

⁷ *Normtek* at para 76 [TAB B].

36. Absent an express direction from the Legislature, the Board is obligated to interpret the phrase “directly affected” in a manner which is consistent with how the term is used elsewhere in *EPEA* and the *Water Act*.

37. It is a well-established principle of statutory interpretation that terms used throughout a statute are presumed to have the same meaning.⁸

38. The Board offends this principle and errs in *McMillan et al v Director, South Saskatchewan Region, Operations Division, Alberta Environment and Parks, re Badlands Recreation Development Corp* where, relying on a pre-*Normtek* decision by the Board issued in 2002, it concludes that the Board and the Director can apply a different meaning and purpose to ‘directly affected’ in *EPEA*, and therefore the Director’s application of ‘directly affected’ should not influence the Board. In particular, the Board rules that the Director applies a more broad and inclusive meaning on ‘directly affected’ than the Board, citing a reference that the Board’s process is ‘adversarial’ whereas the Director undertakes more of an investigatory function.⁹

39. In *Normtek*, the Court of Appeal ruled it would be ‘incongruous’ for the Director to be conferred with jurisdiction to interpret the phrase ‘directly affected’ more broadly than the Board.¹⁰

40. The Board’s reference to its process as ‘adversarial’ is also inconsistent with the Court of Appeal’s description of the Board in *Normtek* as essentially a commission of inquiry.¹¹

41. In summary on this point, the Board’s position in *McMillan* that the Director applies a more broad and inclusive meaning on ‘directly affected’ than the Board, and that the Director’s decision on ‘directly affected’ status should not influence the Board, must be rejected as it is contrary to the Court of Appeal’s decision in *Normtek* and inconsistent with the presumption of consistent expression in legislation that holds a legislature uses language carefully and consistently so that within a statute or other legislative instrument the same words have the same meaning and different words have different meanings.

⁸ Canada (Minister of Citizenship and Immigration) v. Vavilov, 2019 SCC 65 at para 44 [TAB F].

⁹ *McMillan et al v Director, South Saskatchewan Region, Operations Division, Alberta Environment and Parks, re Badlands Recreation Development Corp*, 2022 ABEAB 22 at paras 67 – 72 [TAB G].

¹⁰ *Normtek* at para 84 [TAB B].

¹¹ *Normtek* at paras 126 – 127 [TAB B].

42. In *Normtek*, the Court of Appeal ruled that the Board must eschew a single, rigid approach to applying the term ‘directly affected’ in its determinations:

[T]rying to define in advance or limit the circumstances in which an appellant might be found to be directly affected is something the Environmental Appeals Board wisely avoided for at least the first decade of its existence. When one has regard for the many and diverse approvals, environmental protection orders and contaminated site designations which may be appealed by “directly affected” persons, it is apparent that trying to define the way in which a person must be directly affected in order to be accorded standing is impossible.

....

Significantly, in *Bildson*, the Board rejected what it termed a per se rule employed by the Director not unlike that which the Board itself employed in this case:

The Directors per se rules on the types of harms which can and cannot qualify for standing purposes cannot reasonably be supported by the open-ended nature of the plain meaning of “affected”.

All we can do is reiterate the Board’s caution in *Bildson* against “per se rules” and apply it to the rather narrow or restricted interpretation of the phrase “directly affected” employed by the Board and confirmed by the reviewing justice in the *Normtek* case.¹²

43. *Normtek* directs the Board to eschew per se rules or limits on interpreting the phrase ‘directly affected’.

44. The Board offends this direction and errs in *Jeans-Moline et al. v. Director, North Region, Regulatory Assurance Division, Alberta Environment and Parks, re: Canadian Carmelite Charitable Society Inc.*, where, again relying on several pre-*Normtek* decisions issued by the Board, it applies a per se rule and rigid, formulaic approach on determining how a group meets the ‘directly affected’ test, including whether a majority (more than half) of the persons in the group are directly affected personally and therefore have standing in their own right.¹³

45. This formulaic approach, especially the requirement that more than half of the persons in the group are directly affected, is completely arbitrary. The only support for this distinction offered

¹² *Normtek* at paras 78,80,86-89 [TAB B].

¹³ *Jeans-Moline et al. v. Director, North Region, Regulatory Assurance Division, Alberta Environment and Parks, re: Canadian Carmelite Charitable Society Inc.*, 2023 ABEAB 9 at paras 76 – 87 [TAB H].

by the Board, other than references to its own pre-*Normtek* decisions, is an erroneous reference to section 17 of the *Interpretation Act*, RSA 2000, c I-8 which has no direct relation at all to interpreting ‘directly affected’ in *EPEA*.

46. Moreover, the *Jeans-Moline* approach defeats the purpose of *EPEA* appeals before the Board, which is to encourage submissions from parties with the capacity, knowledge, funds or other resources to engage on issues which facilitates the Board’s role of providing the Minister with its findings and recommendations on an approval or other decision under *EPEA* or the *Water Act*. It is often only a group – such the Appellant - that can provide the type of engagement that is envisioned by the participatory provisions of *EPEA*. The *Jeans-Moline* approach also encourages unnecessary, inefficient, and costly duplication by giving strong, per se, preferential treatment to individuals who can meet the ‘directly affected’ test.

47. Nowhere in *EPEA* or the *Water Act* did the Legislature provide explicit direction for the *Jeans-Moline* approach to group standing. Rather, this is an example of what the Court of Appeal in *Normtek* was critical on: cautioning against ‘per se’ rules that defeat the purposes in *EPEA*.

48. In *Normtek* the Court of Appeal sets out the following interpretive points concerning ‘directly affected’ which the Board must adhere to:

- a. ‘affected’ connotes affected in an adverse manner (at para 78);
- b. generally speaking, ‘directly affected’ means the person seeking an appeal before the Board must demonstrate *potential* to be affected in a ‘direct manner’ by the decision in question; an unbroken connection between the decision and the adverse affect with some temporal measure of ‘immediacy. However, “[i]t is acknowledged that some types of prospective harm may be too remote or too speculative, but not all will be (at para 81);
- c. a ‘direct affect’ is not limited to impacts on a natural resource used by a prospective appellant or that person’s use of a natural resource; nowhere in *EPEA* is standing before the Board inextricably linked to impacts on natural resources or the proximity between an approved activity and one’s use of a natural resource, and the Court of Appeal very clearly and assertively rejects any interpretation of ‘directly affected’ which limits the

- term to how a decision or activity affects a natural resource or a person's use of a natural resource, whether within the vicinity of an activity or otherwise; in other words, demonstrating how a decision or an activity will adversely impact a natural resource which a prospective appellant uses or harm to that person's use of natural resource may be a relevant consideration in establishing directly affected status, but it is not a necessary prerequisite to establishing standing where other adverse effects are alleged (at paras 82 - 105);
- d. *EPEA* contemplates that a wide range of effects may ground standing before the Board, including environmental, social, economic, cultural, property, human health, safety, and regulatory (at paras 82-105);
 - e. a direct economic impact that has an indirect environmental impact may ground standing before the Board; relevant economic impacts include those which result from a decision by the Director which constitutes a change to the regulatory regime governing an activity which, in turn, may adversely affect the commercial viability of a business that facilitates environmental protection concerning an activity regulated under *EPEA* (at paras 111-118);
 - f. it is not necessary for a prospective appellant to demonstrate how an economic impact on its operations is directly linked to an environmental impact (at para 128);
 - g. a 'direct affect' may result from both an activity subject to a decision made by the Director, as well as the Director's decision itself (at para 119);
 - h. a determination of whether a prospective appellant has standing before the Board need not be determined conclusively before hearing any of the substantive issues raised for the appeal (at paras 133-134);
 - i. the consideration of whether a prospective appellant is 'directly affected' by a proposed activity or the Director's decision on that activity necessarily requires a consideration of the nature and merits of the appellant's substantive concerns with the activity or the decision (at paras 135 – 136);

- j. a determination of whether a prospective appellant is “directly affected” and how the Board allocates onus in standing determinations must take into account the fact that EPEA requires the person to submit a notice of appeal no later than 30 days after receipt of notice of the decision sought to be appealed; a precautionary approach to standing determinations is warranted in light of the fact that if it becomes apparent later that a prospective appellant whose notice of appeal was dismissed without a hearing is directly and adversely affected, there are few remedies available. The Director’s decision is final and the Minister is deprived of the appellant’s input and the Board’s recommendations (at paras 138 – 139);
- k. the onus on a prospective appellant is only to establish a reasonable possibility that it will be directly affected by the Director’s decision or the activity approved; a prospective appellant does not bear the onus of establishing conclusively that it is or may be directly affected (at paras 140 – 141).¹⁴

49. These factors are generally summarized by the Board in its McMillan decision.¹⁵

III. THE APPELLANT HAS MET THE ‘DIRECTLY AFFECTED’ TEST

50. The Appellant’s statement on how it is directly affected by the Approval and the activity authorized by the Approval is attached as **APPENDIX A**.

51. The Director found the Appellant to be directly affected by the Approval.

52. The Appellant has an established record of engagement on advocacy, community outreach and education with respect to the cultural and ecological values of the thermal springs, the Park and Bighill Creek.

53. The Approval and the activity authorized by the Approval have an immediate, direct, and unbroken connection to the Park, the thermal springs, Bighill creek, and the Appellant’s work in relation to each of them.

¹⁴ *Normtek* at paras 78, 81 – 105, 111 -119, 128, 133 - 136, 138 – 141 [**TAB B**].

¹⁵ *McMillan et al v Director, South Saskatchewan Region, Operations Division, Alberta Environment and Parks, re Badlands Recreation Development Corp* 19-066 to 071, 074, 081, and 083-085-ID4, 2022 ABEAB 22 at paras 57 – 58 [**TAB G**].

54. Alberta government officials responsible for provincial parks have expressed concern about the impact of the MALP mining on the Park. In a letter submitted to Rocky View County on February 17, 2021, Alberta Environment and Parks specifically referenced the concerns raised in the Fennell Report and observes that the MALP impact assessment failed to fully assess impacts of the mine to groundwater quality and exposure to contaminants. The Appellant submits

- a. this is very strong evidence of potential for a direct and adverse affect on the Park;
- b. the need to deliberate on the conflict or inconsistencies amongst the Director's decision to issue the Approval and these concerns raised by Alberta Environment and Parks, is exactly the sort of scenario for which the appeal process before the Board was designed to address in *EPEA*;
- c. the Appellant has the knowledge, experience, capacity, and resources to provide the Board with the information needed to address this matter.

55. The Appellant's concern with the Approval is also very specific and distinct. It is not a generalized concern. The Appellant engaged Dr. Jon Fennell, an experienced hydrogeologist, to provide an expert report to ascertain the potential impacts of the MAPL mine on water quality and quantity as discharged from the aquifer at the thermal spring in the Park. In the Fennell Report, Dr. Fennell's evaluation determined the mine would create a real risk of contamination of groundwater from weathering and leaching of chemicals as such as arsenic, cadmium, chromium, selenium. The Fennell Report noted that MAPL testing indicated the presence of the potential toxins identified above at concentrations above those listed for the protection of freshwater aquatic life.

56. An appeal before the Board on the terms and conditions of the Approval is exactly the kind of inquiry contemplated by *EPEA* and the Appellant has a demonstrated interest and concern in this matter with the resources and capacity to lead its own evidence and test that of MALP before the Board, in order to provide the Board with the information it needs to form recommendations to the Minister in relation to the Approval.

57. The Appellant meets the 'directly affected' test under *EPEA* to appeal the Approval.

IV. STAY OF PROCEEDINGS

58. The Appellant observes that MALP has commenced stripping of top soil, exaction of till and the creation of perimeter berms. Work done as of September 21 is illustrated in photos below:



59. In order to ensure no irreversible damage to the Park, the thermal springs, or the Bighill Creek watershed, occurs before the impacts of mining to the groundwater, and the assessment of same by the Director, are fully assessed and considered in a hearing before the Board, the Appellant hereby seeks a stay of the Approval under section 97 of *EPEA*. Section 97(2) of the *EPEA* grants the Board the authority to stay the Approval.

60. The legal test for granting a stay of a decision under appeal is the same test that applies for the granting of an interim injunction.¹⁶

61. The test for injunctive relief comes from the Supreme Court of Canada decision in *RJR-MacDonald Inc. v Canada (Attorney General)*:

[43] *Metropolitan Stores* adopted a three-stage test for courts to apply when considering an application for either a stay or an interlocutory injunction. First, a preliminary assessment must be made of the merits of the case to ensure that there is a serious question to be tried. Secondly, it must be determined whether the applicant would suffer irreparable harm if the application were refused. Finally, an assessment must be made as to which of the parties would suffer greater harm from the granting or refusal of the remedy pending a decision on the merits. It may be helpful to consider each aspect of the test and then apply it to the facts presented in these cases.¹⁷

¹⁶ *Bowden Institution v Khadr*, 2015 ABCA 159 at para 11 [TAB I].

¹⁷ *RJR-MacDonald Inc. v. Canada (Attorney General)*, [1994] 1 SCR 311 at 334 [TAB J].

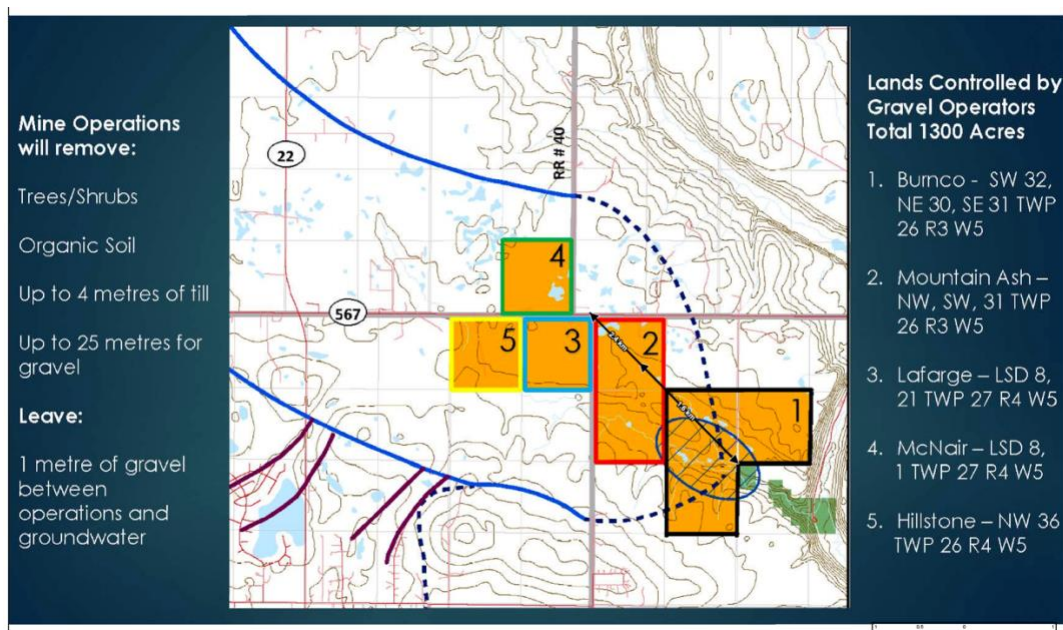
Serious Issue

62. The threshold is low to demonstrate there is a serious issue.¹⁸ All that is required is a preliminary assessment of the merits of the case, to determine that the questions raised by the Appellant are serious and not frivolous or vexatious.¹⁹

63. The Appellant relies upon the submissions made in its Statement of Concern filed with the Director, its Statement attached as **APPENDIX A** and the Notice of Appeal filed with the Board as outlining the serious issues to be heard in this matter.

64. The Approval allows for the construction and operation of a surface mine located on 323 acres of land overlying the aquifer which creates the nationally significant thermal springs in the Park and which sustains Bighill creek. The mine constitutes a material risk to the region's groundwater resources and as a result, to the thermal springs, the Park, and Bighill creek.

65. The construction and operation of the MALP mine is just one of several operating or proposed gravel mines immediately northwest of the Park and the cumulative impacts of this mine along with others in the region will have significant adverse impacts on the thermal springs, the Park, (shown below as the green polygons in the lower right) and Bighill Creek:



¹⁸ *Bowden Institution v Khadr*, 2015 ABCA 159 at para 13 [TAB I]; *RJR-MacDonald Inc. v. Canada (Attorney General)*, [1994] 1 SCR 311 at 337 [TAB J].

¹⁹ *ARLS v MD*, 2014 ABCA 292 at para 14 [TAB K].

66. The Park receives approximately 250,000 visitors annually and was recently renovated at a cost of \$1.2 million due to heavy use. The Park's ecology was created and is sustained by the thermal springs that come from an aquifer extending approximately 30 square kilometers to the north and west. The MALP mine site is located on the aquifer approximately 800 meters from the Park boundary and the springs in the Park. The aquifer's water nourishes the Park and provides about half the flow into Bighill Creek. Between the Park and Cochrane, some five miles, the creek flows through a deeply incised valley of extensive and healthy wetlands and riparian zones.

67. The Approval makes no substantial reference to impacts on groundwater or the aquifer. The Appellant was provided with assurances by the Director that groundwater impacts would be considered by Alberta Environment and Protected Areas. Correspondence with the Director in this regard is included as an attachment to the Appellant's Notice of Appeal filed with the Board in this matter.

68. The issues raised by the Appellant in its Notice of Appeal are not frivolous or vexatious.

Irreparable Harm

69. A determination of irreparable harm requires the Appellant to show that the harm which will result if a stay is not granted is irreversible, permanent and not compensable by monetary damages. In *RJR MacDonald* the Supreme Court of Canada held that an example of irreparable harm is "where a permanent loss of natural resources will be the result when a challenged activity is not enjoined".²⁰

70. It is the nature or character of the harm, and not the magnitude of the harm, which is relevant to a determination of whether harm is irreparable.

71. In a similar case where the issues to be heard on appeal included whether the terms and conditions of an approval issued under the *Water Act* adequately addressed the impacts of a project on the aquatic environment, this Board has previously found that harm to an aquatic environment is often difficult or impossible to reverse if an approval is later varied or rescinded, and moreover

²⁰ *RJR-MacDonald Inc. v. Canada (Attorney General)*, [1994] 1 SCR 311 at 341 [TAB J].

any such restoration work will likely cause further impacts. Moreover, this Board has found that environmental harm in a case like his is not compensable with monetary damages.²¹

72. MALP proposes to mine up to 25 meters of gravel, leaving only 1 meter of gravel to protect the underlying groundwater aquifer which is the source of the thermal springs in the Park. The Fennell Report indicates that removing gravel to the depth authorized by the Approval will impede the filtering mechanism and render the aquifer at risk of contamination from open pit operations and allows exposure to atmospheric oxygen that could enhance weathering. According to Dr. Jon Fennell, a vastly reduced filter would be susceptible to increased flushing and mobilization of fine particles, trace elements including heavy metals like arsenic and cadmium into a fish-bearing stream – such as Bighill Creek.

73. Once the overlying gravel is removed, even after the site is remediated as grazing land, the thin gravel filter would provide ineffective protection from potential coliform contamination caused by cattle.

74. The Appellant submits the MALP mining activities represent a material and permanent risk of irreparable harm to the region's groundwater resources and as a result, to the thermal springs, Park, Bighill Creek, and related wetlands, fish and riparian habitats. These are harms which cannot be mitigated or reversed, if the Approval is subsequently varied or rescinded.

Balance of Convenience and Public Interest

75. The balance of convenience portion of the test requires a consideration of which party will suffer the greater harm from the granting or refusal of the stay.²²

76. The Appellant submits the balance of convenience and a consideration of the public interest favours a stay of the Approval until the Board decides this appeal.

²¹ *Hanson and Lindberg v. Director, Northern Region, Operations Division, Alberta Environment and Sustainable Resource Development, re: County of St. Paul* (07 November 2013), Appeal Nos. 13-005 and 006-ID1 (A.E.A.B.) at paras 51 – 57 [TAB L].

²² *RJR-MacDonald Inc. v. Canada (Attorney General)*, [1994] 1 SCR 311 at 342 [TAB J].

77. The Appellant has an established record of engagement on advocacy, community outreach and education with respect to the cultural and ecological values of the thermal springs, the Park and Bighill Creek.

78. The Fennell Report establishes that there is a serious risk of irreparable harm to the aquatic environment and the thermal springs, the Park and Bighill creek, if the MALP mining activity proceeds under the current terms and conditions set out in the Approval.

79. The Applicant submits that if the MAPL mine is allowed to proceed under the current terms and conditions of the Approval, foreseeable ecological damage will degrade the value of important environmental assets. It would diminish recreational, experiential, and educational opportunities for the over 250,000 annual visitors to the Park. Impairment would extend to the many other users along Bighill Creek's approximately 6 kilometer reach through the Town of Cochrane to its intersection with the Bow River.

80. The Park was established in 1957, and accordingly is one of Alberta's first provincial parks. By the 1950's the attractive creek flowing over tufa falls and its sudden and clear spring, had become a local attraction for picnics, fishing and camping. The original land was apparently donated to Alberta by the estate of Senator Patrick Burns. Over the years, Calgary's Devonian Foundation and Canada's Nature Conservancy have tried to purchase adjacent lands to expand the park and protect the incised melt-water valley between the park and Cochrane. Parks Canada has recognized the springs in the Park as nationally significant and among the top four most important thermal springs in Canada.

81. Alberta government officials responsible for provincial parks have also expressed concern about the impact of the MALP mining on the Park. In a letter submitted to Rocky View County on February 17, 2021, Alberta Environment and Parks specifically referenced the concerns raised in the Fennell Report and observes that the MALP impact assessment failed to fully assess impacts of the mine to groundwater quality and exposure to contaminants. The Appellant submits this is very strong evidence that the public interest requires a stay of the Approval until this appeal is heard and the impacts of mining to the groundwater, and the assessment of same by the Director in issuing the Approval, are fully assessed and considered in a hearing before the Board. A copy of the Alberta Environment and Parks letter dated February 17, 2021 and another letter by the

department dated February 16, 2021 which also references the need to protect the Park from adverse impacts of gravel mining, are attached as **APPENDIX C**.

82. The Appellant submits any delay of the MAPL mine resultant from the appeal process will have no material impact on gravel supplies to the Calgary region. Rocky View County, with in excess of 20 operating mines plus those mines in surrounding municipal districts are fully capable of supplying the demand, especially during the winter as construction activity and gravel demand decline. The lands on which mining is currently underway have been held by Mr. Bruce Waterman, the principle of MAPL since at least 2008 and accordingly there is no apparent need to commence activities under the Approval before this appeal is heard by the Board.

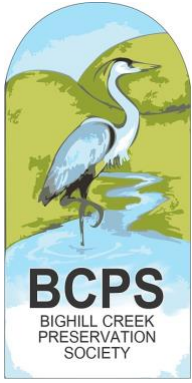
83. Rocky View County has commenced a review of its draft Aggregate Resource Plan intended to establish more comprehensive guidelines to the development of gravel resources throughout the county. This review is scheduled for completion early in 2024. The outcome of the review may impact the MAPL project. The original MAPL application was filed by in 2020. Given the number of years the property has been owned by Mr. Waterman and the period during which the application has been in process, a stay pending the outcome of this appeal will not unduly delay the project.

Respectfully submitted on October 12, 2023.



Shaun Fluker
Counsel for the Appellant

APPENDIX A



BIGHILL CREEK PRESERVATION SOCIETY

October 11, 2023
 Environmental Appeals Board
 Attention: Gilbert Van Ness
 306, 10011-109 street
 Edmonton, Alberta
 T5J 3S8

**Re: Mountain Ash Limited Partnership/ Water Act Approval No. DAUT0012841
 EAB File No. 23-045-052 and 23-056-057**

Dear Mr. Van Ness:

Further to your request that Bighill Creek Preservation Society (BCPS) provide arguments as to its directly affected status we humbly provide the following:

1. BCPS Mandate - Long-term Preservation of the Bighill Creek Drainage.

BCPS was registered as an Alberta Society in 2015 with an overarching objective and mandate to preserve the significant ecological and historical attributes of the Bighill Creek drainage. The Bighill Creek drainage includes Big Hill Springs Provincial Park. The aquifer which created and sustains the unique features of the Park and provides half of the flow in Bighill Creek extends northwest of the Big Hill Spring and erupts within the Park. Bighill Creek carries these waters from the Park, through a deeply incised and ecologically diverse valley containing municipal environmental reserves and through the Town of Cochrane. The Spring, Park and Creek are important ecological and recreational assets of Rocky View County, the Town and the region. Development of gravel mines on lands held by Mountain Ash Limited Partnership (MALP) and four other properties owned by gravel mining companies adjacent the Park pose real and foreseeable harm to the Spring, Park and Creek.

2. BCPS is Contracted by Rocky View County as Stewards of County's Environmental Reserves.

Since 2016, BCPS has contracted with Rocky View County as the stewards of the County's environmental reserves located on the Creek. Resultant from its preservation mandate and its responsibility to protect the County's environmental reserves, the society represents the interests of its members, the more than 250,000 annual visitors to the Park, inhabitants of the Town of Cochrane and the citizens of the County. Therefor BCPS will be directly affected by any harm to Big Hill Spring, Big Hill Springs Provincial Park and Bighill Creek.

Ensuring the natural and historic values of Bighill Creek Watershed are preserved.

3. There is precedence for BCPS being recognized as an affected party in earlier hearings.

BCPS was recognized as an affected party by the Director of Alberta Environment and Protected Areas when it filed a statement of concern regarding the MAPL Water Act application.

4. BCPS core membership is comprised of local residents living adjacent to the creek.

While the society's 100 members are regionally dispersed, its core is a group of local residents. All society directors are volunteers. Two of our directors live next to the Creek. They are the only residents of the valley between Cochrane and the Park. Three more of our directors live on the escarpment above the Creek. The Franciscan Community at Mount St. Francis Retreat, who own and reside on approximately four hundred acres of land which straddles the Creek are also members. Three of our members, Harry Hodgson, Morely Kostecky, and Tom Foss live within 1.6 kilometers of the Park.

5. BCPS has an established record of conservation-related work

BCPS has an established record of conservation-related work in furtherance of its mandate. It is actively engaged in community outreach and education to protect the cultural and ecological values of the Spring, Park and the Creek. To this end, the Society has made presentations to Rocky View County and the Town of Cochrane. As well, the Society has participated in educational seminars, including events sponsored by the Bow River Basin Council, and the Municipal District of Big Horn's annual program, "Living in the Natural Environment". It has pursued its mandate by engaging in public education at the Cochrane Farmers Market. At the Park it has distributed approximately five hundred copies of the pamphlet "Help Save Big Hill Springs Provincial Park" to inform visitors of the attributes of the drainage and potential harm which would result from numerous gravel operations adjacent Park boundaries.

6. BCPS operates and maintains an educational website and social media page

To help raise public awareness of the value of the Park and Creek and promote preservation and recognition of education and recreation opportunities within the watershed, the Society maintains an active website; bighillcreek.ca (where all of its studies are posted) and a Face Book page. The Society works with local schools to promote awareness of the Creek's ecology in classrooms and on location.

7. BCPS produced an educational and professional video about Bighill Creek.

With support from a professional videographer, the Society produced an eight-minute video which resides on the website and describes the attributes of the drainage and the risks it faces.

8. BCPS engages with news media and provides interviews so others learn about Bighill Creek.

The Society is recognized as the local experts and provides information for use by news organizations. Listed below are some of the articles which have resulted:

[Preservation society calls on Alberta government to rethink ...](#)
[CTV News Calgary https://calgary.ctvnews.ca › preservation-society-calls-on...](https://calgary.ctvnews.ca › preservation-society-calls-on...)

Aug 11, 2023 — Alberta's UCP government has given its approval for a gravel company to start mining up against **Big Hill Springs Provincial Park**, ...

Ensuring the natural and historic values of Bighill Creek Watershed are preserved.

[Bighill Creek Preservation Society | Cochrane AB](#)

Facebook [https://www.facebook.com > profile](https://www.facebook.com/profile)

Bighill Creek Preservation Society, Cochrane, Alberta. 145 likes. “To ensure the natural and historical values of **Bighill Creek Watershed** are preserved...

[Conservationists appeal gravel mine approval near Big Hill ...](#)

Global News [https://globalnews.ca > news > big-hill-springs-cochra...](https://globalnews.ca/news/big-hill-springs-cochra...)

Aug 13, 2023 — The **Big Hill Creek Preservation Society** and the Alberta Wilderness Association have filed appeals, asking for the province to rescind its ...

[Fight continues to protect Big Hill Springs Provincial Park](#)

Discover Airdrie [https://www.discoverairdrie.com > articles > fight-cont...](https://www.discoverairdrie.com/articles/fight-cont...)

Aug 4, 2023 — AWA **conservation** specialist Kennedy Halvorson says they have major concerns about the mining operation's impact on water quality and quantity of

..[Gravel pit gets green light from province despite opponents ...Cochrane Eagle](#)

[https://www.cochraneagle.ca > local-news > gravel-pi...](https://www.cochraneagle.ca/local-news/gravel-pi...)

Aug 3, 2023 — **Bighill Creek Preservation Society** (BCPS) spokesman Gerry Bietz said they filed their appeal of the province's decision to the Alberta ...

[Increased concern over threat to Big Hill Springs](#)

Cochrane Now [https://cochranenow.com > articles > increased-concer...](https://cochranenow.com/articles/increased-concer...)

Jan 15, 2021 — The **preservation society** believes the **Bighill Creek** watershed is in desperate need of further study. BCPS believes only one study exists, and ...

[Fight continues to protect Big Hill Springs Provincial Park](#)

Cochrane Now [https://cochranenow.com > articles > fight-continues-t...](https://cochranenow.com/articles/fight-continues-t...)

Aug 4, 2023 — AWA **conservation** specialist Kennedy Halvorson says they have major concerns about the mining operation's impact on water quality and quantity of ..

[Advocates say gravel mines pose risk to Big Hill Spring ...](#)

Rock to Road [https://www.rocktoroad.com > advocates-say-gravel-m...](https://www.rocktoroad.com/advocates-say-gravel-m...)

Nov 23, 2020 — Cochrane, Alta. - The **Bighill Creek Preservation Society** (BCPS) is concerned that a proposed gravel mine adjacent to the **Big Hill Springs** ...

9. BCPS has commissioned professionals for ecological studies of the Bighill Creek drainage

The society has raised funds and commissioned professionals for a broad range of ecological studies which provide baseline data. This information is being used to create a comprehensive and enduring State of the Watershed Evaluation and Plan. All of society's studies are freely available on its website. (Some of the society's work has been utilised in gravel developer's applications.)

Following is a list of studies prepared for the society, some of which are ongoing:

- Bighill Creek Water Analysis Baseline Studies, Dr. Ymène Fouli, 2018-2019
- Electrofishing Investigations in Bighill Creek, Trout Unlimited Canada, June 2018
- Riparian Health Assessment, Bighill Creek, Cows and Fish Alberta, 2018
- Aquatic Biomonitoring at Bighill Creek, Tobin Benedict, 2019

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- Preliminary DNA Data, Bighill Creek AB, University of Guelph, December 2019
- Bighill Creek Water and Sediment Quality Baseline Study, Dr. Ymène Fouli, 2019-2020
- Benthic Macro-Invertebrate Biomonitoring Study, Bighill Creek, Tobin Benedict, Jan. 2020
- Temperature logger installations/monitoring at seven locations, Trout Unlimited report, 2020

10. The society has participated in Rocky View County planning and regulatory processes, and in appeal proceedings to promote the protection of Big Hill Springs Provincial Park and Bighill Creek:

- Recommended amendments to the Rocky View Council Recreation and Parks Master Plan, 2020
- Recommended amendments to Rocky View Council County on Rocky View Municipal Plan, 2021
- Submission to Rocky View Council in opposition re Bylaw C8051-2020, 2021 (Mountain Ash Limited Partnership, MAPL)
- Appealed the Rocky View County development authority's decision to approve a development permit for McNair Sand and Gravel Ltd (PRPD 202223501) to the Land and Property Rights Tribunal.
- Filed a statement of concern under the *Water Act* with Alberta Environment and Protected Areas regarding the application by MALP. The director recognised the Society as an affected party and accepted its statement of concern on May 31, 2022. This letter of acceptance is included as an attachment to the society's Notice of Appeal filed with the Board.

11. BCPS engaged a renowned hydrogeologist

As result of the Society's concerns regarding potential harm to groundwater and to support the initiatives listed in item 10, Dr. Jon Fennell, an experienced hydrogeologist, was engaged. BCPS engaged Dr. Fennell to provide an expert report and ascertain the potential impacts of the MAPL mine on ground water quality and quantity as discharged at the Spring.

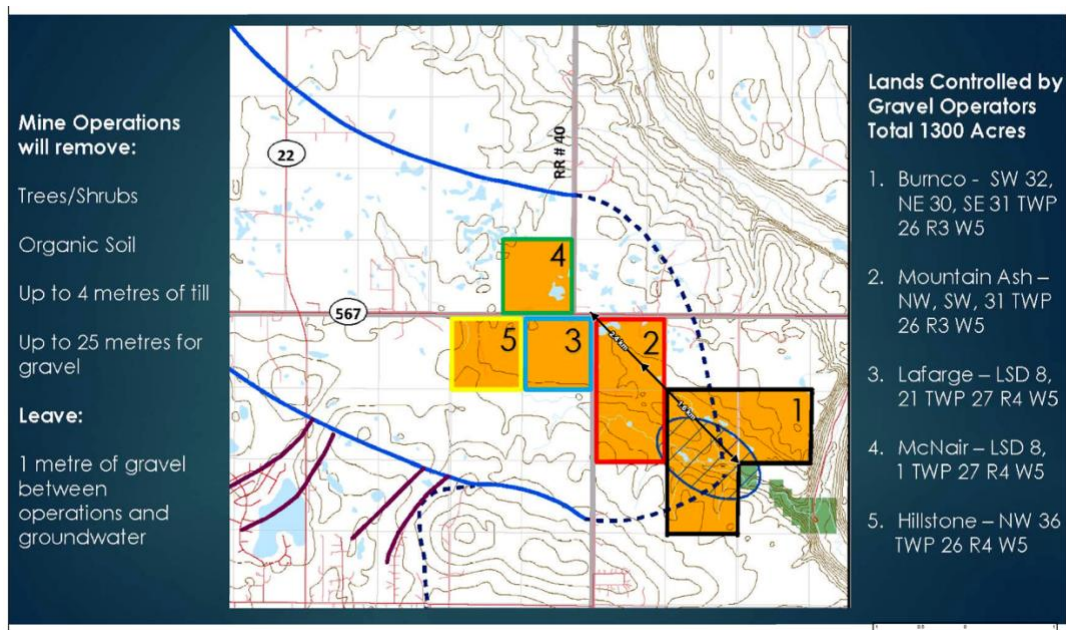
Dr. Fennell's evaluation determined that **the removal of all but one meter of filtering gravel would expose groundwater to contamination by mine operations**. He concluded that exposing the gravels to the atmosphere and precipitation would promote weathering and leaching of chemicals as such as arsenic, cadmium, chromium, selenium. His report noted that MAPL testing indicated the presence of the potential toxins identified above "at concentrations above those listed for the protection of freshwater aquatic life." He pointed out that heightened risk of extreme weather events brought on by climate change could exacerbate negative impacts during and after a mine's thirty year life-these compounded by the cumulative effects of multiple mines.

Dr. Fennell concluded that **the high risk and irreparable nature of this foreseeable harm required that no gravel mining should be permitted within 1.6 kilometers of the Park** and any mine located within an additional 800 meters of the Park should be required to maintain at least 4 meters of gravel between mining operations and groundwater. Much of the MAPL lands are located within the 1.6 kilometer mining exclusion zone described above. (Dr. Fennell's full report is attached to the Society's appeal to the Board. It was referenced in Alberta Parks administration's submission to the Rocky View County opposing the MAPL development application.)

For all the reasons given, BCPS is without question directly affected and submits the MALP mining activities represent harms which cannot be mitigated or reversed.

12. Anticipated cumulative effects

The construction and operation of the MALP mine is just one of several operating or proposed gravel mines which would extend over than 1300 acres immediately northwest of the Park. The cumulative impacts of this mine and the others on the aquifer would have significant adverse impacts on the thermal Springs the Park, (shown on the map below as the two green polygons in the lower right) and Bighill Creek:



The MALP mine site is located on the aquifer approximately 800 meters from the Park boundary and the Big Hill Spring. The MALP would remove up to 25 meters of filtering gravel, leaving only one meter of gravel between mine operations and flowing groundwater. MAPL estimates the velocity of flow in groundwaters toward the Spring and monitoring wells to be 0.27 meters per day. (Estimates of the velocity of groundwater flow vary significantly among hydrological reports.) Groundwater monitoring will require months or years to recognise trending negative impacts on water chemistry, contamination infiltrating from mine operations or fluctuating rates of recharge. Once the overlying gravel is removed, even after the site is remediated as grazing land, the thin gravel filter would provide ineffective protection from potential coliform contamination caused by cattle.

BCPS submits the MALP mining activities represent a material and permanent risk of irreparable harm to the region's groundwater resources and as a result, to the thermal springs, Park, Bighill Creek, and related wetlands, fish and riparian habitats. These are harms which cannot be mitigated or reversed.

Further, the society submits **any delay of the MAPL mine resultant from the appeal process will have no material impact on gravel supplies to the Calgary region.** Rocky View County, with in excess of 20 operating mines plus mines in surrounding municipal districts are fully capable of supplying the demand, especially during the coming winter as construction activity and gravel demand decline.

Rocky View County has commenced a review of its draft Aggregate Resource Plan which will establish more comprehensive guidelines to the development of gravel resources throughout the county. This review is scheduled for completion early in 2024. The outcome of the review may impact the MAPL project.

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The lands on which stripping and grading have commenced have been held by Mr. Bruce Waterman, the principal of MAPL since at least 2008, when they were acquired, apparently as a rural retreat. The original MAPL application was filed by in 2020. Given the number of years the property has been owned by Mr. Waterman and the period during which the application has been in process, a stay pending the outcome of the Society's appeal will not unduly delay or create measurable long-term cost to a mine anticipated to operate for up to thirty years. Harm inflicted by this and the other mine would be permanent.

Yours truly

Gerald H Bietz

President

Bighill Creek Preservation Society

APPENDIX B

**Mountain Ash Limited Partnership
Summit Gravel Pit**

**Review of hydrogeology, geochemistry, fish and aquatics, and
climate change**

Prepared by:

Dr. Jon Fennell, M.Sc., Ph.D., P.Geol.
Hydrogeologist and Geochemist
Water Security | Climate Resiliency

On behalf of:

Friends of Big Hill Springs Provincial Park
and
Bighill Creek Preservation Society

For:

Rocky View County Council
Re: Bylaw C-8051-2020

January 2021



Water flows over lumpy deposits of tufa at Big Hill Springs Provincial Park

Source: By Ruben Lara - Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=59716841>

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Executive Summary

Mountain Ash Limited Partnership (MALP) is applying to develop an open pit gravel mine in the headwaters area of Big Hill Springs Provincial Park. This is one of many aggregate developments likely to come forward in the future given the land ownership in this area. The sand and gravel is being extracted from a buried channel system that is already being mined by Hillstone Aggregates 800 m to the west.

Big Hill Springs Provincial Park, and the spring complex that feeds water down into the fish-bearing Bighill Creek, is located roughly 800 m southeast of the MALP property. This creek is currently listed on the Fisheries and Oceans Canada “Aquatic species at risk map” possibly having bull trout (i.e. a protected species). Big Hill Springs Provincial Park (the Park) was established back in 1957 and is a cherished and unique ecological enclave located in a prairie farmland setting that receives over 250,000 visitors each year. It is so popular that upgrades are currently underway to ensure that Park’s visitors continue to enjoy its redeeming qualities.

The flow of water from the springs originates from groundwater that discharges from a buried sand and gravel-filled channel system and the underlying fractured Paskapoo Formation bedrock. The MALP site is located on top of the south-west section of the aquifer that supplies the springs. The almost constant temperature and quality of the groundwater that sustains these springs year-round is responsible for the development of unique fish habitat in Bighill Creek. Therefore any impacts to that water threaten the aquatic ecology in the local area. Similarly, local residents rely on the local groundwater for their daily consumptive needs. This will be placed at risk if subsurface development activities lead to contamination of their water wells.

MALP’s proposal to the Rocky View County Council is to mine the sand and gravel from beneath their property to within 1 metre of the water table. This will remove the vast majority of the filter that protects this important aquifer system in the headwater area of the Big Hill Springs complex. In doing so this places the remaining aquifer and groundwater discharging at the springs at risk of contamination during open pit operations and post-reclamation.

The proposal submitted by MALP is lacking in critical detail and is conceptual at best. The potential issues regarding impacts to Big Hill Springs and Bighill Creek have not been sufficiently explored or communicated. This includes no evaluation of how removal of a substantial part of this aquifer might affect the local aquatic environment (and terrestrial wildlife habitat).

Despite MALP’s contention that the “above water table” gravel mining operations will not adversely affect local groundwater conditions, evidence from elsewhere indicates the opposite. Studies have found increased water table elevations and notable changes to groundwater quality due to the reduced filtration from overlying sediments. It is noteworthy that the pre-mining groundwater quality reported by MALP

indicates the presence of contaminants like **arsenic, cadmium, chromium, and selenium** at concentrations above those listed for the protection of freshwater aquatic life.

Mining of the sand and gravel will expose the aquifer to atmospheric oxygen and enhanced weathering processes. This will also increase flushing of the remaining sand and gravel deposits with infiltrating waters. The removal of this essential filter will increase the risk of mobilizing fine particles, harmful trace elements like the ones already noted, and other contaminants like spilled fuels or process chemicals, into the local groundwater. Once mobilized, these contaminants will be difficult to recover before they reach fish-bearing waters and may eventually result in provincial and/or federal violations under the *Environmental Protection and Enhancement Act*, the *Fisheries Act*, or the *Species at Risk Act*.

Unfortunately, MALP has not addressed any of these critical environmental issues in their 2020 Master Site Development Plan or Hydrogeological Assessment Report (SLR 2020). As a result, the Rocky View County Council does not have enough information to make an informed decision regarding this application (including any potential future liability that could result from its approval).

There are plenty of other less environmentally-sensitive sand and gravel deposits throughout Rocky View County. Because of this, the responsible and sustainable response to MALP's application is to protect Big Hill Springs Provincial Park and the Bighill Creek system by establishing a suitable development buffer around these features.

A setback distance of at least 1.6 kilometers is therefore recommended. Also, to further protect groundwater quality in this important headwater area sand and gravel extraction within 800 m of this setback should be restricted to at least 4 metres above the water table to ensure suitable filtration of recharging water.

Proper consideration of future climate change effects should also be addressed to protect against extreme events that may result in unintended damaging releases from the site into the area's groundwater. This important issue has also been overlooked by MALP.

Implementing these recommended land use planning steps will protect local groundwater quality that feeds the sensitive aquatic system in the area, and ensure the protection of local water wells, while still allowing prudent gravel development to occur.

Introduction

Mountain Ash Limited Partnership (MALP) has put forward a plan to develop a sand and gravel (aggregate) open pit mine near the headwaters areas of Big Hill Springs Provincial Park. The plan is to strip overburden materials and stockpile them for later use during reclamation, followed by excavation, crushing, and screening of the aggregate for transport to market. Excavation of the pit is proposed to be kept to within 1 metre of the historical high-water mark of the local water table. Despite this, there are significant environmental concerns regarding this development and how appropriately the site conditions and the operational disturbance have been assessed. The main concerns with this proposed development relate to the following:

1. Proximity to the Big Hills Springs Park (and the potential for impacts to the unique system of springs and Bighill Creek, which is fed by these springs).
2. Risk of potentially irreparable adverse impacts to groundwater quality (and associated effects to nearby receptors).
3. Potential risks for protected fish and fish habitat (including aquatic species that support fish populations known to be present in Bighill Creek).
4. Questionable success of any mitigation (including post-reclamation timeframes) that might be necessary.
5. Risks associated with climate change (and the impact to safe mine operations and reclamation efforts).
6. Cumulative effects (from other similar developments extracting gravel near the Big Hill Springs headwater area and along Bighill Creek).

The Friends of Big Hill Springs Provincial Park (FBHSPP), a local landowner group, and the Bighill Creek Preservation Society (BCPS), a local watershed group mandated to develop a watershed plan for the Bighill Creek basin, are concerned for the future of the springs should this, or any other similar development, be approved by the Rocky View County Council. Both groups would like to see a protective buffer established around this unique and popular prairie setting. To assess the appropriateness of such an initiative, the group retained Dr. Jon Fennell to review and comment on the MALP's 2020 Master Site Development Plan and associated Hydrogeological Assessment Report (SLR 2020). Dr. Fennell is a Senior Hydrogeologist, Geochemist, and Water resource Specialist with over 30 years experience in environmental and contaminated sites investigations, risk analysis, and climate change assessment. He is a registered member-in-good-standing with the Association of Professional Engineers and Geoscientists of Alberta (APEGA),

among other similar agencies in Western Canada. Further information regarding Dr. Fennell's credentials is provided in Appendix 1.

The remainder of this report summarizes the critical environmental issues that the RVC Council need to consider regarding this and any other similar developments near the Big Hill Springs Provincial Park and Bighill Creek system.

Key Findings

1. Proximity to the Big Hill Springs Provincial Park

The proposed MALP gravel pit is located in the west half of Section 31, Township 26, Range 3 West of the 5th Meridian and consists of 131 hectares (or 323 acres) of land designated as Ranch & Farm District under Rocky View County's Land Use Bylaw C-4841-97. The aggregate deposit that MALP is intending to mine is part of a large, buried sand and gravel deposit that extends towards the northwest for up to 10 km or so. This large accumulation of granular material, which ranges in thickness anywhere from less than 10 m up to almost 30 m, was formed during the last glaciation of the area and was deposited in a former valley eroded into the underlying bedrock of the pre-glacial landscape. Given the hydraulic properties of the sand and gravel aquifer it classifies as a Domestic Use Aquifer¹.

Overlying the sand and gravel deposit is anywhere from 3-6 m of glacial till consisting of clay and silt, with some sand and rocks, followed by about 30-60 cm of topsoil. Underneath the sand and gravel deposit is bedrock of the Paskapoo Formation comprising layers of sandstone, siltstone, and shale/mudstone sequences. These bedrock deposits have been subjected to fracturing and faulting as a result of deformation during formation of the Rocky Mountain foothills area and offloading of thick glacial ice between 10,000-15,000 years ago².

The footprint of the MALP property is located approximately 800 m from the boundary of Big Hill Springs Provincial Park, a very popular recreation spot for locals, Calgarians, and tourists visiting the area. It is a unique ecological enclave surrounded by farmlands that has considerable recreational and environmental value. The land area that is intended to be mined comprises gently rolling terrain with drainage towards the south and east across the property. The southern half of the proposed development has an abrupt change in elevation from 1292 metres above sea level (masl) to 1272 masl due to the presence of a large drainage-way leading down to the Big Hill Springs complex. Within this drainage-way is a small intermittent tributary stream located approximately 300 m to southeast of the property boundary that also leads down to the springs. This tributary is documented by SLR Consulting (Canada) Ltd. as being fed only by surface

¹ Alberta Government 2019

² Moran 1986

drainage (SLR 2020); however, it is very likely that groundwater in the local sand and gravel deposits, as well as the upper bedrock, discharge to this tributary stream at some point further downslope from its origin.

Big Hill Springs is a spring complex fed by the very same groundwater residing in the sand and gravel deposit that MALP intends to mine for aggregate resource. Investigative work done by SLR during the period of 2014 to 2019 found the water table to be located at a depth of up to 30 metres below surface on the upland portion of the site, and a depth of around 12 metres at the southern end where the land surface drops down into the drainage-way. The springs flow year-round at rates ranging from 0.4 to 0.1 cubic metres per second and eventually discharge into Bighill Creek – a fish-bearing water body indicated as having protected bull trout, which is a threatened species under the Species at Risk Act (SARA). The water from Bighill Creek eventually discharges into the Bow River at the Town of Cochrane. The relatively stable (and cool) temperature of the spring water (around 6°C), and its high quality (low mineralization and turbidity), has led to development of local habitat that supports various vegetation, wildlife, and aquatic species. As such, the Big Hill Springs, the established Park area, and the associated ecology are an important aspect of Bighill Creek’s ability to sustain ecological viability.

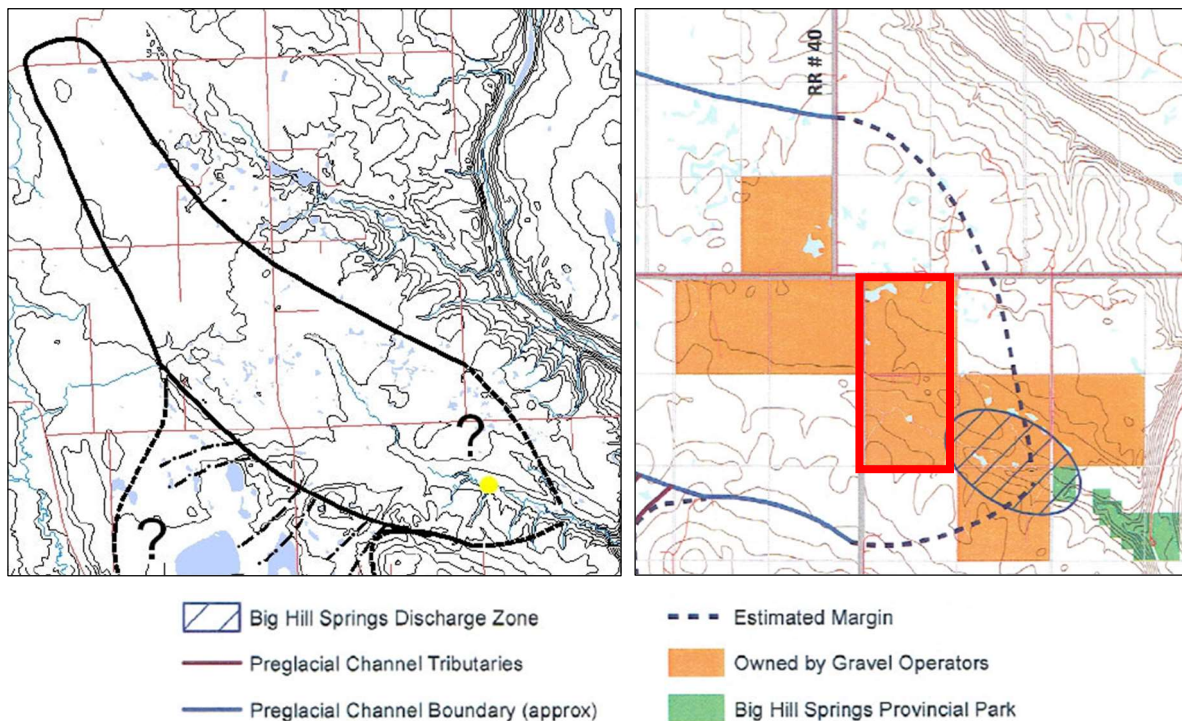


Figure 1. Mapped preglacial channel for Big Hill Springs (left)³, where dot-dashed lines indicate extent of buried tributaries, and extent of lands owned by gravel operators near Big Hill Springs Provincial Park (right)⁴ *Note: MALP property outlined in red.*

³ Excerpt from Figure 22 of Poschmann S. (2007)

⁴ Excerpt from a figure provided by Bighill Creek Preservation Society

The MALP development is not the only pressure facing the headwater area of Big Hill Springs complex. In addition to the MALP proposal there are a number of other land parcels that are currently owned by gravel operators, the locations of which are shown in Figure 1. It is clear from a review of this map that there are numerous locations where gravel could be mined, if approved, included areas right up against the Park limits and the spring complex itself. It is also clear that the MALP property itself (outlined in red) impinges on the identified discharge zone for the springs.

It is MALP's opinion that development of their sand and gravel pit will not adversely affect the quality and quantity of water reporting to the Big Hill Springs complex as they only intend to mine down to within 1 metre of the historical high-water level for the local water table. Although the final pit depth is yet to be established, MALP assumes that the operation will be a dry pit configuration, and no dewatering of the gravel will be required, thus no drawdown impact to the groundwater underneath. In fact SLR goes on to say in their technical report that the development will actually increase the recharge of water to the sand and gravel left in place, which they consider to be a "positive" effect. However, there are some significant considerations that contradict that position. These will be explained in the paragraphs and sections that follow.

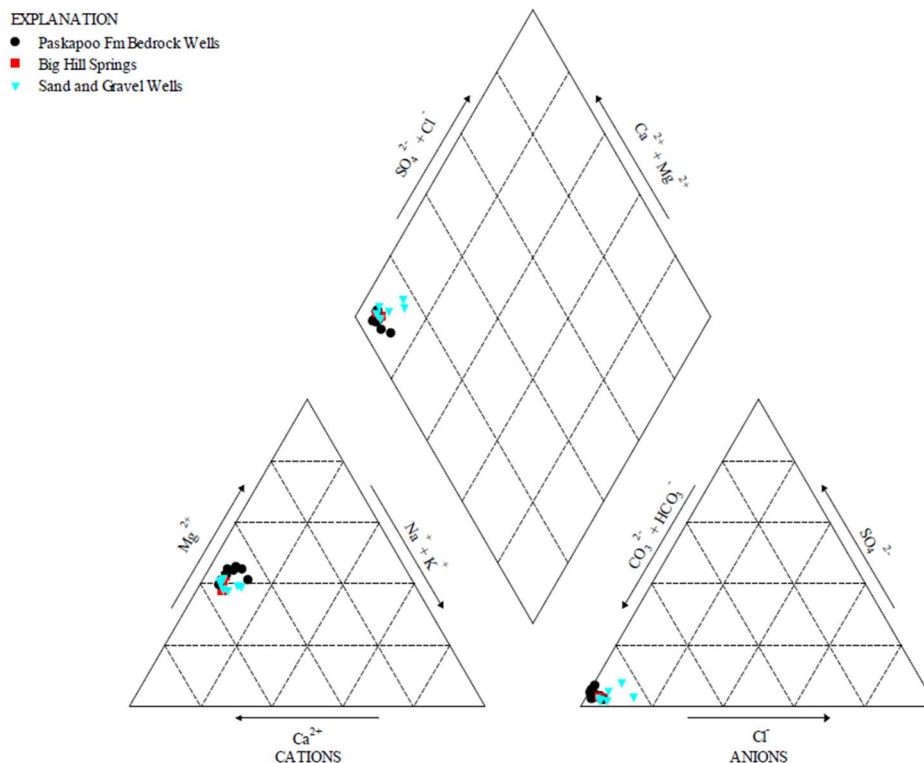


Figure 2. Piper plot showing similarity of water chemistry from various sampling locations (i.e. the sand and gravel monitoring wells established on the MALP property, nearby domestic water wells completed in the bedrock, and Big Hill Springs)⁵

⁵ Figure 1 from SLR's Hydrogeological Assessment Report (2020), pdf page 19 of 335.

Results of SLR's hydrogeological assessment clearly indicate that the groundwater in the sand and gravel deposits and fractured upper bedrock, and the water discharging at the Big Hill Springs complex, are chemically the same. This is demonstrated by the similarity of major ion compositions in the Piper plot prepared by SLR (Figure 2).

Given this evidence of this hydraulic connectivity, any changes to groundwater quality or quantity within the excavated footprint of MALP's gravel pits will eventually manifest themselves at the Big Hill Springs complex and eventually Bighill Creek. Based on the calculated groundwater flow direction to the southeast and a velocity of about 300 m/year, using data from SLR (2020), the estimated travel time for groundwater to move from MALP's property to the springs is 2-3 years. This is considered a rather short timeframe for groundwater flow and places the springs at considerable risk of adverse impacts from any contaminants that might originate from pit operations or reclaimed areas. Figure 3 shows the locations of monitoring wells (MW-series) and local water wells (WW-series) used in the SLR's 2020 site assessment.



Figure 3. Location of monitoring wells and local water wells (used in the 2020 SLR Hydrogeological Assessment) and mapped water table elevations and contours⁶. (Note: blue arrow indicates direction of flow)

2. Risk of impact to groundwater quality

Results of the SLR (2020) investigation indicate that natural groundwater is already affected to some degree by certain metals and trace elements at concentrations above Guidelines for Canadian Drinking Water (GCDWQ)⁷. These, include:

⁶ Drawing No.4 from SLR's Hydrogeological Assessment Report (2020), pdf page 43 of 335.

⁷ Health Canada (2020)

- Aluminum
- Arsenic
- Barium
- Cadmium
- Chromium
- Iron
- Lead
- Mercury

It is also stated in the SLR (2020) report that the reason for detections of metals and trace elements above GCDWQ is turbidity from their wells, which ranges from below detection levels (<0.1 NTU) up to >4000 NTU (see Tables section in this report). This is a common occurrence when turbid water samples are analyzed for Total Metals, and usually results from the preservation of unfiltered water samples with laboratory-grade nitric acid. When assessing water sample collected by SLR with low turbidity values (<10 NTU), the exceedances of GCDWQ values become restricted to a lesser number of elements:

- Aluminum
- Barium
- Iron
- Lead
- Manganese

It is important to note that the groundwater beneath the area does not just support drinking water supplies. It also sustains the flow of water at Big Hill Springs, which also provides significant discharge to the fish-bearing Bighill Creek to the east. When guidelines for the protection of freshwater aquatic life, or FWAL⁸, are applied to the groundwater monitoring results the following elements exhibit concentrations above long-term chronic guidelines:

- Aluminum
- Arsenic
- Cadmium
- Chromium
- Copper
- Iron
- Lead
- Selenium
- Zinc

Review of water quality at the Big Hill Springs complex itself, as reported by SLR (2020) and summarized in the Tables section of this document, does not indicate concentrations of many parameters exceeding the FWAL guidelines. Only the occasional aluminum, chromium, and selenium exceedances are noted. Similarly, results from water samples collected from Bighill Creek near the location where Big Hill Springs discharges into it, also provided in the Tables section of this report, indicate the following elements occasionally approaching or exceeding FWAL guidelines⁹:

- Aluminum
- Cadmium
- Chromium
- Iron
- Selenium

⁸ Alberta Government (2018). Environmental Quality Guidelines for Alberta Surface Waters.

⁹ Fouli Y. (2020)

It is therefore clear that naturally-elevated concentrations of various metals and trace elements are already present in the groundwater and surface water of the study area, and that the aquatic habitat and fish within the Big Hill Springs and Bighill Creek system are already exposed to them. The question that remains unanswered by MALP is:

“How will the excavation of sand and gravel at their proposed pit, exposure of the remaining sand and gravel to oxygen in the atmosphere, and enhanced recharge through a relatively thin layer of remaining sand and gravel above the water table affect the mobility of contaminants (i.e. metals, trace elements, nutrients, turbidity and any other constituents associated with their operation) into the groundwater used by local residents, and discharge that supports the Big Hill Springs, and eventually flow in Bighill Creek?”

It is a well-known fact that when buried sediments are excavated and exposed to the atmosphere the local geochemical conditions change. The increased chance of mineral oxidation combined, with the usual wetting and drying cycles from recharge and rainfall events, work to enhance weathering and leaching reactions and ultimately the release of various constituents into the local groundwater. Table 1 provides an example of how the water quality beneath “above water table” gravel pits can change¹⁰.

Table 1. Example of difference in natural groundwater and groundwater measured 2.5 m below above watertable gravel extractions areas (Source: Hatva 1994)

| Parameter | Rainwater <i>n</i> = 12 | | | Natural groundwater areas <i>n</i> = 43-60 | | | Gravel extraction areas <i>n</i> = 76-240 | | | |
|--------------------------------|----------------------------|-----|-----|--|------|------|---|------|-----|------|
| | Md | min | max | Md | min | max | Md | min | max | |
| Temperature | °C | | | 4.7 | 1.1 | 6.8 | 5.6 | 0.0 | 8.8 | |
| Acidity | pH | 4.5 | 4.1 | 6.3 | 6.4 | 5.6 | 7.3 | 5.9 | 5.4 | 7.3 |
| Conductivity | mS m ⁻¹ | 4.0 | 2.0 | 9.0 | 6.0 | 3.0 | 9.0 | 7.0 | 4.0 | 19.0 |
| Carbonic acid | mg l ⁻¹ | | | | 11.0 | 2.0 | 44.0 | 24.0 | 2.0 | 62.0 |
| Bicarbonate | mg l ⁻¹ | | | | 25.0 | 15.0 | 38.0 | 20.0 | 8.0 | 45.0 |
| Chloride | mg l ⁻¹ | 1.0 | 1.0 | 3.5 | 2.0 | 1.0 | 7.0 | 3.0 | 2.0 | 37.0 |
| Sulphate | mg l ⁻¹ | 2.0 | 0.5 | 3.0 | 4.0 | 4.0 | 12.0 | 10.0 | 5.0 | 16.0 |
| KMnO ₄ -consumption | mg l ⁻¹ | | | | 3.0 | 0.0 | 9.0 | 2.0 | 0.0 | 51.0 |
| Hardness | °dH | | | | 1.0 | 0.5 | 1.5 | 1.0 | 0.5 | 3.0 |
| Nitrate | mg l ⁻¹ | 2.1 | 1.4 | 6.7 | 0.4 | 0.0 | 4.0 | 1.9 | 0.0 | 11.5 |

Note: *n* = number of samples; Md = median values

What is most striking about the change in median values from natural groundwater areas to gravel extraction areas is the slight increase in temperature (4.7 to 5.6°C) and reduction in pH (6.4 to 5.9), the 2 times increase in carbonic acid (11 to 24 mg/L), and 2.5 times increase in sulphate (4 to 10 mg/L). It is the carbonic acid that is of most significance given its importance in mineral weathering and other surface-related reactions involving minerals with trace elements adsorbed to their surfaces (e.g. clays). The increase in nitrate (0.4 to

¹⁰ Hatva T. (1994)

1.9 mg/L) is evident and associated with the reduced protection to the underlying groundwater from removal of the protective soil cover. Removal of this material effectively reduces the attenuating, or filtering, capacity of the remaining material below before the infiltrating water reaches the underlying water table.

Once released into the local groundwater environment, geochemical conditions will dictate the mobility and toxicity characteristics of contaminants released. Chromium, for example, tends to be more mobile and toxic under oxygenated conditions, and exists in the hexavalent form as chromate ions (CrO_4^{2-}). Similarly, selenium exists as selenate (SeO_4^{2-}) and selenite (SeO_3^{2-}) species, with selenite being the more toxic and mobile form. Figure 4 provides Eh-pH diagrams showing the various stability fields for chromium and selenium species in water. The red dots indicate the type of Eh and pH conditions that would be expected in well-oxygenated recharge water moving through a relatively thin layer of residual sand and gravel beneath a gravel pit (like MALP's).

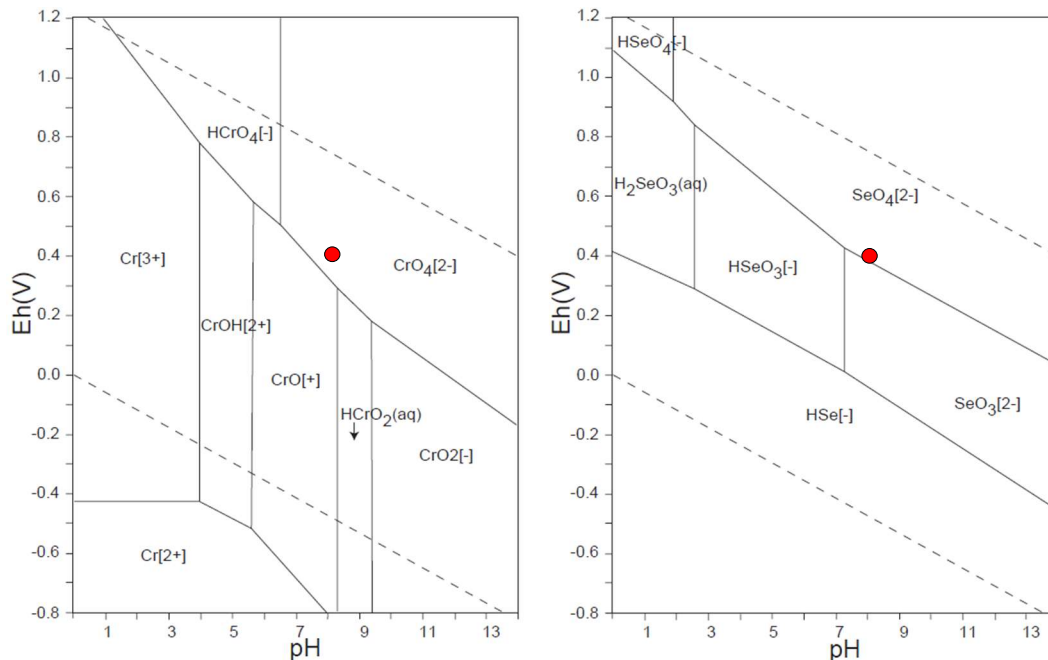


Figure 4. Eh-pH diagrams for chromium (left) and selenium (right)¹¹. (Note: red dots represent conditions expected in well-oxygenated groundwater delivered by recharge through a thin remaining layers of gravel)

The potential for mobilization of fine particulate matter and/or colloids¹² into the groundwater as a result of MALP's mining operations also exists. Removal of the protective cover of glacial till, followed by a significant reduction in the thickness of the sand and gravel deposit, will leave a small amount of material

¹¹ Atlas of Eh-pH diagrams

¹² Colloids are very low diameter particles (1 nanometer, or 10^{-6} mm to 1 micrometer, or 0.001 mm) which are responsible for the turbidity or the color of water. In fast moving groundwater systems such particles can remain suspended and move considerable distances due to the physical lifting effect of the water and associated charge characteristics (positive, negative, or neutral).

above the water table. This residual sand and gravel will be exposed to increased infiltration and weathering of minerals by infiltrating runoff. The enhanced recharge of water will increase the ability to flush fine particulate matter into the underlying groundwater and eventually into the fractures of the upper bedrock. The local water table will also have a high probability of increasing above the normal range of variability. An example of the increase in groundwater levels below natural versus developed areas is provided in Figure 5.

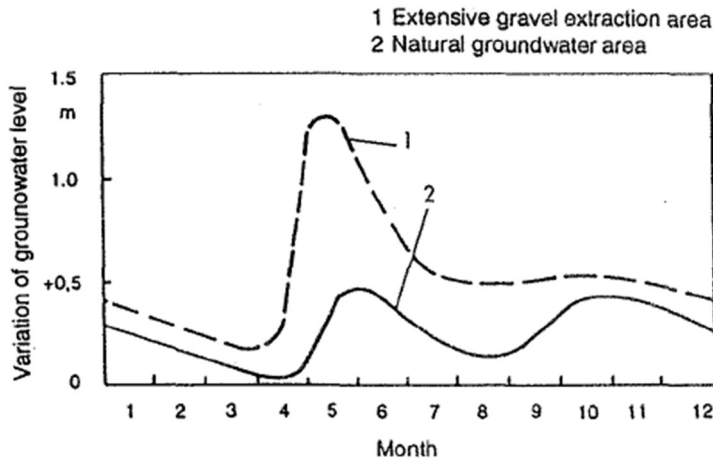


Figure 5. Example of expected increase to water table due to above water table gravel extraction operations (Source: Hatva 1994)

Turbidity issues have been documented at gravel pits, with measurable effects being noted as far as 1.8 km downgradient of those operating areas¹³. The following quote is taken from Mead (1995), indicating the significant distance that turbidity plumes can travel through permeable sand and gravel deposits:

“This DEQ study found a turbidity plume that extended more than a mile to the north (downgradient) of the gravel operation. The average turbidity of the water being discharged from the washing operation into the pond at the site was 2,737 nephelometric turbidity units (NTUs). Nearly all wells sampled within the first 6,000 feet of the turbidity plume were measured at 5 NTU or more. Many wells within the first 3,000 feet of the plume had turbidity levels of 10 NTU or more. Nearly all wells outside the plume had turbidities of 2 NTU or less.”

The most consistent position of most regarding turbidity movement within the subsurface is that the fine particles will be strained out in the pores of the granular material. However, this may not apply to the very small particles, or colloids, that can still make their way through the soil grains and continue on. For reference, Alberta’s FWAL turbidity guideline for long-term exposure (>24hr) in clear running waters is

¹³ Mead R.D. (1995)

2 NTUs above background levels. Based on data provided by SLR (2020), and included in the Table section of this report, the background turbidity in the groundwater beneath the MALP property is generally less than 1 NTU. Therefore the risk of increasing local turbidity values in the groundwater exists.

Another concern that has not been addressed, at all, is the potential for leaching of inorganic or organic constituents from the previously disturbed soil materials placed back over the excavated areas once mining and reclamation activities are complete. The fact that the till is clay-rich and will likely have some metals and trace elements that could be leached by infiltrating precipitation of naturally lower pH presents an additional risk. For reference, the average pH of precipitation in the Calgary area is around 6, with a minimum of around 4.9¹⁴. The reason for the pH values below neutral (pH 7) is the equilibration of the atmospheric moisture with carbon dioxide (CO₂) and the formation of carbonic acid (H₂CO₃). Other constituents like oxides of sulphur and nitrogen gases released from things like sour gas plants and agricultural lands development can also serve to reduce the pH through the development of sulphuric acid (H₂SO₄) and nitric acid (HNO₃). Such pH values are considered mildly acidic and therefore can enhance minerals weathering reactions.

The risk associated with the release of harmful metals and trace elements, as well as other things such as nutrients, turbidity and other site-specific contaminants (e.g. fuel spills), into the local groundwater is twofold:

- i) these constituents can eventually impact local water wells, and
- ii) they can eventual discharge at Big Hill Springs resulting in increased loading of nutrients and harmful constituents to Bighill Creek, thus compromising sensitive fish habitat.

3. Potential issues for fish and aquatic habitat

The presence of naturally-elevated concentrations of trace elements in the local groundwater is a clear indication that the geochemical conditions in the area are conducive the mobilization. With the exposure of the open gravel pit areas to atmospheric oxygen and increased recharge, there is increased risk to mobilize even more of these harmful trace elements into the groundwater and eventually Big Hill Springs, either in dissolved form or associated with colloidal material in a process known as “facilitated transport”. As noted earlier, the groundwater that feeds the Big Hill Springs complex eventually discharges to Bighill Creek, adding up as much as 20 to 50% of its flow¹⁵ and regulating its water temperature.

MALP’s application documents fail to explore the topic of fish and fish habitat and therefore this aspect has not been considered as a “valued component” in the assessment process. A search of Fisheries and

¹⁴ Alberta precipitation quality monitoring program website

¹⁵ Fouli Y. (2020); BRBC (2020)

Ocean Canada website, showing the location of stream protect under the Species at Risk Act, identified bull trout, which is a protected species (Figure 6).

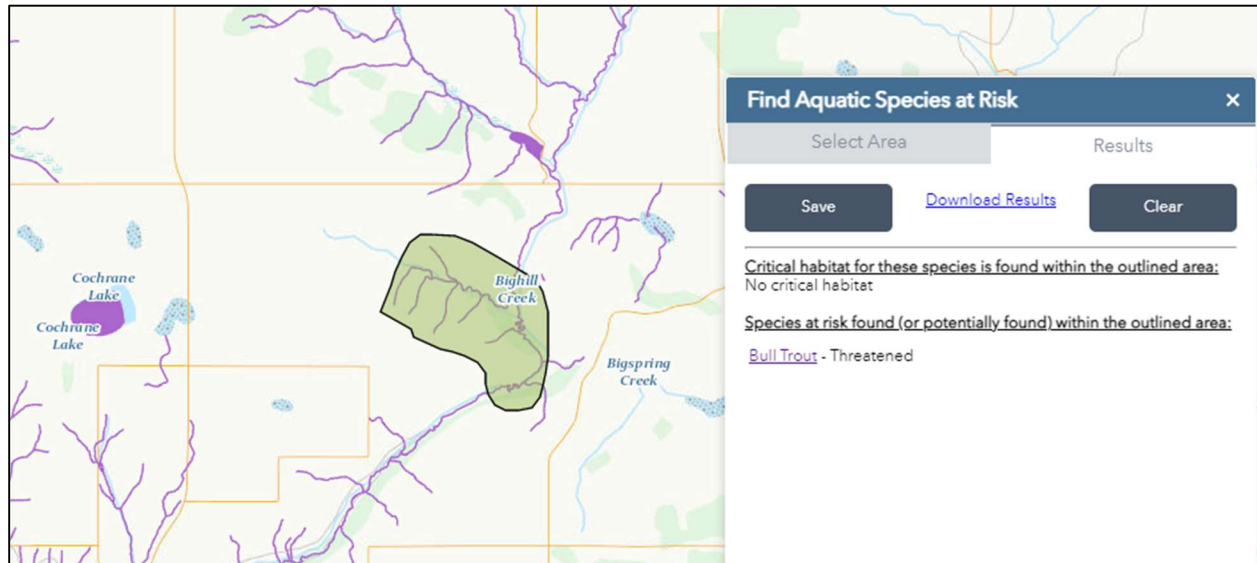


Figure 6. Excerpt from the Fisheries and Oceans Canada Aquatic species at risk map (Note: area shown in green indicates the Big Hill Springs headwaters and the confluence with Bighill Creek)¹⁶

A report prepared for the BCPS by Trout Unlimited Canada (TUC)¹⁷ identified a number of fish species in Bighill Creek, in particular long nose dace, brook trout, brown trout, longnose/mountain/white sucker, mountain whitefish, and rainbow trout. As noted earlier, the *SARA*-protected bull trout species is also identified. At the location where discharge from Big Hill Springs enters Bighill Creek there is a significant lowering of stream water temperatures and the development of unique habitat for cooler water fish species. As noted by TUC:

“The highest density of Brook Trout within reach 4 occurred at the confluence of Bighill Creek and Bighill Springs Creek, likely due to the thermal preference of Brook Trout for the cold water from Bighill Springs. The water temperature in Bighill Springs Creek was dramatically colder than all other sites and only supported Brook Trout.”

Additionally, results from a 2019 biomonitoring program¹⁸ using environmental DNA metabarcoding identified that the highest species richness is noted in this reach of Bighill Creek, underscoring the importance contributions of water from Big Hill Springs in providing unique aquatic habitat¹⁹.

¹⁶ Fisheries and Oceans Canada

¹⁷ TUC (2018)

¹⁸ Hajibabaei Lab 2019

¹⁹ Fish habitat means water frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply, and migration areas.

Because fish frequent Bighill Creek, the greatest risk posed by MALP's (or any other) pit development in the headwaters areas of the Bighill Creek system is the altering of groundwater quality and eventual impact to aquatic receptors from discharge of contaminants released into groundwater reporting to that water course. This has particular relevance with respect to metals and trace elements that SLR has shown to be already present at elevated concentrations in the groundwater beneath MALP's property. Spills of fuels, lubricants, and other chemicals used during the gravel mining process is also a concern.

In Alberta, the *Water Act*, *Environmental Protection and Enhancement Act*, *Wildlife Act*, and their associated regulations are the main legislative instruments that provincial regulators rely upon when reviewing development applications such as this. This review process is meant to determine:

- i) if the application is sufficient and complete,
- ii) whether the potential impacts to wetlands, water bodies, fish and fish habitat (as well as wildlife) are adequately described,
- iii) whether proposed avoidance and mitigations are appropriate, and
- iv) whether the project should be approved, modified, or rejected.

Federally, the *Fisheries Act* and *Species at Risk Act* are the main legislation that address fish-related issues (as well as vegetation and wildlife) associated with development activities. In particular, under the *Fisheries Act* no one is to create a situation where there will be harmful alteration, disruption or destruction (HADD) of fish habitat. Equally, the release of deleterious substance is forbidden. The relevant excerpts from the Act are as follows:

Section 35:

Harmful alteration, disruption or destruction of fish habitat

35 (1) No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat.

Section 36:

Deposit of deleterious substance prohibited

(3) Subject to subsection (4), no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water.

It is clear that MALP has failed to adequately address the potential impacts to Bighill Creek and the groundwater feeding Big Hill Springs that eventually discharges into it, and therefore the potential impacts to fish and fish habitat.

The main challenge facing the RVC Council in assessing MALP's pit application, and any other similar applications close to the Big Hill Springs complex and/or Bighill Creek itself, is the potential adverse impacts to fish or fish habitat including the aquatic species that support those fish. Allowing the development of gravel pits too close to the headwaters of Big Hill Springs, or other critical areas along Bighill Creek itself, where the release of dangerous and deleterious substances like **arsenic, cadmium, chromium, selenium**, etc. can occur may trigger a contravention of provincial and/or federal Acts. This application has yet to be reviewed by Alberta Environment and Parks (AEP) and/or the Department of Fisheries and Oceans (DFO), and therefore it is premature to approve any such application where the risk to fish and fish habitat has not been properly considered or assessed.

4. Success of any mitigation

The preceding evidence and examples of how "above water table" sand and gravel pits can alter groundwater conditions (both physically and chemically) demonstrates that it is likely that contaminants and particulate matter will be released into the local groundwater from MALP's development, should it proceed. The risk of this occurring has obviously not been assessed by MALP with appropriate calculations or geochemical modelling. Therefore it would be left up after-the-fact monitoring to detect these contaminants and signal the need for responsive actions. However, once detected these contaminants are already on the move and will require mitigation before they reach and negatively impact a nearby receptor like a water well or spring. Again, MALP has provided no evidence that they have considered this aspect, including what they would propose do in the event of such an occurrence. A more proactive stance would be appropriate considering the risks posed.

A typical approach to a contaminant release is establishing a groundwater recovery well, or wells, to intercept impacted groundwater before it can reach a receptor. Pumping effectively creates a capture zone where contaminants are pulled in and recovered to the surface where they can be dealt with accordingly. In MALP's location a recovery system operating this close to the Big Hill Springs complex would capture of groundwater that would otherwise report to (feed) those springs, and possibly local water wells. And, if the recovery wells needed to be installed in the bedrock, because of low groundwater levels below the remaining sand and gravel deposits, this could pull contaminants and particulate matter down into the fracture networks and become even more of a challenge.

If groundwater recovery is not viable, then establishing some other form of mitigation would be required. The difficulty with any type of engineered system is the ability to successfully commission that system and ensure it is functioning properly so as not to negatively affect local groundwater users or downgradient locations reliant on that same groundwater. Therefore, the best approach to ensure protection is to eliminate the risk of contamination altogether.

Establishing a suitable buffer zone both vertically and laterally within this gravel deposit would allow groundwater quality impacts to be remediated through natural processes before reaching the water table and affecting local receptors. With respect to a development setback, a distance of at least 1.6 km from nearby domestic use water wells and important water features like Big Hill Springs and Bighill Creek is justified given the findings of Mead (1995), unless substantiated otherwise through a rigorous scientific review process. This would mean no gravel pit development in this setback area. Additionally, to provide added protection outside of the development setback, recommendations provided by Hatva (1994) indicate that maintenance of a vertical buffer of at least 4 metres of sand and gravel above the water table would allow for the natural filtration and remediation of any contaminants that may be released by peripheral operations. The recommended distance to extend this pit development constraint is an additional 800 meters. In order to stay 4 meters above the water table, or even 1 metre for that matter, will require a firm understanding of the historical high-water level for the location so as not to extend the gravel pit too deep. This critical determination has not been clearly defined by MALP for the area beneath their property.

5. Climate change considerations

There is concern that the impacts of climate change have not been addressed, at all, in MALP's development application. Figure 7 shows the anticipated change in temperature and precipitation conditions for the Calgary region based on output from 24 separate GCMs (General Circulation Models) provided by the Pacific Climate Impact Consortium through the Climate Atlas of Canada website²⁰.

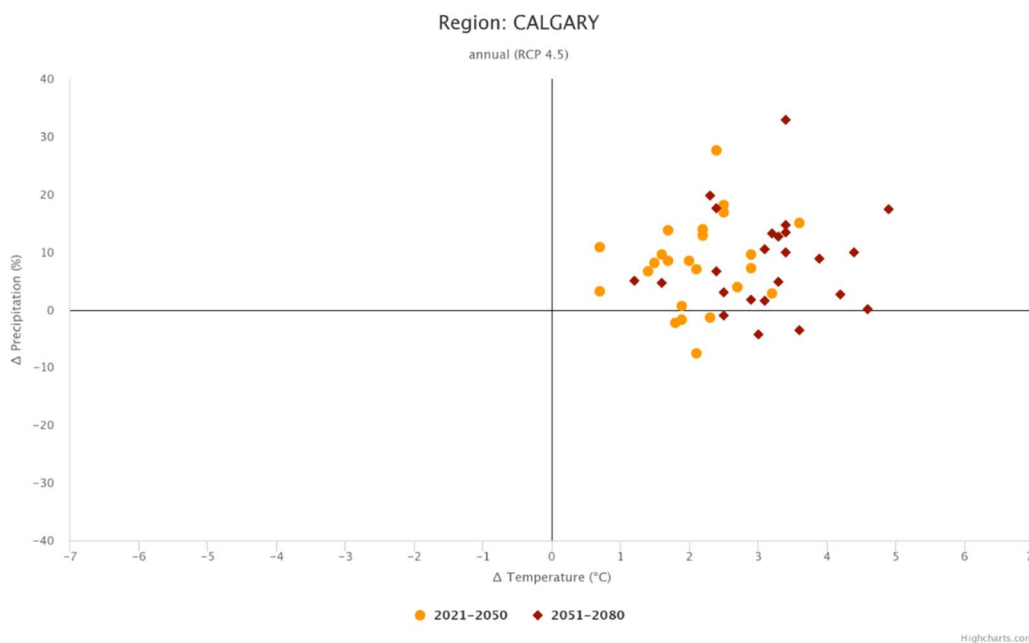


Figure 7. Anticipated change to temperature and precipitation in the Calgary region over this century (RCP 4.5 scenario)

²⁰ Climate Atlas of Canada

In the majority of model cases the expectation is for an increase in precipitation anywhere from less than 5% up to as much as 35% in the coming decades. Also, a doubling of the number of days with heavy precipitation (20 mm) from 2 to 4 days is projected by the end of the century, with the extreme model cases showing up to 11 days in the latter part of this century. Convective storm activity is also expected to increase due to warmer temperatures as the ability of the atmosphere to hold water increases. Convective storms can deliver large amounts of precipitation over a short period of time and overwhelm holding pond systems if not properly designed with this in mind. Kuo et al. (2015) indicate that an overall shift in the intensity, duration and frequency, or IDF, of precipitation events in general, is expected:

*“Future IDF curves show a wide range of increased intensities especially for storms of short durations (≤ 1 -h). Conversely, future **IDF curves are expected to shift upward** because of increased air temperature and precipitable water which are projected to be about 2.9°C and 29% in average by 2071–2100, respectively.”*

This anticipated change to hydroclimatic conditions is related to a shifting of the mean towards more extreme conditions, an increase the degree of variability, and a change in symmetry relating to the major climate drivers - temperature and precipitation. This is illustrated in Figure 8 (on the following page). What is obvious is that as the world continues to warm, and climate conditions shift towards a new regime, the probability of extreme events, commonly described by the 10th and 90th percentiles, will adjust as a result. Therefore, gravel pit developments with operations extending out multiple decades and leaving behind landscapes in the form of reclaimed depressional areas need to consider how projected climate change will affect their design, longevity and ultimate success in reaching stated goals and regulatory requirements.

It is my professional experience that there is a general lack of consideration for climate change in most development applications and how this might affect risk to nearby receptors. MALP’s application is no different. If approved, each open pit will form a local catchment for snow melt and rainwater, thus focussing recharge into the subsurface despite all efforts to manage water out of the working areas. Ponds will need to be properly sized considering the likelihood of more extreme events, compared to current conditions, so they do not overtop and/or fail. All indications, thus far, are that normal return periods for extreme events will shorten in duration, so a 1:25-year event may become a 1:10-year event, and a 1:100 may become a 1:50, so on.

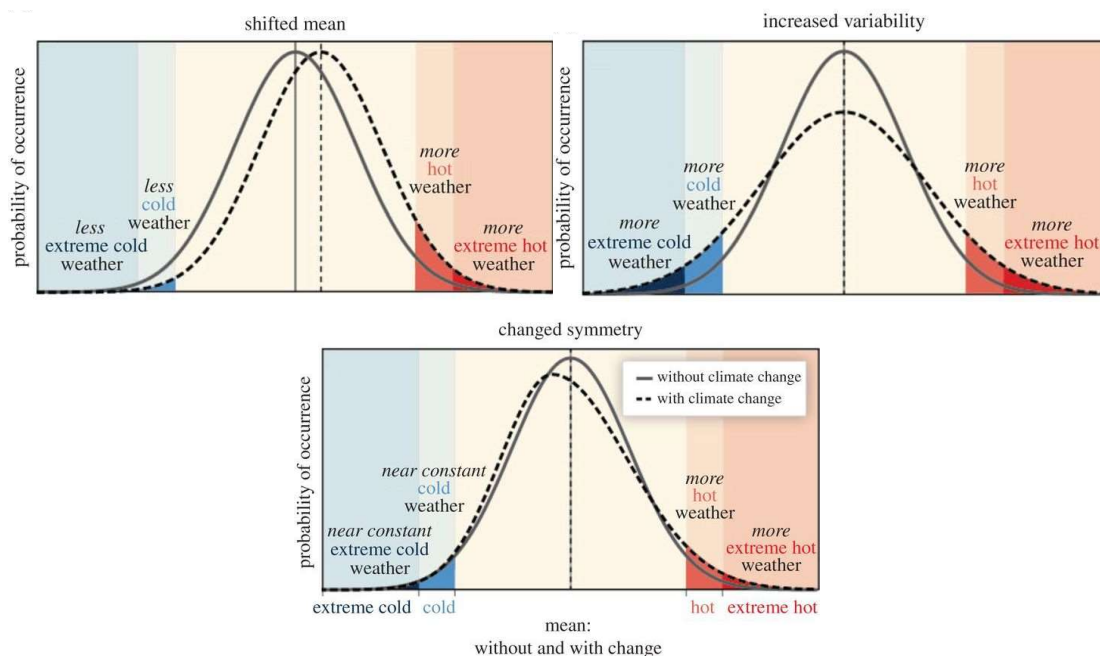


Figure 8. Example of how climate can change with a shift in mean, variability, and symmetry conditions²¹

It is also unclear what effect the altered landscape will have on the local watertable under future climate conditions. For the reasons outlined in this document, the focussing of recharge caused by the excavation and removal of large amounts of sand and gravel from the MALP property will:

- i) threaten groundwater quality due to exposure of the aquifer,
- ii) reduce the thickness of the remaining sand and gravel, and the associated filtration and contaminant attenuation capacity,
- iii) increase the elevation of the water table due to enhanced recharge,
- iv) increase the risk of contaminant migration into the groundwater within the remaining sand and gravel and fractured bedrock, and
- v) increase the risk of adverse impact to systems receiving groundwater discharge from the pit areas.

Post-development, the reclamation landscape will continue to focus this recharge, but now over a broader area through disturbed till and topsoil on top of a reduce thickness of filtering material above the fractured bedrock. This may further exacerbate the delivery of soluble and particulate contaminants present in those reclamation materials, such as metals and trace elements and nutrients (nitrogen, organic carbon), into the

²¹ Ummenhofer and Meehl 2017

underlying groundwater supplying local wells and the Big Hill Springs complex. Restoration of agricultural development and/or grazing will increase the risk of further contamination into the future as well.

A much higher water table due to enhanced recharge from capture of annual precipitation or large convective storms could also lead to water ponding on the surface leading to enhanced runoff, erosion risk, and increased sedimentation of downgradient areas like the Big Hill Springs and Bighill Creek. These are all considerations that MALP has failed to adequately assess, and therefore leads to an extreme risk of unintended consequences.

5. Cumulative effects

There is currently one operating gravel pit (Hillstone Aggregates) located about 850 m due west of the MALP property along Highway 567. That operation is extracting gravel from the same buried channel deposit that MALP intends to exploit. A number of other gravel mining developments have been proposed, or are under consideration, at the downstream end of this buried sand and gravel deposit and in headwater area for Big Hill Springs. This raises concerns regarding the cumulative effect that multiple pits would have on the water balance and water quality in this sand and gravel aquifer and the resulting impacts to connected aquatic features. In response to this concern, a legal challenge was presented to the Court of Queen's Bench in 2019 (Docket 1701 12053), and on September 16 of that same year the decision was made by Justice J.T. Eamon to set aside the RVC Council's decision to approve a Natural Resource Industrial (NRI) District within the west half of Section 31. This is exactly where the MALP property resides. The County is presently appealing this court ruling, but it is understood that the lands still remain designated as Ranch & Farm (R&F) District.

The concern for cumulative development effects on the Big Hills Springs complex, and local water well owner, is the reason why the original court challenge to the RVC Land Use Bylaw was launched back in 2019. It is evident that a considerable amount of aggregate development would occur in the headwater area, and other parts of the extended sand and gravel deposit (see Figure 1, right image) should a change be made from R&F to an NRI District. It is also evident that the risk of adverse impacts from the MALP development will add to any impacts propagating from other nearby sand and gravel pits. As such, the effects of all developments regarding increased recharge and constituent mobilization into the groundwater sustaining Big Hill Springs and local users is a grave concern considering its value to the local environment.

This fact is the reason for the recommended 1.6 kilometer development setback (at a minimum, unless determined otherwise) and maintenance of a vertical 4 metre buffer above the water table for any other gravel pit developments within 800 metres of that development setback. The sole purpose of this strategy is to maintain the quality of the groundwater sustaining the springs and supporting aquatic habitat reliant

on the delivery of good quality water of stable temperature. Such a development buffer will also protect the quality of groundwater for nearby households and farms reliant on water wells for their everyday needs.

Given that there are plenty of gravel resources in other locations in the County and away from this sensitive headwater, establishing such a development buffer would:

- i) preserve the quality of a well-loved provincial park and prairie spring complex,
- ii) ensure that regulatory violations do not occur down the road, and
- iii) not adversely affect the potential for the County to realize aggregate levies.

To achieve sustainability (i.e. the balancing of economic and environmental consideration for societal benefit) it is important to make room for, and preserve, natural landscape features when considering the impacts of resource development projects. This can be achieved through prudent land use planning and decision-making.

Closure

It is clear that Big Hill Springs is a unique feature in Rocky View County that serves the recreational needs of residents and visitors and provides a quiet respite for many to connect with nature or relax with family and friends. It is also frequented by wildlife. The area is located between Parkland and Foothills natural regions and contains a large complex of springs feeding a tributary creek and series of small waterfalls that flow year-round over rocky terraces (and unique tufa deposits) covered with a lush growth of shrubs and grasses. The area is also the site of an historic fish hatchery. In fact, the area is so special, and regionally unique that the government established this as a provincial park in 1957, which received over 250,000 visitors each year.

The spring complex at the headwaters of Big Hill Springs Provincial Park is sustained by groundwater that discharges from a large, buried sand and gravel aquifer deposited thousands of years ago. These sand and gravel deposits are gaining increased attention, and pressure, to be developed as aggregate by various companies. Despite the fact there are multiple other locations in Rocky View County and the immediate region where sand and gravel aggregate can be extracted, or is already being exploited, MALP (and others) are interested in establishing pits in close proximity to Big Hill Springs Provincial Park and the headwaters of the Big Hill Springs complex.

There are definite future ramifications for this type of development when considering local groundwater users and surface water bodies that receive, and rely on, the groundwater discharging from this sand and gravel aquifer. The risks of future impacts to the local groundwater are only increased due to the cumulative pressures from multiple aggregate operations that want to establish themselves in the same area. Not only is there an issue regarding changes to groundwater quality, but there is also legal liability associated with

future impacts to aquatic habitat and fish in Bighill Creek, which could trigger a series of violations related to provincial and federal Acts. Establishing a development setback of at least 1.6 kilometers, and the requirement to maintain an adequate vertical buffer of undisturbed sand and gravel above the water table of at least 4 metres for any other development within 800 metres of this development setback, would manage the risks posed to the Big Hill Springs complex and the Bighill Creek system. And, in doing this will also avoid the potential for future interventions on development applications and manage the risk of regulatory violations.

Respectfully submitted by,

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Hydrogeologist & Geochemist

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TABLES

Table 1. Groundwater quality in and around MALP property (SLR 2020)

| Parameters | Units | FWAL criteria | Sand & Gravel monitoring wells | | | Bedrock wells | | | | Big Hill Springs | | |
|--|-------|-------------------|--------------------------------|-----------|-----------|---------------|----------|----------|----------|------------------|-----------|-----------|
| | | | MW14-101 | MW14-103 | MW19-110 | WW1 | WW2 | WW3 | WW4 | | | |
| | | | 20-Nov-14 | 04-Aug-15 | 10-Jul-19 | Median | Median | Median | Median | 30-Oct-14 | 04-Aug-15 | 10-Jul-19 |
| General quality indicators | | | | | | | | | | | | |
| pH | S.U. | 6.5-9.0 | 7.9 | 8.0 | 7.8 | 8.1 | 8.0 | 8.0 | 8.0 | 8.2 | 8.2 | 8.1 |
| TDS | mg/L | | 337 | 333 | 290 | 314 | 317 | 340 | 330 | 342 | 334 | 210 |
| Hardness (calc) | mg/L | | 328 | 316 | 278 | 310 | 281 | 333 | 333 | 336 | 317 | 200 |
| Turbidity | NTU | | 9.6 | 8 | <0.10 | 0.3 | 0.8 | 0.23 | 0.60 | 0.8 | 1.07 | 5.1 |
| Major ions | | | | | | | | | | | | |
| Calcium | mg/L | | 76 | 73 | 62 | 69 | 59 | 71 | 75 | 74 | 72 | 48 |
| Magnesium | mg/L | | 34 | 33 | 30 | 33 | 33 | 38 | 35 | 37 | 33 | 20 |
| Sodium | mg/L | | 6 | 8 | 6 | 7 | 13 | 8 | 7 | 8 | 8 | 5 |
| Potassium | mg/L | | 5 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 5 |
| Bicarbonate | mg/L | | 382 | 375 | 330 | 363 | 363 | 385 | 365 | 376 | 371 | 240 |
| Chloride | mg/L | 120 | 11 | 9 | 8 | 4 | 2 | 8 | 11 | 10 | 10 | 8 |
| Sulphate | mg/L | 429 or greater | 9 | 11 | 8 | 7 | 16 | 11 | 7 | 9 | 8 | 5 |
| Nitrate-N | mg/L | 3.0 | 1.2 | 1.8 | 1.9 | 1.7 | 0.7 | 1.9 | 3.2 | 2.8 | 3.0 | 1.4 |
| Nitrite-N | mg/L | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total metals & trace elements | | | | | | | | | | | | |
| Aluminum | mg/L | 0.05 | 0.16 | 0.11 | 10.0 | 0.009 | 0.006 | 0.006 | 0.004 | 0.018 | 0.014 | 0.30 |
| Arsenic | mg/L | 0.0050 | 0.0004 | 0.0003 | 0.0084 | 0.0001 | 0.0002 | 0.0001 | 0.0002 | 0.0002 | 0.0006 | 0.0006 |
| Barium | mg/L | | 0.424 | 0.332 | 2.20 | 0.283 | 0.128 | 0.223 | 0.225 | 0.304 | 0.313 | 0.210 |
| Boron | mg/L | 1.5 | -- | -- | -- | 0.022 | 0.028 | -- | 0.023 | 0.024 | <0.020 | <0.020 |
| Cadmium | mg/L | 0.000340 | 0.000016 | <0.000005 | 0.004200 | 0.000013 | 0.000024 | 0.000032 | 0.000024 | 0.000032 | 0.000008 | 0.000034 |
| Chromium | mg/L | 0.001 (assume 6+) | -- | 0.002 | 0.019 | -- | -- | -- | 0.001 | -- | -- | 0.001 |
| Copper | mg/L | 0.040 | -- | 0.0013 | 0.032 | 0.022 | 0.002 | 0.065 | 0.006 | -- | 0.0010 | 0.0013 |
| Iron | mg/L | 0.300 | 0.28 | 0.22 | 10.0 | 0.015 | 0.029 | -- | 0.018 | 0.03 | 0.02 | 0.25 |
| Lead | mg/L | 0.007 | 0.000 | -- | 0.019 | 0.001 | 0.001 | 0.003 | 0.001 | -- | -- | -- |
| Mercury | mg/L | 0.000005 | -- | -- | 0.000002 | -- | -- | -- | | -- | -- | 0.000003 |

| Parameters | Units | FWAL criteria | Sand & Gravel monitoring wells | | | Bedrock wells | | | | Big Hill Springs | | |
|------------------------|---------|---------------|--------------------------------|-----------|--------------|---------------|--------------|--------------|--------------|------------------|-----------|-----------|
| | | | MW14-101 | MW14-103 | MW19-110 | WW1 | WW2 | WW3 | WW4 | | | |
| | | | 20-Nov-14 | 04-Aug-15 | 10-Jul-19 | Median | Median | Median | Median | 30-Oct-14 | 04-Aug-15 | 10-Jul-19 |
| Manganese | mg/L | | 0.020 | 0.010 | 7.300 | -- | 0.004 | 0.001 | 0.004 | 0.0019 | 0.0012 | <0.0040 |
| Molybdenum | mg/L | 0.073 | 0.001 | 0.001 | 0.002 | 0.001 | 0.002 | 0.001 | 0.001 | 0.0014 | 0.0009 | 0.0004 |
| Nickel | mg/L | 0.120 | -- | 0.001 | 0.065 | -- | 0.001 | 0.002 | 0.001 | -- | <0.00050 | 0.0009 |
| Selenium | mg/L | 0.002 | -- | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 | 0.001 | 0.001 |
| Thallium | mg/L | 0.0008 | -- | -- | 0.0002 | -- | -- | -- | | -- | -- | -- |
| Uranium | mg/L | 0.015 | 0.002 | 0.002 | 0.006 | 0.001 | 0.001 | 0.002 | 0.001 | 0.0020 | 0.0019 | 0.0013 |
| Zinc | mg/L | 0.030 | -- | -- | 0.140 | -- | 0.035 | 0.205 | 0.041 | -- | -- | -- |
| Microbiological | | | | | | | | | | | | |
| Total coliforms | MPN/100 | | - | <1 | 180 | <1 | <1 | <1 | 6 | - | 2420 | >2400 |
| E.coli | MPN/100 | | - | <1 | 63 | <1 | <1 | <1 | <1 | - | 1733 | 1600 |

Notes:

- Parameters highlighted in red indicate concentrations above published FWAL criteria (AB government 2018)
- Average hardness of 250 mg/L (as CaCO₃) used for determining metals and trace element guidelines, as required.
- FWAL = freshwater aquatic life

Table 2. Bighill Creek water quality: 2019-2020 (Fouli 2020)

| Sampling Location | Units | FWAL criteria | SITE 1 - upstream of Big Hill Springs at Hwy 567 | | | SITE 2 – near confluence of Big Hill Springs and Bighill Creek | | |
|--|-------|--------------------|--|---------|--------|--|---------|--------|
| | | | Median | Min | Max | Median | Min | Max |
| General quality indicators | | | | | | | | |
| pH | | 6.5-9.0 | 8.1 | 7.8 | 8.3 | 8.1 | 8.0 | 8.5 |
| TDS | mg/L | -- | 310 | 180 | 490 | 330 | 210 | 370 |
| Hardness (as CaCO ₃) | mg/L | -- | 280 | 160 | 430 | 280 | 180 | 340 |
| Selected ions | | | | | | | | |
| Sodium | mg/L | -- | 20 | 11 | 31 | 15 | 11 | 17 |
| Chloride | mg/L | 120 | 9.8 | 7.8 | 23 | 9.0 | 5.7 | 15.0 |
| Sulphate | mg/L | 429 or greater | 13 | 7 | 28 | 13 | 10 | 14 |
| Nutrients | | | | | | | | |
| Nitrate (as N) | mg/L | 3.0 | 0.077 | 0.027 | .033 | 3.3 | 0.84 | 9.2 |
| Total Phosphorus | mg/L | -- | <0.10 | <0.10 | <0.10 | 0.10 | <0.10 | 0.120 |
| Total metals & trace elements | | | | | | | | |
| Aluminum | mg/L | 0.050 | 0.055 | 0.031 | 0.440 | 0.053 | 0.017 | 0.160 |
| Arsenic | mg/L | 0.0050 | 0.0010 | 0.0007 | 0.0013 | 0.0009 | 0.0002 | 0.0011 |
| Barium | mg/L | -- | 0.165 | 0.120 | 0.260 | 0.200 | 0.130 | 0.280 |
| Boron | mg/L | 1.5 | 0.018 | <0.02 | 0.026 | 0.010 | <0.020 | 0.023 |
| Cadmium | ug/L | 0.034 | 0.010 | <0.010 | 0.039 | 0.026 | 0.010 | 0.037 |
| Chromium | mg/L | 0.0010 (assume 6+) | 0.0005 | <0.0010 | 0.0013 | 0.0005 | 0.0005 | 0.0012 |
| Copper | mg/L | 0.040 | 0.0005 | 0.0004 | 0.0015 | 0.0007 | 0.0003 | 0.0009 |
| Iron | mg/L | 0.0300 | 0.410 | 0.240 | 0.830 | 0.240 | 0.170 | 0.580 |
| Lead | mg/L | 0.0070 | 0.0001 | <0.0001 | 0.0004 | 0.0001 | <0.002 | 0.0002 |
| Manganese | mg/L | -- | 0.026 | 0.014 | 0.220 | 0.015 | 0.011 | 0.047 |
| Molybdenum | mg/L | 0.0730 | 0.0010 | 0.0003 | 0.0012 | 0.001 | 0.000 | 0.001 |
| Nickel | mg/L | 0.110 | 0.0008 | 0.0006 | 0.0012 | 0.0006 | <0.0003 | 0.0011 |
| Potassium | mg/L | -- | 5.0 | 3.8 | 7.1 | 4.1 | 3.5 | 6.0 |
| Selenium | mg/L | 0.0020 | 0.0005 | 0.0004 | 0.0013 | 0.0008 | 0.0005 | 0.0015 |

| Sampling Location | Units | FWAL criteria | SITE 1 - upstream of BHS at Hwy 567 | | | SITE 2 - confluence of BHS and Bighill Creek | | |
|-------------------|-------|---------------|-------------------------------------|--------|-------|--|-------|-------|
| | | | Median | Min | Max | Median | Min | Max |
| Silicon | mg/L | -- | 4.9 | 2.2 | 8.4 | 4.4 | 3.1 | 7.3 |
| Strontium | mg/L | -- | 0.555 | 0.320 | 0.820 | 0.500 | 0.360 | 0.560 |
| Sulphur | mg/L | -- | 4.7 | 3.0 | 7.8 | 2.9 | 2.7 | 5.0 |
| Titanium | mg/L | -- | 0.003 | 0.002 | 0.013 | 0.001 | 0.001 | 0.005 |
| Uranium | mg/L | 0.0150 | 0.003 | 0.002 | 0.003 | 0.002 | 0.001 | 0.003 |
| Vanadium | mg/L | -- | 0.001 | <0.001 | 0.002 | 0.002 | 0.002 | 0.002 |
| Zinc | mg/L | 0.030 | 0.003 | 0.002 | 0.005 | 0.004 | 0.004 | 0.004 |

Notes:

- Parameters highlighted in red indicate concentrations above published FWAL criteria (AB government 2018)
- Average hardness of 250 mg/L (as CaCO₃) used for determining metals and trace element guidelines, as required.
- BHS = Big Hill Springs; FWAL = freshwater aquatic life

APPENDICES

Jon Fennell. M.Sc., Ph.D., P.Geol.

PROFESSIONAL PROFILE

Dr. Jon Fennell has been a practicing consultant in the natural resource sector for over 30 years offering support in the environmental sciences and resource management. His experience includes contaminated sites assessment, development of local and regional-scale groundwater systems, mine dewatering strategies, water supply and disposal, groundwater-surface water interaction assessment, implementation of monitoring and management systems, climate analysis and adaptation strategies, and environmental forensics including applications of:

- i) remote sensing
- ii) downhole, earth-based and airborne geophysical methods
- iii) geochemical assessment & modelling
- iv) stable and radiogenic isotopes to support source water tracing, chemical fingerprinting, and age-dating

The bulk of Jon's experience is associated with various oil & gas and mineral resource development projects in Canada and abroad. Over the last 13 years Jon has worked closely the Alberta Government through various initiatives to support the Water for Life Strategy, Land Use Framework, and Cumulative Effects Management System in the province. A primary area of focus is on developing strategies to ensure water security and communicating the importance of water knowledge as it applies to sustainable development activities.

PROJECT EXPERIENCE

International support

United Nations – Joint Caribbean Climate Change Partnership

Technical lead for the development of UNFCCC-sanctioned National Adaptation Plans for the countries of Belize and Guyana, with the goal of addressing multi-sector impacts from future climate change. Responsibilities included review of existing policies and studies supporting climate change adaptation, assessment of current adaptation plans for major economic, social, and environmental sectors, Incorporation of IPCC model results under various RCP scenarios, delivery of facilitated in-country workshops for various ministries, provision of recommendations to address gaps identified in current plans, liaison with government officials and UNDP organizers, completion of risk assessment and options analysis to identify high-value actions, preparation of capacity-building plan and 10-yr strategic plan, and risk and vulnerability assessment (including spatial aspects under various climate change scenarios – SRES and RCP).

Mexican Soda and Water Company – Monterrey Mexico

Lead for a groundwater evaluation project to supplement beverage making operations a large manufacturing plant in the city of Monterrey. Responsibilities included review of background geological, hydrogeological and geochemical information across a large study area centered on the Monterrey Metropolitan Area; assessment of structural fabric of study area including presence of major folds, faults, and other features (e.g. karst), amalgamation of background data with result from Quantum Geoelectrophysics reconnaissance program to identify prospective drilling targets, completion of a 4C

report (compare, contrast, correlate, confirm) and selection of prime drilling target for testing and evaluation.

Dept. of Environment & Resource Management – Coal Seam Gas Development, Queensland Australia

Lead for a hydrogeochemical assessment and water fingerprinting exercise in Great Artesian Basin aquifers of the Surat and Bowen basins to support Coal Seam Gas development and cumulative effects analysis. Responsibilities included a comprehensive data and information inventory to facilitate source water fingerprinting and collation of large public-domain data sets to provide a first-of-its-kind database of water quality information, review of major ions, metals and trace elements, stable and radiogenic isotopes and dissolved gases to identify recharge phenomenon, cross-formational flow characteristics and distinct water types, and statistical analysis to assess data groupings and spatial trends.

Additionally, lead for an aquifer vulnerability assessment to assess groundwater and groundwater-dependent ecosystem risks from Coal Seam Gas development in southeast Queensland. Responsibilities included development of a multi-criteria weighting and ranking system linked with GIS to display areas of highest risk to drawdown including areas users and groundwater dependent ecosystems, and facilitation of industry and government workshops to present and vet results.

Origin Energy – Coal Seam Gas Development, Queensland Australia

Groundwater lead for a large-scale coal seam gas project (up to 10,000 wells) located in the headwaters of the Murray-Darling Basin and recharge area for the Great Artesian Basin. Responsibilities included, development of a regional-scale groundwater monitoring system using vulnerability and risk mapping, design of a hydrogeological model covering a 173 000 km² area (using FEFLOW) to assess cumulative effects from coal seam gas development, completion of supporting Technical Report (including risk mapping, injection feasibility, model development) and Environmental Impact Statement chapter, and liaison with the Queensland Department of Environment and Natural Resources to address needs for the required Environmental Impact Assessment.

Texas Petroleum Company – Hydrocarbon Development, Columbia South America

Completion of an onsite environmental assessment of oilfield operations in support of the transfer of the Teca Nare, Cocorná, Velásques Oil Fields and the Velásquez-Galan Pipeline. Responsibilities included phase 1 site assessment of field operations, verification of site conditions at all well sites including soil and vegetation conditions prior to property transfer, assessment of baseline surface water and groundwater chemical conditions, as wells as environmental quality assessment to determine contamination from oilfield operations, and provision of summary report including recommendations.

Texas Petroleum Company – Hydrocarbon Development, Ecuador South America

Completion of a baseline groundwater and surface water study in a remote and environmentally sensitive area of the Amazon basin (headwaters area) to support a helicopter-assisted drilling program for oil and gas exploration. Responsibilities included field reconnaissance to establish the suitability of proposed drilling targets, assessment of the suitability of local surface water and groundwater sources for drilling fluid provision (quality and quantity), review of baseline soil quality, site hydrogeology, and geochemical conditions, and development of recommendations for pit construction and site preparation.

Canadian International Development Agency – Municipal works, Ecuador South America

Completion of a baseline soil and groundwater study (physical and chemical) around the City of Catamayo to determine the feasibility of siting an engineered wastewater impoundment for the treatment

of municipal sewage treatment (project funded by CIDA). Responsibilities included general site reconnaissance, collection of soil and groundwater samples for baseline geochemical quality assessment, review of hydrogeological conditions and processes relating to baseline conditions, and submission of recommendations on the suitability of the proposed location and possible approaches to rectify existing limitations.

Government of Yemen – National water supply, Yemen

Hydrogeological and geochemical support for a regional-scale study of water supply potential in the country. Responsibilities included hydrogeological and hydrogeochemical facies mapping, geochemical assessment and flow path evolution modelling, groundwater flow field assessment and modelling, sustainable yield evaluation, and groundwater age dating.

Blackbird Mine – Acid Rock Drainage assessment, Idaho USA

Completion of a hydrogeological baseline study and associated stable isotope investigation ($\delta^{34}\text{S}$, $\delta^{18}\text{O}$, and $\delta^2\text{H}$) to determine the source of acid mine drainage near active underground workings. Responsibilities included review of existing geochemical data and related mineral equilibria conditions (i.e. baseline and impacted), and assessment of geochemical reactions leading to ARD conditions, including biogeochemical aspects.

Government support

Alberta Environment, Oil Sands Science and Monitoring Division

Preparation of oil sands tailings pond seepage review report. Responsibilities included review of background information pertaining to oil sands produced water (OSPW) seepage research and natural bedrock groundwater discharge studies, review of industry-submitted EPEA compliance reports to assess current “state of affairs” regarding monitoring and OSPW detections, assessment of seepage management systems, review of geological pathways for OSPW migration, and development of seepage risk profiles for all active tailings ponds.

Alberta Environment and Parks (AEP)

Provision of external expert review for the Implementation Directive for the Surface Water Body Aggregate Policy (SWBAP). Responsibilities included review of relevant Government of Alberta documents relating to aggregate mining in or near surface water bodies and/or floodplain environments, use of information from relevant policies in other jurisdictions as well as studies and research (aquatic, terrestrial, river morphology, climate risk) regarding impacts of aggregate mining in floodplain areas, identification of gaps regarding goals and objectives of the approval and management process, review of risk assessment approach to approving aggregate mines near surface water bodies, and provision of recommendations for monitoring, evaluating and reporting, and interaction with AEP project team members and presentation of results.

Also, participation on expert hydrogeology panel to development a template for groundwater management frameworks (GMFs) in Alberta. Responsibilities included assessment of background on Alberta groundwater resources and documents highlighting existing GMFs inside and outside of Canada, review of sustainability goals and challenges with groundwater management (quantity and quality), review of prevailing concepts to groundwater management (i.e. surface water capture, risk and vulnerability assessment), identification of data needs and required infrastructure to support cumulative effects management, identification of proposed indicators using DPSIR approach, and participation in

external panel and internal AEP team of hydrogeological experts to define aspects of a standardized GMF template.

Alberta Environmental Monitoring Evaluation and Reporting Agency (AEMERA)

Assessment of Alberta's groundwater observation well network, including redundancy and gap analysis. Responsibilities included groundwater risk mapping, development of a numerical scoring scheme to prioritize monitoring wells, statistical and spatial analysis of provincial water chemistries using information from the Alberta water well information database, and development of monitoring strategy including analytes and frequency to address key development activities (e.g. hydraulic fracturing, waste disposal, large-scale groundwater extractions).

Alberta Environment (AENV)

Various projects include:

- Assistance with scoping, conceptual design and development of approach to Groundwater Management framework template
- Expert review for Implementation Directive for the Surface Water Body Aggregate Policy
- Review and comment on Groundwater Monitoring Directive (2012 draft)
- Technical assistance with development of a guidance framework to respond to the implications of thermal mobilization of constituents at in-situ bitumen recovery projects including facilitation of team workshops to communicate the physical and chemical aspects of thermal mobilization and the risks posed by in-situ operations, development of a risk-based, phased, approach to assessing thermal mobilization to address source-pathway-receptor aspects, development of a draft guidance document and interaction with the AEP communications team, and support for industry and CAPP consultation meetings to review the draft guidance document.
- Completion of vulnerability and risk mapping for the Lower Athabasca Regional Planning area and development of groundwater management framework for the mineable and thermal in situ areas.
- Completion of an inventory of existing quality and quantity issues, water supply conditions and related environmental policy.
- Participation in technical and policy-related work sessions involving various stakeholder representatives.
- Assessment of potential cumulative effects from thermal in-situ bitumen recovery operations and related activities (i.e. water withdrawal for steam generation; fluid waste injection)
- Facilitation of technical and policy-related work sessions to engage stakeholders (operators, AENV and ERCB) directly affected by changes to provincial water management.

Alberta Environment and Sustainable Resource Development (ESRD)

Various projects include:

- Development of a multi-attribute point-scoring system and ArcGIS tool to assist with optimal siting of provincial monitoring wells to address concerns regarding hydraulic fracturing (HF). Responsibilities included identification of key risks to groundwater resource from HF activities, conceptualization and construction of a subsurface risk assessment, and identification of surface access opportunities in an ArcGIS platform to identify prime locations for monitoring in active and future development areas.

- Northern Athabasca Oil Sands Region groundwater monitoring program. Responsibilities included development of sampling methodology, data evaluation process and program logistics, communication to technical team comprising oil sands operators, ERCB and AEP representatives, development of an on-line visualization tool, and client liaison.
- Review of LARP management plan, supporting Groundwater Management Frameworks and supporting guidance documents re: Thermal Mobilization of Trace Elements during In Situ Developments and Groundwater Monitoring Directive.
- Preparation of summary document for Scientific Advisory Committee of the Oil sands GW working group, and Alberta Environment.

Alberta Land Use Secretariat (LUS)

Assistance with development of land planning scenarios in NE Alberta to guide future development in the Lower Athabasca Regional Plan area pursuant to the goals of the Alberta Land-use Framework. Responsibilities included presentations to the Land Use Secretariat, Regional Planning Team and Regional Advisory Council, development and assessment of modelled results from a cumulative effects simulator, completion of groundwater modelling over a 93 000 km² area (using MODFLOW), and development of an approach to deal with groundwater resources in the LARP area.

Alberta Utilities Commission (AUC)

Provision of expert review support for a wind power application in the Provost AB area. Responsibilities included review of project concept and environmental implications, assessment of completeness regarding baseline hydrogeological assessment, assessment of impact analysis and proposed mitigation, identification of gaps and provision supplemental information requests.

BC Ministry of Energy, Mines and Petroleum Resources

Provision of expert review support for hydraulic fracturing review process. Responsibilities included preparation of background information pertaining to water quality risks and source-pathway-receptor aspects of hydraulic fracturing operations, provision of recommendation regarding geochemical fingerprinting (ion ratios, isotopes, NORMs), risk assessment and mapping techniques, and monitoring, and appearance at in-camera session to discuss water quality aspects with academic panel members including recommendations.

Agency support

Alberta Innovates (AI)

Provision of hydrogeological support services for the following University of Alberta research studies:

- Resolving human versus Industrial Influences on the water quality of the Lower Athabasca River (data synthesis; geophysical and geochemical assessment; isotope geochemistry source water fingerprinting, GW-SW interaction – identification and flux)
- Review of Arsenic in Alberta's groundwater (collation of multiple open source and private data bases, GIS platform design; correlation/cluster/factor analysis to determine source/cause/reasons(s), both physical and geochemical, for elevated concentrations, development of a risk mapping tool to identify existing and potential future high-risk areas and aquifer intervals)
- Predicting Alberta's Water Future (complete estimates of groundwater recharge to Alberta's 2200 sub-basins; determining groundwater use projection by major sector to 2050; assessing baseflow contributions and groundwater stress area based analytic model outputs; project changes to provincial

water supplies based on population growth, energy extraction, food production, land use, and climate variability/change; coordinate results with climate change model outputs and SWAT model outputs to generate preliminary Water Risk map for the province.

Alberta Water Research Institute (AWRI)

Preparation of a report assessing Alberta's inventory of water and its associated dynamics (natural and human-induced). Responsibilities included the development of a partnership model including participants from Universities and Institutes in Beijing, Switzerland, Edmonton, Calgary and Lethbridge, completion of a complete inventory of surface water, groundwater and fossil water (glaciers and deep groundwater) to identify current and future risks to water supplies in the province, and assessment of climate variability and change implications to provincial groundwater water resources

Canada's Oil Sands Innovation Alliance (COSIA)

Completion of a tailing pond seepage risk assessment and preparation of a peer-review journal manuscript to place suspected oil sands impacts into perspective. Responsibilities included review of individual tailings ponds established at the various operating oil sands mines in the Athabasca Oil Sands region, application of source-pathway-receptor model in relation to calculated groundwater flow velocities, stand-off distances from receptors, and natural attenuation properties to assess risk associated with each structure, and preparation of manuscript to place into context natural discharge of low-quality groundwater from bedrock formation versus oil sands seepage.

Other projects include:

- Completion of regional geochemical assessments in NE Alberta (35,000 km² area) supporting the Regional Water Management Initiative. Responsibilities included, collation of regional geological, hydrogeological, and geochemical data using public domain and industry information, assessment and interpretation of hydrogeological setting and of conceptual models, assessment of traditional and isotope geochemistry to determine source water chemistry to define flow path phenomena areas of aquifer interactions, statistical analysis of data to determine groupings and associations (PCA analysis), and documentation and presentation of results at various public venues.
- Completion of a water disposal assessment in NE Alberta (153,000 km² area) supporting the Regional Water Management Initiative. Responsibilities included collation of regional geological, hydrogeological, and water production data using public domain and industry information, development of a multi-criteria analysis approach to assessing Injection Potential and Theoretical Injection Rates based on a system of weighted and ranked physical and chemical attributes, and development of an ArcGIS platform to identify high-value disposal formations in relation to existing and planned in situ developments and pipelines
- Completion of oil sands industry study assessing the risks and benefits of landfills, salt caverns and disposal wells in liquid waste management. Responsibilities included participation in industry workshops. assessment of liquid waste management options, documentation and presentation of the results to industry members.

Cumulative Environmental Management Association (CEMA)

Assessment of baseline hydrological and hydrogeological conditions and development of a regional-scale groundwater quality monitoring network (18 000 km² study area) located in the Athabasca Oil Sands Region of northeast Alberta. Responsibilities included refinement of conceptual hydrogeological model, groundwater-surface water interaction assessment, assessment of quality conditions and trends (including statistical analysis), knowledge and data gap analysis, pathway identification and vulnerability assessment

for sensitive receptors, field reconnaissance and well selection, isotope interpretation ($\delta^{18}\text{O}$, $\delta^2\text{H}$, $\delta^{13}\text{C}$, Carbon-14), groundwater hydrograph analysis, report preparation and presentation, and liaison with government and industry representatives.

Other projects include:

- Preparation of a groundwater monitoring and management plan in support of the State of the Muskeg River Watershed report. Responsibilities included assessment of baseline groundwater quantity and quality conditions in the study area, identification of development stresses and potential short and long-term impacts, identification of proposed physical, chemical and state indicators for monitoring, and interaction in multidisciplinary team.
- Overview of historical, current, and planned groundwater initiatives in the Regional Municipality of Wood Buffalo. Responsibilities included interviews with relevant industry, government, academia, aboriginal, and non-governmental organization groups, identifying and accessing relevant studies, reports, and investigations relating to groundwater and groundwater-surface water interaction, and development of a useable database with relevant descriptors of content and results.

Lakeland Industry and Community Association (LICA)

Assessment of the current health of two large watersheds (covering over 8500 km²) in response to changing climatic conditions, changing land use practices, and increased pressure on water resources (surface water and groundwater) by agricultural and industrial users. Responsibilities included the assessment of historical Landsat imagery, review of stream and groundwater hydrograph data, assessment of effects of climate phenomena on basin hydrology, development of a hydrogeological framework from over 11,500 water well records, and review of temporal quality data from lakes and water wells.

Petroleum Technology Alliance of Canada (PTAC)

Completion of studies and industry workshops assessing environmental net benefit of saline water use versus non-saline water use in unconventional oil and gas development and the role of collaboration in unconventional oil and gas development.

Municipal and Watershed Stewardship Groups

Butte Action Committee

Preparation for, and participation in, AEP-led Surface Water Body Aggregate Policy 2017 stakeholder review workshops. Responsibilities included consultation with stakeholder group, provision of support for Leduc workshop, review of AEP materials in advance of Airdrie workshop (AEP policies, guides, codes, risk assessment framework), review of other Canadian and International policies and guides to aggregate mining near water bodies, review of impact studies related to aggregate mine development near surface water bodies (erosion, pit capture, infrastructure risk, fisheries and riparian area impacts), assessment of climate change implications for streamflow timing and magnitude, as well as intensity, duration, and frequency of storms and related runoff, on 1:100 levels, and documentation of questions to AEP for clarification and response to AEP questions re: climate change implications.

Red Deer River Watershed Alliance (RDRWA)

Assistance with development of an Integrated Watershed Management Plan to address future development in the basin. Responsibilities included assessment of aquifer types and groundwater inventory, water use patterns, effects of land use and climate variability/change on basin storage, assessment of water quality conditions, risk and vulnerability analysis, development of beneficial

management practices, and development of a conceptual monitoring system to achieve plan goals and objectives.

South McDougall Flats Protection Society, Sundre AB

Review of proposed re-zoning for aggregate mine development in historic floodplain of Little Red Deer River in Sundre, AB. Responsibilities included review of proposed gravel pit re-zoning area, air photo assessment and delineation of paleo-floodplain. preparation and presentation of workshop materials at public forums re: pros and cons of gravel mining (including policy framework review), and support for Town Council hearing.

Town of Okotoks, AB

Assistance with review of development applications and support for ensuring water security through conjunctive use strategies. Responsibilities included expert review of development applications assessing cumulative drawdown effects and provision of recommendations to manage effects, engagement with Town official on development of a sustainable water management strategy, and provision of support for AENV and Environmental Appeal Board process.

Also, completion of a pre-feasibility study to assess aquifer storage and recovery (ASR) and managed aquifer recharge (MAR) as a solution to water supply challenges. Responsibilities included review of regulatory setting and constraints for ASR and MAR (Canada and international jurisdictions), review of ASR and MAR projects world-wide, assessment of local geological and hydrogeological conditions and identification of potential areas to facilitate ASR and MAR success, modelling to determine optimal placement of MAR system to enhance baseflow conditions, groundwater-surface water interaction assessment, and preparation and presentation of pre-feasibility summary to Town Council and Mayor.

Town of High River, AB

Lead for the development of a Water Sustainability Plan predicated on risk identification and alternative storage and management options for a large alluvial aquifer system. Responsibilities included concept and program design, execution of vulnerability mapping approach to assess risk to High River from groundwater impacts (e.g. underground storage tanks), development of conceptual hydrogeological framework, review of groundwater-surface water interaction and climate variability effects, assistance with groundwater model development, and liaison with town officials, MD Foothills official and other project stakeholders.

Tsuut'ina First Nation

Completion of flood analysis for the Redwood Meadow development on the Elbow River floodplain. Responsibilities included review of river hydrology, flood frequency, and related changes in river morphology, assistance with hydrological modelling to address groundwater flooding potential to existing and planned development areas, calculation of damage estimates associated with 5-, 20-, 100-, 200- and 500-year return periods, and liaison with First Nations representatives, Government of AB, and Canadian Environmental Assessment Agency.

Industry support

Alberta Energy Company (AEC)

Preparation of an Environmental Operations Manual for all aspects of petroleum exploration and development in Alberta. Contents of the manual included environmental procedures for seismic outline

provision and reclamation, siting and construction of drilling leases and processing facilities, siting and construction of pipeline right of ways, spill response and cleanup, and site reclamation.

Amoco Canada

Various projects include:

- Numerous gas plant and batter investigations, including the completion of geophysical surveys (EM38, EM31, and EM61), and the design, installation, testing and sampling of groundwater monitoring networks.
- Completion of environmental site assessments and landfill delineation programs for gas plant divestitures. Responsibilities included installation, testing and sampling of groundwater monitoring wells, completion of soil sampling programs, and assessment of the results to determine the liability cost associated with property transfer.
- Completion of a stable isotope study using $\delta^{34}\text{S}$, $\delta^{18}\text{O}$, $\delta^2\text{H}$, $\delta^{13}\text{C}$ to determine the source of anomalous groundwater sulphate concentrations (natural vs. anthropogenic), and review of fresh groundwater usage for steam injection. Responsibilities included assessment of historical monitoring well and lake level readings to evaluate local effects resulting from groundwater withdrawal.
- Sounding Lake area monitoring program to determine effects from nearby drilling activity. Responsibilities included interviews with well-owners, assessment of the water delivery system, short-term aquifer testing, sample collection using ultra-clean sampling methods, evaluation of the data, and communication of results to client and owner.

Apache Canada

Completion of watershed analysis and intake siting in support of a Water Act Application on Smoky Lake. Responsibilities included assessment of Smoke Lake watershed and water supply potential, water supply modelling to determine availability and reliability of lake water, review of historical flow data and determination of suitable IFN at outlet (i.e. Q80), review of terrestrial, fisheries and water quality data to support water diversion strategy, development of proposed monitoring and response plan, and liaison with AEP and AER representatives.

Bellatrix Exploration Ltd.

Completion of a Water Sourcing study for Rocky Mountain asset. Responsibilities included review of existing and potential water sourcing options, development MCA and of GIS tool to assess and map high-value water opportunities, and completion of a corporate water security plan.

BP Canada

Resident well sampling program to determine effects from nearby drilling programs and existing gas wells. Responsibilities included well-owner interviews, assessment of the well conditions and water delivery system, sample collection using ultra-clean sampling methods, and communication of results.

Canadian Occidental

Completion of a stable isotope studies to determine the source of sulphate impact from two large sour gas processing facilities (Balzac and Okotoks). Responsibilities included drilling, installation, and testing of monitoring wells, development of a conceptual site model, review of site-wide geochemistry (soil and groundwater), and application of $\delta^{34}\text{S}$, $\delta^{18}\text{O}$, $\delta^2\text{H}$, and $\delta^{13}\text{C}$ isotopes to resolve natural versus anthropogenic influences.

Devon Canada

Various projects include:

- Development of a thermal mobilization risk model to support development efforts in the Jackfish and Pike oil sands developments. Responsibilities included review and evaluation of existing geochemical data including metals and trace elements, development of conceptual site model using existing geological picks for various identified formations, design of Spatial MCA approach to map risk of thermal mobilization from artificial ground heating, and preparation of summary document and presentation at various public venues.
- Completion of detailed studies to define baseline hydrogeological and hydrological conditions in support of a CBM project in the Crowsnest Region of the eastern Rocky Mountains. Responsibilities included, completion of detailed field reconnaissance program, establishment of a spring and water well monitoring network, investigation of surface water/groundwater interactions, development of a conceptual hydrogeological framework in a mountainous area using geological and geochemical data, groundwater age dating of regional confined aquifers using radioactive isotopes (i.e. Tritium and Chlorine-36), and public and regulatory liaison.
- Hydrogeological support for D51 disposal application. Responsibilities included refinement of conceptual model and identification of hydrodynamic conditions supporting disposal water entrapment by stagnation zone using geochemical and isotope evidence.

Enerplus

Completion of a Water Security Plan for the Western Canadian assets. Responsibilities included review of asset operations and water management process, assessment of basin water risk conditions and current mitigations in place, source water and disposal opportunity assessment, and development of multi-criteria assessment (MCA) process to rank water risk profile of each asset and provide recommendations for mitigation.

Graymont Western US Inc.

Preliminary development of a mine dewatering and water management strategy for a large limestone quarry located in the eastern front ranges of the Rocky Mountains. Responsibilities included assessment of baseline hydrogeological and hydrogeochemical conditions in a mountain environment, source water fingerprinting and groundwater age-dating, fracture and lineament analysis using structural geology and geophysical analysis (GPR, borehole tele-viewer), groundwater-surface water interaction assessment (i.e., Bow River), conceptualization of dewatering strategy utilizing oriented and horizontal well technology, and issues identification and risk analysis.

Hammerhead Resources

Completion of watershed analysis, flood assessment and intake siting in support of a Water Act Application on the Smoky River. Responsibilities included assessment of Smoky River watershed and water supply potential, review of historical flow data and assessment of Q80 and Q95, flood assessment to determine 1:10 and 1:25 year event levels, review of fisheries and bank stability assessment in support of intake siting, development of proposed monitoring and response plan, and liaison with AEP and AER representatives.

Husky Oil Operations Ltd.

Completion of a water security plan for the Ansell asset, west-central Alberta. Responsibilities included review of project water profile and future requirements for hydraulic fracturing, facilitation of risk review

workshop, and review of water source opportunities and development of MCA opportunity ranking process.

Also, completion of a Water Security Plan for a 200,000 barrel per day thermal in situ oil sands operation. Responsibilities included, review of water supply and disposal needs for the duration of the planned project, risk and opportunity analysis using multi-criteria analysis to ensure viability of supply and disposal strategies, and identification of strategies to ensure project viability and project sustainability.

Imperial Oil

Various projects include:

- Completion of field and bench-scale tests to determine facilitated mobility of metals, trace elements, and dissolved organics resulting from artificial ground heating around thermal in situ wells. Responsibilities included drilling, installation, testing, and sampling (soil and water) from 22 deep (up to 90 m) monitoring wells at a newly established thermal in situ pad to determine baseline geochemistry and groundwater flow directions, tracer experiment to determine groundwater flow velocities in a deep (>80 m) confined aquifer, collection of sediment samples (under anoxic conditions) for bench-scale heating experiments to determine metals mobility and related kinetics, review of stable isotopes in groundwater and dissolved gases to determine effects of heating from in-situ thermal wells on local geochemical conditions (inorganic and organic constituents), reaction path modelling to determine processes influencing changes metals concentrations and biological activity resulting from subsurface heating, determination of activation energies for metals release, and the role of biogeochemical reactions in facilitating metals release, transport and fate modelling to determine the long-term risk of thermal mobilization of metals (and other related constituents) to the surrounding environment, and documentation of result and liaison with client and regulatory agencies.
- Design and implementation of dewatering program for large process water ponds. Responsibilities included review of site geological conditions, installation of dewatering wells, acquisition and interpretation of aquifer test data, design of dewatering system using appropriate theoretical calculations and analytical modelling solution, and development of dewatering plan and associated performance monitoring
- Completion of a regional groundwater investigation and development of a regional-scale ground water monitoring network (per EPO 95-07 requirements) in a multi-layer inter-till aquifer system in east-central Alberta. Responsibilities included assessment and interpretation of Quaternary stratigraphy, interpretation of seismic line data and geophysical borehole log analysis, regional groundwater flow mapping, geochemical facies mapping, assessment of regional arsenic concentrations, trends, and potential connection to thermal in situ development activities, groundwater age-dating and stable isotope analysis ($\delta^{18}\text{O}$, $\delta^2\text{H}$, $\delta^{34}\text{S}$, $\delta^{11}\text{B}$ and $\delta^{13}\text{C}$: dissolved constituents and gases), preparation of investigation report to address EPO questions (i.e. source and cause of groundwater quality issues), and liaison with regulators during investigation and EPO closure process.
- Completion of an environmental liability assessment to determine the cost of decommissioning, abandoning and restoring the area currently occupied by the Norman Wells field. Responsibilities included completion of a Phase 1 audit of production facilities and supporting infrastructure (i.e. wellheads, pipelines, satellites, batteries and former refinery), design and implementation of a late Fall field program to sample a statistically sufficient number of locations to generate realistic liability costing for field shutdown and closure, generation of a summary report, and assistance with design of liability costing model and summary reporting.

- Completion of numerous isotope studies used to determine groundwater flow rates in regional confined aquifers and the source of anomalous groundwater quality conditions and dissolved gas concentrations near a large heavy oil recovery operation using assessment of $\delta^{18}\text{O}$, $\delta^2\text{H}$, $\delta^{34}\text{S}$, $\delta^{11}\text{B}$ and $\delta^{13}\text{C}$ and Tritium and Carbon-14 for groundwater age-dating.
- Tritium age dating of groundwater in Norman Wells, NWT to determine vertical groundwater flow characteristics in discontinuous permafrost environment
- Development and implementation of a site characterization program at a former refinery and battery (circa 1930s) located approximately 160 km south of the Arctic Circle. Responsibilities included the design and installation of a monitoring network in discontinuous permafrost, and assistance in development of assessment programs to generate Tier II criteria in support of a human health and ecological risk assessment.
- Support for re-licensing of supply wells for oilfield injection using Alberta Environment “Water Conservation and Allocation Guideline for Oilfield Injection” and “Groundwater Evaluation Guideline.” Responsibilities included, completion of field-verified surveys, review of site geological conditions, acquisition and interpretation of aquifer test data, assessment of groundwater/surface water interaction, and determination of long-term sustainable yield using analytical solutions
- Hydrogeological lead for a large oil sands mine EIA (Kearl Oil Sands Mine Project). Responsibilities include evaluation and interpretation of water well information and chemical data, defining Quaternary stratigraphy, temporal water level assessment to determine potential impact to regional groundwater quality and quantity arising from mine development and dewatering, and support at Joint Panel hearing.
- Cold Lake area monitoring program (Arsenic Investigation – 30 private residents). Responsibilities included interviews with well-owners, assessment of the water delivery system, sample collection using ultra-clean sampling methods, review of the data, and communication of results to client, well owner and Alberta Environment
- Completion of an environmental liability assessment and costing exercise in support of the sale of the Judy Creek field to PenGrowth Corp. to statistically sample a sufficient number of facilities to generate realistic liability cost for property transfer. Responsibilities included completion of Phase 1 audits of production facilities and supporting infrastructure (i.e. wellheads, pipelines, satellites, and batteries), design and implementation of winter field program to sample facilities to generate realistic liability cost for property transfer
- Conceptual model design for dewatering scheme in support of mine development. Responsibilities included assessment of geological conditions, boundary assessment, parameter selection and optimization, and assessment of model results
- Completion of a groundwater modelling study to determine the sustainable yield of a major deep freshwater aquifer in the Cold Lake area. Responsibilities included the provision of hydrogeological support for model conceptualization and design, input parameter selection, and evaluation and communication of results
- Development and implementation of a regional groundwater quality monitoring network covering an area of 1,200 km². Responsibilities included, regular interaction with environmental regulatory agencies and the local landowners, installation, testing and sampling of deep (up to 230 m) monitoring wells to assess potential impact to confined aquifers due to production well casing failures, design, implementation and interpretation of aquifer tests in support of groundwater remediation programs, and development of cost effective approaches towards restoring water quality conditions in deep aquifers influenced by heavy hydrocarbons and associated production fluids.

- Preparation of an AB environment approved Incident Response Plan to deal with groundwater quality issues identified during routine monitoring activities at a large heavy oil recovery scheme. Responsibilities included design of a cost-effective sampling schedule including rationalization of a 200 well monitoring network to provide a meaningful network of approx. 100 wells, and development of statistical limits for response and mitigation actions.

Japan Canada Oil Sands (JACOS)

Execution of hydrogeological section of an expansion EIA for the Hangingstone Thermal In Situ Oil Sands project. Responsibilities included development of baseline hydrogeology, EIA sections, and SIR responses, liaison with project team and governing agencies, and stakeholder consultation with First Nations and 3PC.

Also, completion of a water supply project in support of a heavy oil recovery scheme using Alberta Environment “Water Conservation and Allocation Guideline for Oilfield Injection” and “Groundwater Evaluation Guideline.” Responsibilities included assessment of geophysical logs and EM survey results, design and implementation of field programs, step rate test and constant rate test data acquisition and analysis, well screen selection and well design, well efficiency assessment, and use of pertinent analytical equations to predict effect of long-term pumping.

Mobil Oil Canada

Completion of a stable isotope study to determine the source of sulphate impact from a large sour gas processing facility. Responsibilities included, drilling and installation of monitoring wells, development of a conceptual site model, review of site-wide geochemistry (soil and groundwater), and application of $\delta^{34}\text{S}$, $\delta^{18}\text{O}$, $\delta^2\text{H}$, and $\delta^{13}\text{C}$ isotopes to resolve natural versus anthropogenic influences.

Nexen ULC

Development of a water strategy to service the Aurora LNG project/Dilly Creek asset. Responsibilities included assessment of development trajectory with respect to water use, identification of feasible water supply source to accommodate up to 6.5 million m^3 per year of water, conceptualization of water storage strategy to reduce pressure on local water sources and minimize physical footprint of development, development of a water conveyance strategy utilizing existing rights of way, including Class 5 cost estimation, and liaison with Fort Nelson first Nations to facilitate development of baseline hydrology monitoring program and facilitation of a Section 10 water licence (following successful EAB appeal of previous licence).

Also, the design and completion of bench-scale testing to determine the mobilization of metals and trace elements under applied heating. Responsibilities included conceptual design of experimental process in collaboration with AGAT lab representatives, assessment of frozen core samples and selection of appropriate intervals for physical (grain size, mineralogy via XRD) and chemical testing (total metals, leachable metals), assessment of results from sequential batch heating experiments extending from 5-100°C for metals species released to solution, geochemical modelling of kinetic experiment results to determine activation energies of metals release, completion of attenuation experiments to determine potential for mobilized metals to re-associated with sediments under cooled conditions, and preparation of suitable documentation to present to the client and AER.

Pembina Pipeline Corporation

Provision of expert legal support to review source and cause of industrial chemical contamination at an operating gas plant. Responsibilities included review of existing site investigations, procedures, and documentation, assessment of efficacy of investigations and protocols (field and laboratory), development

of conceptual model to explain presence and movement of sulfolane in bedrock deposits, and review of risk assessment findings and provision of recommendations to close data and information gaps.

Petro-Canada

Various projects include:

- Completion of detailed regional and local baseline studies, and cumulative impact assessment, to establish regional and local hydrogeological and geochemical characteristics in support of a 30,000 bbl/d heavy oil recovery expansion (MacKay River Project). Responsibilities included defining Quaternary stratigraphy, temporal water level assessment to determine potential impact to regional groundwater quality and quantity arising from bitumen recovery operations, development of a numerical groundwater model to assess long-term effects of water withdrawal and waste disposal to support project activities, and completion of climate change assessment formed part of the assessment for project design.
- Conceptualization and design of field program to assess water supply and water disposal for two major heavy oil projects (>30,000 bbl/d). Responsibilities included selection of drilling locations based on geophysical reconnaissance, implementation of field programs, step rate test and constant rate test data acquisition and analysis, well efficiency assessment, well screen selection and well design, and use of pertinent analytical equations.
- Review of fresh groundwater use for a water flood project. Responsibilities included interpretation of historical monitoring well data to determine the effects of the groundwater withdrawal from the local aquifer.
- Assessment of long-term effects of industrial water supply wells used for a water flood scheme. Responsibilities included a review groundwater chemistry and well hydraulic data to determination sustainable production rates.
- Completion of an environmental operations audit and subsequent industrial landfill delineation to determine the source area of possible groundwater contamination. Responsibilities included completion of a comprehensive intrusive landfill delineation and soil sampling program to determine the extent and volume of landfill contamination.
- Completion of an industrial landfill delineation project to determine possible sources of groundwater contamination. Responsibilities included completion of a magnetometer survey, follow-up excavation and soil sampling near a decommissioned landfill to determine the presence, extent and volume of residual landfill material.

Procor

Review of operational history of a salt cavern storage facility including an assessment of groundwater quality near the large brine storage ponds and the potential for impact to the Regina Aquifer.

Shell Canada

Various projects include:

- Completion of watershed analysis and intake siting in support of a Water Act Application on Iosegun Lake. Responsibilities included assessment of Iosegun Lake watershed and water supply potential, water supply modelling to determine availability and reliability of supply, review of historical flow data and determination of suitable IFN at outlet (i.e. Q80), review of terrestrial, fisheries and water quality data to support water diversion strategy, development of proposed monitoring and response plan, and liaison with AEP and AER representatives.

- Hydrogeological support for Jackpine Mine Expansion EIA
- Development of Groundwater Management Plan and annual monitoring support at Shell's Muskeg River Mine. Responsibilities included review of site-wide groundwater monitoring network for applicability to EPEA Approval requirements (including gap analysis, routine monitoring and reporting per EPEA requirements, selection of indicator suites to facilitate routine monitoring, evaluation, and reporting, identification of locations with water quality concerns, development of approach to statically assessing and responding to data excursions and trends, and preparation of the GMP for consideration and acceptance by AEP.
- Support for Carmon Creek EIA and assessment of brackish water supply potential in support of heavy oil operations in the Peace River area. Responsibilities included assessment of baseline hydrogeological conditions and potential impacts from project development, preparation of climate change assessment for project development, support for SIR submissions and EIA team interactions, feasibility assessment of potential for deep formations to produce sustained supplies and conceptual well-field development, and liaison with regulatory agencies
- Development of a regional-scale ground water monitoring network in a multi-layer aquifer system in the Peace River region of Alberta. Responsibilities included assessment of Quaternary stratigraphy, interpretation of seismic line data, geophysical borehole log analysis, and geochemical facies mapping and solution chemistry analysis.
- Assistance with the development and construction of an induced infiltration groundwater supply system for the Shell Caroline Gas Plant industrial water supply project. Responsibilities included drilling and installation of large diameter water production wells, borehole geophysical logging and interpretation. sand quantification testing and analyses to determine sediment production volumes prior to pipeline construction, and liaison with client and local landowners.

Suncor Energy

Various projects include:

- Lead subsurface specialist for a multi-criteria decision analysis and life-cycle value analysis in support of a regional brine management strategy in the Athabasca Oil Sands area. Responsibilities included development of a holistic weighting and ranking approach to address triple-bottom-line assessment of treatment and disposal options for liquid and solid waste streams originating from oil sands mining and in situ assets located across a 30 000 km² area, facilitation of, and participation in, workshops to assess viable options for treatment and disposal including Class 4 costing, and development of a constraints mapping approach (vulnerability, risks and opportunities) using ArcGIS to assist in management and disposal options for liquid and solids waste streams.
- Development of an Athabasca River reconnaissance program to identify and sample natural groundwater-surface water interaction zones discharging waters from the Cretaceous and Devonian formations. Responsibilities included planning/execution and interpretation of a marine-based geophysical program using EM31 imaging and bathymetric readings, development of pore water sampling program including geochemical assessment of waters and source fingerprinting (major ion, trace element, dissolved organics, and stable and radiogenic isotopes), interpretation of results and presentation at various venues (government, industry).
- D51 disposal monitoring at the Firebag Thermal In Situ Project
- Thermal mobilization assessments (Firebag, Lewis, Meadow Creek)
- Development of brine water management strategy including options analysis and Class 4 costing

- Preparation of an oil sands mining closure strategy outlining goals, objectives, tasks, timelines, and consulting and research agencies to execute in support of Life of Mine Closure and Reclamation process
- Assistance with Fort Hills Operational Plan regarding preservation of McClelland Lake and wetland complex; review of physical hydrogeology and geochemical setting; assessment of numerical model design and output; review of cut-of wall design and mitigation system; review of adaptive management processes
- Review of Devonian – McMurray interactions at the North Steepbank mine expansion and assistance with investigation program design (including geochemical assessment)
- Completion of geophysical and porewater surveys on the Athabasca and Steepbank Rivers to determine contributions of natural discharge versus industry inputs
- Review of existing water supply for Steepbank and Millennium mine operations and development of contingency supply options. Responsibilities included review of past water resource evaluations, development of geophysical investigation program and interpretation of results, assessment of contingency water supply (groundwater and operations water), client consultation and liaison with Alberta Environment, and implementation of horizontal well technology to provide a secure supply of water for continued operations
- Groundwater age-dating and source area identification in support of active tailings pond seepage investigations. Responsibilities included conceptual site model design, review of traditional geochemistry to determine end-point water types, and application of Tritium, $\delta^{18}\text{O}$, $\delta^2\text{H}$, $\delta^{34}\text{S}$, $\delta^{11}\text{B}$ to resolve geochemical setting and potential areas of seepage
- Preparation of an AB Environment approved Groundwater Management Plan at a large oil sands mining operation. Activities included, the design of a cost-effective sampling schedule including rationalization of over 300 wells to establish a meaningful monitoring network of 150 wells, development of statistically established trigger values for response and mitigation, and liaison with Government of Alberta during review and approval.

Synchrude Canada

Participation on expert hydrogeology panel to review Devonian investigation program for Aurora mine and assess mitigation strategies to control high risk areas (Les Gray - UBC, Carl Mendoza, - UofA, Ken Baxter - Golder, Jon Fennell - WP). Responsibilities included review of existing baseline data for active mining site, identification of high-risk areas to consider for future investigation and monitoring, participation in group workshop settings to communicate findings and accumulate input for recommendations refinement, and participation in internal panel meetings to discuss concepts and develop final recommendations.

Teck Resources Limited

Evaluation of stream response to groundwater interception in support of fisheries habitat offsetting at Line Creek Mine, BC. Responsibilities included baseline reconnaissance of Line Creek alluvial system and GW-SW water interactions with Line Creek, assessment of area springs, shallow groundwater, and creeks to determine geochemical quality and flow conditions (using drive point well technology and data logger systems), completion of ground penetrating radar survey to map thickness and morphology of alluvial deposits, water quality fingerprinting using major ion, trace elements (in particular selenium) and stable isotopes to determine interaction of groundwater environment with Line Creek, and assessment of selenium mobilization conditions related to active mine workings and development of a conceptual (passive) mitigation strategy to offset impacts to fisheries habitat.

Total E&P

Support for Joslyn North Mine EIA submission and development of a mine dewatering strategy for. Responsibilities included development of baseline hydrogeology, EIA sections and SIR responses , liaison with project team and governing agencies, joint Panel hearing support.

Also, selection and phasing of depressurization wells and associated monitoring wells, review of deep well injection potential, including geochemical compatibilities of waters, development of a performance monitoring system, selection of pipeline route, and preparation of a design-based memorandum with related costs (Class 3) of implementation and long-term operation.

Various Gas Plants, Batteries and Refineries (Alberta, British Columbia, Saskatchewan)

Completion of piezometer network design at numerous operating facilities to assess the potential impact to local groundwater quality resulting from industrial activities and extent of contaminant migration from known source areas (Imperial Oil, Shell, Mobil, Canadian Occidental); and, provision of hydrogeological services in support of a gas plant decommissioning (ongoing). Responsibilities include, well installation, testing and sampling, involvement in a site-specific risk assessment (ecological and human health), development of sampling protocols, and assessment of cost-effective remediation techniques to address various contaminant situations in both soil and groundwater.

Various Oil and Gas Facilities (Alberta, Saskatchewan)

Completion of environmental operations audits and development of waste management plans for numerous operating oil and gas facilities (Amoco, Petro-Canada, Shell). Responsibilities included review of historical operations files (spill reports, waste handling procedures, EUB and AENV records), completion of site inspections and interviews, and historical air photo analysis and interpretation.

EDUCATION

Ph.D. (Geochemistry) – University of Calgary, 2008

M.Sc. (Physical Hydrogeology and Isotope Geochemistry) – University of Calgary, 1994

B.Sc. (Geology: hard rock, sedimentology, mineralogy, structural, geochemical) – University of Saskatchewan, Saskatoon, 1985

REGISTRATIONS & AFFILIATIONS

APEGA (P.Geol. – Alberta)

EGBC (P.Geo. – British Columbia)

APEGS (P.Geo. P.Eng. – Saskatchewan)

NAPEG (P.Geol. – Northwest Territories and Nunavut)

National Ground Water Association (NGWA)

International Association of Hydrogeologists

Canadian Water Resources Association (CWRA)

Sustainable Energy Development Program (Univ. of Calgary) – External Advisory Board – 2017 to present

Bow River Basin Council (Calgary), Board of Directors (2008-2013), Chair of Monitoring and Modelling committee (2008 to 2012), Member of Legislation and Policy Committee (2006-2011), Member of Integrated Watershed Management Group (2007 to 2010)

SPECIFIC TECHNICAL EXPERTISE

- ICP-MS, GC-MS, Ion chromatography (LC-MS, HPLC, IC)
- SEM, XRD (bulk and clays), XRF, EDS and Synchrotron Light (XANES, and EXAFS)
- Isotope ratio mass spectrometry (IRMS)
- Solid-phase extraction, Alumina fraction, and sequential soil extraction
- Toxicity identification evaluation for metals and organics
- Selection of appropriate inorganic or organic analytical techniques based on Standard Methods for Water and Wastewater
- Statistical analysis (e.g. population testing, trend analysis, control charting, PCA, HCA, spatial analysis)
- Multi-criteria decision analysis (MCDA)
- Vulnerability and risk mapping
- Risk assessment (human and ecological)
- Climate tele-connections assessment, climate model analysis and impact identification, development of adaptation strategies

PUBLICATIONS

Fennell J. and Aciszewski T (2019). Current knowledge of seepage from oil sands tailings ponds and its environmental influence in northeastern Alberta. *Science of the Total Environment*, 686, p. 968-985.

Birks S.J., **Fennell J.W.**, Gibson J.J., Yi Y., Moncur M.C., and Brewster M. 2019. Using regional datasets of isotope geochemistry to resolve complex groundwater flow and formation connectivity in northeastern Alberta, Canada. *Applied Geochemistry*, 101 (2019), p. 140-159.

Hatala R., **Fennell J.**, and Gurba G. 2018. Advances in the realm of Hydrogeophysics: The emerging role of Quantum Geoelectrophysics in Aquifer Exploration. *Can. Soc. of Expl. Geoph.*, RECORDER October Focus - Hydrogeophysics: the Past, Present, and Future. Vo. 43, No. 6, p. 32-36.

Birks S.J., Moncur M.C., Gibson J.J., Yi Y., **Fennell J.**, and Taylor E.B. 2018. Origin and hydrogeological setting of saline groundwater discharges to the Athabasca River: Characterization of the hyperheic zone. *Applied Geochem.*, 98, p. 172-190.

Fennell J., 2018. Predictions, perceptions and the precautionary principle: responding to climate change in a realm of uncertainty. *Canadian Water Resources Association, Water News*, Fall/Winter 2018. Vo. 37, No. 2, p. 6-9.

Fennell J., 2018. *Water, Peace, and Global Security: Canada's Place in the World We Want* (Sandford and Smakhtin, eds.), *Groundwater and Canada's Future – Moving data and information to knowledge and security*. Prepared for the United Nations University, Institute for Environment, Water and Health, 17 pp.

Fennell J. 2018. *Poison Well: Chasing arsenic in Alberta's groundwater*. Water Canada, January/February 2018, p. 20-21.

- Fennell J.** 2017. Let's make a deal: Canada's vital role in the Columbia River Treaty. *Water Canada*, September/October 2017. p. 42-43.
- Faramarzi M., K. Abbaspour, V. Adamowicz, W. Lu, **J. Fennell**, A. Zehnder and G. Goss 2017. Uncertainty based assessment of dynamic freshwater scarcity in semi-arid watershed of Alberta, Canada. *Journal of Hydrology: Regional Studies*, 9, p. 48-68.
- Fennell J.** 2015. Disposal in the unconventional oil and gas sector: Challenges and solutions. American Assoc. of Petroleum Geologists, *Environmental Geosciences*, Vol. 22, No. 04, December 2015, p. 127-138.
- Fennell J.** and O. Keilbasinki 2014. Water, food, and our climate: Is California a harbinger of things to come? *WaterCanada*, July/August 2015, p. 24-25.
- Fennell J.** and O. Keilbasinki 2014. Water without Borders: What is Canada's role in water security? *WaterCanada*, November/December 2014, p. 50-51.
- Gibson J.J., **J. Fennell**, S.J. Birks, Y. Yi, M. Moncur, B. Hansen and S. Jasechko 2013. Evidence of discharging saline formation water to the Athabasca River in the northern Athabasca oil sands region. *Canadian Journal of Earth Sciences*, 50, p. 1244 - 1257.
- M.S. Ross, A.S. Santos Pereira, **J. Fennell**, M. Davies, J. Johnson, L. Sliva, and J.W. Martin 2012. Quantitative and Qualitative Analysis of Naphthenic Acids in Natural Waters Surrounding the Canadian Oil Sands Industry. *Environmental Science and Technology*, 46, p. 12796 – 12805.
- Fennell J.** 2011. Total Water Management – a new and necessary paradigm. *Environmental Science and Engineering Magazine*, May/June edition.
- Fennell J.**, Klebek M. and Forrest F. 2011. An approach to managing cumulative effects to groundwater resources in the Alberta Oil Sands. World Heavy Oil Congress proceedings, March 2011.
- Fennell J.** 2010. Protecting water supplies in CSG development. *Water Engineering Australia*, Vo. 4, No. 6, September 2010.
- Fennell J.** 2008. Effects of Aquifer Heating on Groundwater Chemistry with a Review of Arsenic and its Mobility. Ph.D. thesis, Department of Geoscience, University of Calgary.
- Fennell J.** Zawadzki A. and Cadman C. 2006. Influence of natural vs. anthropogenic stresses on water resource sustainability: a case study. *Water Science and Technology*. Volume 53, No. 10, p 21-27.
- William L.B., M.E. Wieser, **J. Fennell**, I. Hutcheon, and R.L. Hervig 2001. Application of boron isotopes to the understanding of fluid-rock interactions in a hydrothermally stimulated oil reservoir in the Alberta Basin, Canada. *Geofluids*, Vol. 1, p. 229-240.
- Kellett R., **J. Fennell**, A. Glatiotis, W. MacLeod, and C. Watson 1999. An Integrated Approach to Site Investigations in Permafrost Regions: Geophysics, Soils, Groundwater, and Geographical Information Systems. ARCSACC Conference, Edmonton '99.
- Gilson E.W., R. Kellett, **J. Fennell**, P. Bauman, and C. Sikstrom 1998. High Resolution Reflection Seismic and Resistivity Imaging of Deep Regional Aquifers for Stratigraphic Mapping. CSEG Conference.

Fennell J. and Bentley L. 1997. Distribution of Sulphate and Organic Carbon in a Prairie Till Setting: Natural versus Industrial Sources. *Water Resources Research*, Vol. 34, No. 7, p. 1781-1794.

Fennell J. and Sevigny J. 1997. Effects of Acid Conditions on Element Distribution Beneath a Sulphur Base Pad (Acid Mobilization Study). Publication submitted to the Canadian Association of Petroleum Producers (CAPP).

Fennell J. 1994. Source and Distribution of Sulphate and Associated Organics at a Sour Gas Plant in Southern Alberta. M.Sc. thesis, Department of Geology and Geophysics, University of Calgary. Hayes B., J. Christopher, L. Rosenthal, G. Los, B. McKercher, D. Minken, Y. Tremblay, and

J. Fennell 1994. *Atlas of the Western Canadian Sedimentary Basin – Chapter 19: Cretaceous Manville Group*. Canadian Society of Petroleum Geologists and Alberta Research Council, ISBN 0-920230-53-9.

PRESENTATIONS & LECTURES

COSIA Oil Sands Innovation Summit, June 2019 Calgary AB: Fact or fiction – the truth regarding tailings pond seepage in Canada's oil sands (response to a Free Trade Agreement Challenge)

CWRA Alberta Branch conference, April 2019 Red Deer: Flooding, climate change, and the need for a precautionary approach.

University of Calgary, Sustainable Energy Development Program. February 2019, Decision support processes and tools in sustainable energy development projects.

Mine Water Solutions, June 2018. Total Water Management: Canada's contribution to sustainable mine development.

Canadian Water Resources Association, April 2018, Red Deer, AB. Arsenic and Alberta's Groundwater: the where and why.

Southern Alberta Institute of Technology (water Initiative), February 2018, Calgary AB. Risky business: understanding Alberta water security

Canadian Society of Unconventional Resources (CSUR), January 2018, Calgary AB. Managing through nature's extremes: ensuring water security for successful UCOG operations.

SEAWA, Nov 2017, Medicine Hat AB. Hydrology of riparian areas: the need for protection and preservation.

CWRA National Conference, June 2017, Lethbridge AB. Climate change, the Columbia River Treaty, and considerations for a successful re-negotiation.

Thermal mobilizations and the regulatory response, May 2017, Calgary AB. CHOA forum.

National Ground Water Association, March 2017, Denver CO. Advances in the realm of hydrogeophysics: the role of Quantum Geoelectrophysics in groundwater exploration

Haskayne School of Business IRIS series, Feb 2017. Following the molecules: the importance of water to Canada's future.

BRBC-CEAC, Feb 2017, Cochrane AB, GW-SW interaction and the implication for development in riparian lands.

Watertech, April 2017, Banff AB. Arsenic in Alberta's Groundwater: the where and why; Isotopes and Geochemistry:

National Ground Water Association, Hydrogeophysics for deep groundwater exploration, March 2017, Denver CO. Advances in the realm of Hydrogeophysics: the role of Quantum Geoelectrophysics in Groundwater Exploration

Haskayne School of Business CPC IRIS seminar series, February 2017, Calgary AB. Following the molecules: the importance of water in Canada's future.

Bow River Basin Council/Cochrane Environmental Action Committee Collaborating for Healthy Riparian Lands Engagement Workshop, February 2017, Cochrane AB. Groundwater-Surface water interaction and the implications of human development in riparian lands.

Watertech, April 2016, Banff AB. Predicting Alberta's Groundwater Future & An Integrated Approach to Resolving Complex Hydrogeological Settings.

Canadian Water Resources Association (CWRA), April 2016, Edmonton AB. Natural discharge and its role in Athabasca River water quality.

Canada's Oil Sands Innovation Alliance (COSIA) Water Forum, March 2016, Calgary AB. Natural discharge and its role in Athabasca River water quality.

Canadian Association of Petroleum Geologists (CSPG), March 2016, Calgary AB. Climate, water availability, and the success of Western Canada's Energy Development & Natural discharge and its role in Athabasca River water quality.

Underground Injection Control (GWPC), February 2016, Denver CO. Disposal in the unconventional oil and gas sector: challenges and solutions.

AGAT Environmental Series, Jan/Feb 2016. Calgary and Edmonton, AB. Climate, water availability and the success of Western Canada's energy industry.

International Water Conference, November 2015, Orlando FL. Disposal in the unconventional oil and gas sector: challenges and solutions.

Chemistry Industry Association of Canada, October 2015, Edmonton AB. Water Sustainability: and its importance to successful industry.

EnviroAnalysis, July 2015, Banff AB. Thermal mobilization and Arsenic: implication for the oil sands.

WaterTech, April 2015, Kananaskis AB. Smart Monitoring to address challenges of Unconventional Gas development and an approach to mapping risk related to thermal mobilization of constituents.

Canadian Water Resources Association, April 2015, Red Deer AB. Water, Energy and Canada's Future (keynote address)

Underground Injection Council, February 2015, Austin TX. Monitoring to address challenges of Unconventional Gas development (invited speaker)

National Ground Water Association, Groundwater monitoring for Shale Gas developments workshop, November 2014, Pittsburgh PA. Smart monitoring to address the challenges of Unconventional Gas Development (invited speaker)

Canadian Water Resources Association, June 2014, Hamilton ON. Water disposal in the Oil Sands: challenges and solutions and What is Water Security and Why is it Important.

Water Management in Mining, May 2014, Vancouver BC. Total Water Management: a necessary paradigm for sustainable mining.

CSPG GeoConvention May 2014, Calgary AB. Water disposal in the Oil Sands: challenges and solutions; Placing the risk of thermal mobilization into perspective; What is Water Security and Why is it Important?

WaterTech, April 2014, Banff AB. Water disposal in the Oil Sands: challenges and solutions and Placing the risk of thermal mobilization into perspective.

Canada's Oil Sand Innovation Alliance (COSIA), March 2014, Edmonton AB. Water disposal in the Oil Sands: challenges and solutions and Placing the risk of thermal mobilization into perspective.

International Assoc. of Hydrogeologists, GeoMontreal 2013, October 2013, Montreal QC. The role of subsurface heating in trace element mobility.

Oil Sands Heavy Oil Technology 2013, July 2013, Calgary AB. The role of subsurface heating in trace element mobility.

Watertech, April 2013, Banff AB. The role of subsurface heating in trace element mobility.

International Assoc. of Hydrogeologists World Congress 2012, September 2012, Niagara ON. Session Chair for Hydrogeological Issues in the Oil Sands and presenter: i) Oil Sands overview – economic and environmental setting; ii) Framing groundwater vulnerability in the oil sands: an approach to identify and discern; and iii) Climate: a driving force affecting water security in the oil sands

Water in Mining 2012, June 2012, Santiago Chile. Total Water Management: a necessary paradigm for sustainability.

BCWWA 2012 Annual Conference, April 2012, Penticton BC. The role of inventory, dynamics, and risk analysis in water management: a case study.

WaterTech, April 2012, Banff AB. Plenary Session. Bringing context to the oil sands debate: understanding the role of nature and its environmental effects.

BCWWA Hydraulic Fracturing Workshop, Fort St. John BC, March 2012. Keynote address: Striking a Balance – water resource management versus economic development (keynote address).

CONRAD 2012, March 2011, Edmonton AB. Bringing context to the oil sands debate: understanding the role of nature and its environmental effects.

Alberta Irrigation Projects Assoc., November 2011, Lethbridge AB. Managing what we have: a review of Alberta's water sources, volumes and trends (invited speaker).

Alberta Innovates Technology Talks, November 2011, Calgary AB. Dynamics of Alberta's Water Supply: a review of supplies, trends and risks.

Red Deer River Watershed Alliance Annual General Meeting, October 2011, Red Deer AB. Water in the Red Deer: volumes, patterns, trends and threats.

Land and Water Summit, October 2011, Calgary AB. Total Water Management: a necessary paradigm for water security.

CEMA Groundwater Working Group, June 2011, Fort McMurray AB. Groundwater in the oil sands: facts, concepts and management processes.

CWRA Alberta / Alberta Low Impact Development Annual Conference, April 2011, Red Deer AB. A Review of Alberta's Water Supply and trends.

WaterTech, April 2011, Banff AB. Managing what we have: a review of Alberta's water supply.

World Heavy Oil Congress 2011, March 2011, Edmonton, AB. An approach to managing cumulative effects to groundwater resources in the Alberta Oil Sands.

Engineers Australia, August 2010, Brisbane Qld. CSG development in Australia: an approach to assessing cumulative effects on groundwater (invited speaker).

Joint IAH/AIG meeting, July 2010, Melbourne Vic. Assessing the effects of coal seam gas development on water resources of the Great Artesian Basin (invited speaker).

18th Queensland Water Symposium, June 2010, Brisbane Qld. A cumulative effects approach to assessing effects from coal seam gas development on groundwater resources (invited speaker).

WaterTech, April 2010, Lake Louise AB. Regional Groundwater Monitoring Network Implementation: Northern Athabasca Oil Sands Region.

University of Calgary, December 2009, Calgary AB. What's happening to our water? A review of issues and dynamics.

CSPG Gussow Conference, October 2009, Canmore AB. Water sustainability in the Alberta Oil Sands: managing what we have (invited speaker).

Bow River Basin Council, Legislation and Policy Committee Groundwater Licensing Workshop, March 2009, Calgary AB. Groundwater: the hidden resource

BlueWater Sustainability Initiative, January 2009, Sarnia ON. Planning approaches and forensic tools for large-scale regional monitoring initiatives.

CWRA Technical luncheon session, October 2008, Calgary, AB. Water sustainability in a growing Alberta.

Bow River Basin Council, September 2008, Calgary AB. Basin Monitoring and Management Approaches.

IAH/CGS GeoEdmonton08, Edmonton AB. Coordinator and Chair of Groundwater Development Session.

North American Lake Management Society (NALMS) 2008, Lake Louise AB, Coordinator and Chair of Climate Change Effects to Lakes, Reservoirs and Watersheds section.

EcoNomics™ Luncheon, May 2008, Calgary AB. Water Sustainability in the Hydrocarbon Industry.

WaterTech, April 2008, Lake Louise AB. Effects of climate and land cover changes on basin water balances.

CWRA Annual Conference, April 2008, Calgary AB. Role of climate change and land cover on water supply sustainability.

Bow River Basin Council, March 2007, Calgary AB. Forest Hydrology and the effects of Climate Change.

ALMS/CWRA, October 2006, Lethbridge AB. Reservoir Maintenance Workshop. Climate tele-connections and their effects on basin water supplies

Bow River Basin Council, June 2006, Calgary AB. Groundwater sustainability: the invisible resource (Climate change and basin sustainability)

Engineering Institute of Canada, May 2006, Ottawa ON. CCC2006 Land use and climate change effects at the basin scale.

International Water Association, Watershed and River Basin Management Specialists Group Conference, Calgary, AB, 2005. Basin Water Management Strategies.

Burgess Shale Geoscience Foundation, August 2004 and 2005, Field BC. Water in a Changing Climate: understanding and adapting.

C-CAIRNS, October 2005, Victoria BC, Climate and Fisheries Impacts, Uncertainty and Responses of Ecosystems and Communities, Effects of Climate and the PDO on Hydrology of a Major Alberta Watershed.

North American Lake Management Society, November 2004, Victoria BC. Climate Change and Effects on Water Resources.

Canadian Institute Conference, June 2004, Calgary AB. Water Management Strategies for the Oil and Gas Industry: The challenge and approach

Canadian Society of Petroleum Geologists, Gussow Conference, March 2004, Canmore AB. Understanding the Effects of Natural and Anthropogenic Forcings on Basin Water Resources.

Alberta Environment and EUB, April 2003, Elk Point AB. Climate and Land Use Change Effects on Basin Water Resources in the Lakeland Region - East-central Alberta.

Joint CGS/IAH Conference, June 2001, Calgary AB. A Multidisciplinary Approach to Resolving Complex Hydrogeologic Systems.

Aquatic Toxicity Workshop, October 1996, Calgary AB. Use of site characterization and contaminant situation ranking to focus a risk assessment evaluation at a decommissioned sour gas plant and associated landfill.

Joint GAC/MAC Conference, April 1995, Waterloo ON. Use of geochemical modelling and stable isotopes to determine the source of groundwater quality impacts near a sour gas processing facility.

Joint GAC/MAC Conference, Edmonton AB, 1994. Assessment of depression-focused recharge as a mechanism for variable groundwater and soil chemistry.

GasRep Conference, Calgary AB, 1994. Use of stable isotopes to determine the source of water quality impacts near a sour gas processing facility.

APPENDIX C

February 17, 2021

Legislative Services
Rocky View County
262075 Rocky View Point
Rocky View County, AB
T4A 0X2

Re: BYLAW C-8051-2020

Dear Rocky View County:

Alberta Environment and Parks has been made aware of a groundwater technical report related to the Mountain Ash Limited Partnership, Summit Gravel Pit proposal. This report, prepared by Dr. Jon Fennell, provides a review of hydrogeology, geochemistry, fish and aquatics and climate change related to the proposal. Our interest in this report is related to the potential effects of the proposal on Big Springs Provincial Park.

Alberta Environment and Parks (herein Parks) manages Big Hill Springs Provincial Park, which is located adjacent to a number of existing and potential aggregate extraction developments including the Mountain Ash proposal. Parks wants to highlight the importance of Big Hill Springs Provincial Park and its nationally significant year round springs, unique tufa deposits and vegetation communities. To ensure these values persist for future generations, Parks needs to secure the protection of these values.

Over the years, Parks has provided comments to developments including:

- 2013 - Redesignation of South Rock lands.
- 2018 - Draft Aggregate Resource Plan.
- 2019 - Amendments to Hillstone Aggregates.
- 2020 - Redesignation and MSDP for Mountain Ash.

Parks response to aggregate development applications has been consistent in requesting that proponents conduct a thorough assessment of surface and groundwater quality and quantity impacts related to the Park and the Big Hill spring. Parks reviewed the Biophysical Impact Assessment Report (SLR, January 2020) that supports the Mountain Ash proposal and notes that although the consultant links Big Hill Springs to the site's groundwater and notes increase in spring flows, the report does not assess impact of water chemistry changes in the spring as a potential impact of the development.

In Dr. Jon Fennel's report, geochemistry results indicating increases in metals due to the removal of overburden (exposing subsurface material) are concerning. As the Big Hill springs are so closely linked to the groundwater at the Mountain Ash site, we question the proposal's potential impact in groundwater quality and spring chemistry, affects on tufa formation, and its effects on fish and fish habitat.

In light of the new information presented in Dr. Jon Fennel's report, we request that Rocky View County consider additional assessment for the Mountain Ash site and delay its decision on the planning application PL20200031 and the associated Mountain Ash Summit Pit Master Site Development Plan (PL20200034) until the assessment is complete. The assessment should consider project effects and cumulative effects. The assessment should also use criteria ratings such as duration, frequency, reversibility, magnitude, probability supported by quantitative data and comparisons with provincial and federal water quality guidelines. To reiterate, the assessment needs to link groundwater between the site and the springs not only for quantity but also for quality (chemical changes).

We also request that Rocky View County considers the recommendations outlined in Dr. Jon Fennel's report as a means of mitigating project and cumulative impacts including:

- Aggregate Development Setbacks
 - Specifically 1.6 km setback from the boundary of Big Hill Springs Provincial Park.
 - Additional 800 m setback whereby development does not occur within 4 m of the water table.

We are confident that Rocky View County will manage aggregate resources so that values that inspired the establishment of Big Hill Springs Provincial Park will remain intact. If you require further clarification or information regarding the comments outlined above, please contact me at 403-678-9545.

Sincerely,



Michael Roycroft
Regional Director, Kananaskis Region

cc.

Andrew Schoepf, Kananaskis East Area Manager
Maria Lynn, Senior Park Planner, Kananaskis Region
Thea Mitchell, Park Planner, Kananaskis Region

February 16, 2021

Dominic Kazmierczak
Planning Services
Rocky View County
262075 Rocky View Point
Rocky View County, AB, T4A 0X2

Re: Rocky View County Draft Municipal Development Plan

Dear Mr. Kazmierczak:

Thank you for the opportunity to review the Rocky View County Draft Municipal Development Plan.

Alberta Parks plays an important role in establishing and managing a number of protected areas in Rocky View County including Big Hill Springs Provincial Park (Park). Alberta Parks manages the Park for its nationally significant year round springs, unique tufa deposits and vegetation communities. Alberta Parks is nearing completion of a 1.2 million project that focused on restoring riparian areas along the creek and improving the visitor experience in the Park.

The comments below reflect Alberta Parks concerns in managing the Park which is located adjacent to a number of existing and proposed aggregate extraction developments.

Section 3.3 Natural Resource Development

- Intro - Aggregate extraction should minimize impacts on surrounding land uses.

Alberta Parks suggests to:

- Implement set backs from the boundary of the Park.
- Implement set backs from the spring source in the western most parcel of the Park.

These set backs will reduce potential effects in the Park related to groundwater, surface water, fish and fish habitat, aesthetic values and visitor experience.

Section 3.3.1 Aggregate Extraction

- c) Discourage residential development that will be impacted by future aggregate extraction.

Alberta Parks suggests to flip the narrative on aggregate extraction.

- Define set backs and establish expectations for aggregate extraction proponents.
- Discourage aggregate development that may be impacted by protected area set backs.

Section 3.8.2 Park and Open Spaces

- (g) Development proposal consideration of provincial parks.

Alberta Parks suggests to:

- Provide set backs for protected area boundaries to ensure (iv) viewscape preservation, (v) vegetation management and (vi) wildlife management.
- Add references to surface and groundwater.

Alberta Parks requires support from Rocky View County through effective land use planning to continue to manage the Park for the reasons it was established. We all want the amazing values in Big Hill Springs Provincial Park to persist for future generations. Responsible land use planning surrounding the Park is integral to the survival of Park values. Alberta Parks is optimistic that Rocky View Country will consider the suggestions above that contribute to preserving Big Hill Springs Provincial Park.

If you require further clarification or information regarding the comments outlined above, please contact me at (403)703-9840.

Sincerely,



Andrew Schoepf
Kananaskis East Area Manager

TAB A

Court of Queen's Bench of Alberta

Citation: Pembina Institute v Alberta (Environment and Sustainable Resources Development), 2013 ABQB 567

Date: 20131001
Docket: 1203 18391
Registry: Edmonton

Between:

Pembina Institute, Fort McMurray Environmental Association

Applicants

- and -

Director, Northern Region, Alberta Environment and Sustainable Resources Development and Southern Pacific Resource Corp.

Respondents

**Reasons for Judgment of the
Honourable Mr. Justice R.P. Marceau**

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The seventh principle is the opportunities made available through this Act for citizens to provide advice on decisions affecting the environment. In other words, Mr. Speaker, this Act, Bill 23, is not just a set of laws; it really is an environmental agenda. It's an environmental agenda that will be amended and probably changed through the course of time but only through the input of the citizens of Alberta. Basically this principle allows the facilitation of public access and service by providing a single-window approach to Alberta Environment making for more streamlined administrative procedures. It includes an access to information section, a requirement for state-of-the-environment reporting, increased public consultation and participation in all aspects of environmental protection and enhancement activities, provisions supporting studies on the environment, a library, educational materials, public consultation in the development of guidelines, objectives, and regulations, public consultation in the environmental impact assessment process and the approvals process, opportunities for appeals for parties directly affected by decisions through the creation of an environmental appeal board. This board will provide an independent review of the decisions made by directors and other people within the department to provide a system of checks and balances on those decisions. This principle also provides for allowing for requests by citizens for investigations and contraventions.

Alberta, Legislative Assembly, *Hansard*
22nd Leg., 4th Sess. (4 June 1992) at 1184

[29] The emphasis is on public consultation, setting up administrative procedures to promote “access to information” and increase public consultation and participation in all aspects of environmental reporting and enhancement activities.

[30] I also make reference to the approvals program policy APPC-2008-01 Environmental Division dated September 22, 2008. This is the policy in force when OSEC filed its Statement of Concern. I refer under the heading of Policy 2(i):

- (i) Directly affected – Anyone living in the geographic vicinity of the activity will be considered directly affected. (Note: For small facilities with minimum potential for offsite impact, geographic vicinity may be considered as encompassing an area of only a few kms in radius from the site whereas for larger activities the area may be much larger – this will have to be assessed on a case-specific basis.) Any organization that has a portion of its members living in the geographic vicinity of the activity will also be considered directly affected, e.g., a community league. In general, associations representing the general public or people who just periodically visit in the geographic vicinity of any activity will not be considered directly affected.

TAB B

In the Court of Appeal of Alberta

Citation: Normtek Radiation Services Ltd v Alberta Environmental Appeal Board, 2020 ABCA 456

Date: 20201211
Docket: 1801-0385-AC
Registry: Calgary

Between:

Normtek Radiation Services Ltd.

Appellant
(Applicant)

- and -

**Alberta Environmental Appeals Board, Secure Energy Services Inc. and Director of
Alberta Environment and Parks**

Respondents
(Respondents)

The Court:

**The Honourable Mr. Justice Brian O’Ferrall
The Honourable Madam Justice Jo’Anne Strekaf
The Honourable Madam Justice Ritu Khullar**

Memorandum of Judgment

Appeal from the Order by
The Honourable Madam Justice J.R. Ashcroft
Dated the 21st day of November, 2018
Filed on the 18th day of December, 2018
(2018 ABQB 911, Docket: 1701 00469)

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Memorandum of Judgment

The Court:

Introduction

[1] This is an appeal of a judicial review upholding a decision of the Alberta Environmental Appeals Board (Board) refusing to hear an appeal of an approval granted by the designated director of approvals (the Director) permitting the respondent to accept and dispose of certain naturally occurring radioactive material (sometimes referred to as NORM) in its Pembina Landfill near Drayton Valley, Alberta.

[2] The Environmental Appeals Board declined to hear the appeal of the approval because it was of the opinion that the party appealing, the appellant herein, was not directly affected by the decision of the Director to amend the landfill approval to permit the acceptance of radioactive wastes. Section 95(5)(a)(ii) of the *Environmental Protection and Enhancement Act*, RSA 2000, c E-12 (*EPEA*) provides that the Board may dismiss an appeal of a Director's decision or approval if it is of the opinion that the person submitting the notice of appeal is not directly affected by the decision. At issue was whether the Board's decision to dismiss the appellant's appeal was reasonable.

[3] In a letter dated October 13, 2016, the parties were advised that the Board had decided to dismiss the appellant's appeal because the appellant was not directly affected by the Director's decision and that the Board's reasons would be provided in due course. These reasons were provided by the Board's Chairman on March 2, 2018. In a 47-page decision, the Chairman ruled that the appellant's concerns were primarily economic and that it failed to demonstrate that its use of a natural resource would be affected by the amending approval.

[4] The appellant sought judicial review of the Board's decision and an order quashing it on the ground that the Board employed an unduly restrictive, and therefore unreasonable, interpretation of the phrase "directly affected" in sections 91(1)(a)(i) and 95(5)(a)(ii) of the *Environmental Protection and Enhancement Act*.

[5] The appellant's application for judicial review was dismissed on the basis that the Board's finding that the appellant was not directly affected by the Director's decision was reasonable. The judicial review judge also ruled more generally that the *Environmental Protection and Enhancement Act* does not confer a discretionary authority on the Board to hear an appeal by a person not directly affected based on a general public interest standing.

[6] The appellant now appeals to this Court arguing that the Board's interpretation and application of the phrase "directly affected" was unreasonably restrictive and that the reviewing

judge erred in upholding the Board's interpretation of "directly affected." The appellant also appeals on the basis that the reviewing court erred in upholding the Board's conclusion that it could only hear appeals of approvals by persons directly affected by Director's decisions. The appellant had argued that *Environmental Protection and Enhancement Act* permits the granting of public interest standing to an appellant with a genuine interest and something of public interest to contribute, yet not directly affected.

[7] For the reasons which follow, we would allow the appellant's appeal of the order of the judicial review judge and remit the matter back to the Board to decide the matter of the appellant's standing to appeal the Director's decision. We are of the view that both the Board and the judicial review judge adopted an unreasonable and unjustifiably restrictive interpretation of the phrase "directly affected" which does not accord with the *Environmental Protection and Enhancement Act* in determining whether a person wishing to appeal a Director's decision is directly affected by it. We agree, however, with both the Board and the judicial review judge, that section 95(5) of the Act does not confer jurisdiction on the Board to hear appeals of Directors' decisions by persons who are not directly affected by those decisions.

[8] In order to better appreciate our reasons, we find it necessary to summarize the record which was before the Board when it made its decision to dismiss the appellant's appeal. We do this not only to provide context for the Board's decision, but also because the Board's decision was based on a view that much of the record before it was irrelevant to the issue of standing.

Application for Director's Approval

[9] The process which led to the appeal began with the respondent, Secure Energy Services Inc. (Secure Energy), applying to the designated Director for approval of an amendment to its existing Class I landfill approval. The amendment was sought in order to permit the receipt of concentrated naturally occurring radioactive material at the respondent's Pembina landfill northwest of Drayton Valley.

[10] Under the *Environmental Protection and Enhancement Act*, no person may commence or continue any activity that is designated by the regulations as requiring an approval without the required approval (ss 60 and 61). Also, no person may make any change to an activity which is the subject of an approval unless an amendment to the approval authorizing the change is issued by the Director (s 67(1)(a)). Under section 5 of the Act's *Activities Designation Regulation* (276/2003), an approval is required for the construction, operation and reclamation of a landfill where more than 10,000 tonnes per year of waste is being disposed of. A "landfill" is defined in section 2(1)(i) of the Regulation as a waste management facility at which waste is disposed of by placing it on or in land, but does not include a land treatment facility, a surface impoundment, a salt cavern or a disposal well.

Normtek's Statement of Concern

[11] The *Environmental Protection and Enhancement Act* provides that any person who is directly affected by a Director's decision may submit to the Director a written statement of concern setting out that person's concerns with respect to the decision (s 73).

[12] The appellant, Normtek Radiation Services Ltd. (Normtek), is in the business of decontaminating (removing) naturally occurring radioactive material (typically radioactive scales, sludges and films) which become unnaturally accumulated or concentrated in oilfield waste or on oilfield equipment (principally production pipe) as a consequence of oil and gas extraction and production operations. Normtek then disposes of the radioactive material either in an approved landfill (like that which the Director approved) or in a secure subterranean geological formation, depending on the level of the material's radioactivity.

[13] Normtek responded to Secure Energy's application for approval by submitting to the Director what the *Environmental Protection and Enhancement Act* refers to as a statement of concern indicating its concerns with the proposal to landfill radioactive waste material with a radioactivity concentration of higher than 5-10 Bq/g rather than dispose of it in a subterranean geological formation. Secure's proposal was to landfill NORM up to 70 Bq/g. A Bq or Becquerel is a measure of radioactivity. A Becquerel is one nuclear transformation or disintegration per second. Normtek argued that generally-accepted industry standards and national and international guidelines suggest that Secure was proposing to landfill radioactive wastes that ought properly to be disposed of in a secure subterranean geological formation.

[14] Normtek contended that the landfilling of naturally occurring radioactive material which becomes concentrated in oil field waste is only appropriate for low radioactivity level material (5-10 Bq/g). Higher radioactivity level NORM, such as that proposed to be landfilled at Secure Energy's Pembina Landfill (up to 70 Bq/g), Normtek submitted, is typically sent for geological disposal in salt caverns in Saskatchewan. Normtek's statement of concern also pointed to the lack of a provincial regulatory regime for NORM and the lack of clarity surrounding the respective responsibilities of the Alberta Energy Regulator and Alberta Environment with regard to NORM disposal. Normtek urged the Director not to approve the acceptance of high level radioactive waste at Secure's facility until appropriate waste classification criteria for NORM disposal had been developed. Apparently, there had been a previous failed attempt by the Alberta Energy Regulator to reach an industry/regulator consensus on landfill acceptance limits for oilfield NORM. Significantly, Normtek made it clear that it did not object to the landfilling of low-level radioactive materials.

[15] In response to Normtek's statement of concern, the Director questioned whether Normtek was directly affected by Secure's application and in particular whether the company resided, owned, or used land, near the landfill.

[16] Normtek responded to the Director's inquiry acknowledging that it did not have any land holdings in the vicinity of the landfill, but submitted that factors other than ownership of land near the proposed activity can give rise to being directly affected. Normtek described how it would be impacted if the amendment, as applied for, was approved. Normtek submitted that an approval would change the way NORM disposal was currently being conducted. Normtek argued that the approval would give Secure a competitive advantage over anyone in the business of disposing high activity naturally occurring radioactive material because Secure proposed to simply dispose of such radioactive waste in its landfill, rather than manage it in accordance with what Normtek submitted were generally accepted best practices. Normtek submitted if the applied-for approval was given, high level radioactive materials which had hitherto only been permitted to be disposed of in underground geological formations would now be allowed to be disposed of near the surface.

[17] To quote from Normtek's October 26, 2014 letter to the Director:

..industry will simply dispose of high level radioactive waste rather than manage the waste in compliance with generally accepted best practises developed by the IAEA [International Atomic Energy Agency] and industry...

Management of NORM waste will simply disappear for cheap disposal tipping fees and technical experts within the industry will be lost...

Normtek is affected financially as capital spent on equipment to transfer waste to geological disposal facilities will be lost if dumping high level NORM waste into the proposed Secure landfill is approved as submitted. This specialized equipment is only used for geological disposal and has been utilized only in this industry in Western Canada...

Normtek's business and its employees are directly affected by the proposed project. The project changes the NORM industry not only in Alberta but all of Canada.

[18] Normtek claimed it and others in the NORM treatment and disposal industry would be directly affected by what it argued would be a substantial change to the rules of the game if the approval was granted. To quote Normtek's letter to the Director:

In summary, Normtek does not compete with the proposed project as it does not own or operate any disposal facilities, however, Normtek's business and its employees are directly affected by the proposed project. The project changes the NORM industry not only in Alberta but all of Canada. Health Canada and the Canadian Nuclear Safety Commission have recognized that the International Atomic Energy Agency and the International Commission on Radiological Protection is comprised of leading experts in the field of radiation. As such, they have adopted these agencies best practices. Normtek and the industry in Alberta have developed based off these sound radiological principles. Low level NORM

waste has been approved for landfill disposal and high level waste for geological disposal. Canada has the luxury of geological salt cavern disposal. Changing the industry by allowing high activity disposal levels greater than those already approved in Canada to levels that are also not consistent with international practices affects Normtek, its employees, the industry as a whole and the way international communities look at Canada's NORM management approach.

Director's Rejection of Normtek's Statement of Concern

[19] Alberta Environment's District Approvals Manager (on behalf of the Director) responded to Normtek's letter indicating how it would be directly affected by approval of Secure Energy's application in a letter which did not address any of the grounds upon which Normtek argued that it was directly affected. Rather, Alberta Environment's letter simply stated,

Thank you for your letter dated August 24, 2014 [Normtek's Statement of Concern] and your clarification letter dated October 26, 2014 [Normtek's standing letter] expressing concerns about the Pembina Area Landfill's application to accept Naturally Occurring Radioactive Materials (NORM) waste.

Your mailing address indicates that your place of residence is outside the area of environmental impact associated with this proposed project. On this basis, you will not be considered as directly affected and your submission will not be considered a statement of concern.

[20] This decision by the Director is the subject of a separate judicial review proceeding, but the reason given by the Director for finding that Normtek was not directly affected by Secure Energy's application (namely that Normtek's place of residence was outside the area of environmental impact) presaged the reasons given by the Environmental Appeals Board for its finding that Normtek was not directly affected by the Director's decision.

Director's Decision (Approval)

[21] On July 14, 2016, the Director issued an approval amending Secure Energy's landfill approval to permit it to receive and dispose of NORM waste that did not exceed certain prescribed maximum concentration limits (70 Bq/g) as proposed by Secure Energy. The approval also required Secure Energy to operate the landfill in accordance with the "Canadian Guidelines for the Management of Naturally Occurring Radioactive Materials". The Guidelines were developed by the Federal-Provincial-Territorial Radiation Protection Committee (the FPTRPC). Among other things, the Guidelines set maximum concentration acceptance limits for NORM dispersed in soils and other media.

[22] The federal government has jurisdiction over nuclear energy by virtue of its declaratory power under section 92(10)(c) of the *Constitution Act, 1867* (UK), 30 & 31 Victoria, c 3 and the

national concern branch of the peace, order and good government power in section 91. The federal government has not formally transferred power to the provinces to regulate NORM. Instead, the federal government takes the position that since NORM is not part of the nuclear fuel cycle and poses less of a risk, it falls to the provincial and territorial governments to regulate it. The *General Nuclear Safety and Control Regulations* (SOR/2000-202) under the federal *Nuclear Safety and Control Act*, SC 1997, c 9, expressly exempt naturally occurring nuclear substances from the application of the *Nuclear Safety and Control Act* and the Regulations.

[23] Provincially, “radiation” is defined as a “substance” in section 1(mmm) of the *Environmental Protection and Enhancement Act*. Under the Act, no person is permitted to release a substance into the environment in an amount, concentration or level that is in excess of that expressly prescribed by an approval, a code of practice or the regulations (s 108(1) of the Act).

[24] The Canadian Guidelines for the Management of NORM referenced in the approval were developed to help the provinces regulate NORM in order to address radiation exposure risks and to harmonize practices between provinces and minimize jurisdictional gaps. They purport to set out a code of best practices.

[25] The Director’s approval expressly requires the approval holder to operate its landfill in accordance with these Guidelines. Yet the Director’s approval also expressly prescribes certain radioactivity limits for materials accepted by the landfill which appear to be expressed in a multiple of the concentration limits (10 times the concentration limits) for exempt material set out in certain International Atomic Energy Association Regulations. Normtek’s position was that the federal Guidelines and the so-called International Atomic Energy Association Regulations were violated by the very terms of the approval which purported to incorporate them.

Normtek’s Appeal of Director’s Decision

[26] Normtek filed a notice of appeal of the Director’s decision approving the acceptance of NORM at Secure Energy’s Pembina Landfill

[27] The *Environmental Protection and Enhancement Act* provides that a notice of appeal of a Director’s decision may be submitted to the Environmental Appeals Board by any person who previously submitted a statement of concern and who is directly affected by the Director’s decision (s 91(1)(a)(i)). However, the Act also provides that the Environmental Appeals Board may dismiss a notice of appeal if it is of the opinion that the person submitting the notice of appeal is not directly affected by the decision (s 95(5)(a)(ii)).

[28] The form of notice of appeal prescribed by the Environmental Appeals Board requires the appellant to address the issue of whether or not it is directly affected. The form asks the question, “How is it [Alberta Environment’s decision] affecting you?” Normtek’s answer was as follows:

Financially, commercially and requires us to manage radioactive materials that are not consistent with the recommendations of the IAEA [International Atomic Energy Association] or that governed under CNSC [Canadian Nuclear Safety Commission]. Creates confusion within an industry already lacking radioactive waste management regulations. Does not afford the same level of environmental safety as that afforded in other provinces.

[29] The form of notice of appeal also requires the appellant, who has only 30 days to do so, to identify the disposition it seeks from the Environmental Appeals Board. To quote the Board's form:

What would you like the Board to do to resolve your appeal? (Note: If you fail to state all solutions to your appeal here, you may be prevented from raising them later in your appeal.)

Normtek sought the following disposition of its appeal:

We would ask the Board to recommend to the Minister to vary the acting [director's] approval for radium 226 to 5 Bq/g which is consistent with the BC Licensed Hazardous waste facility until such time as the request for amendment can be reviewed by the AER [Alberta Energy Regulator] giving consideration to the concerns addressed in the appeal or ask the Minister to reverse the acting [director's] approval until such time as formal policies have been implemented on radioactive waste in Alberta.

Again, it is significant that the relief Normtek requested sought what it considered to be regulatory harmonization (i.e. a level playing field), not that Secure Energy's application be denied outright.

[30] Attached to its Notice of Appeal, Normtek appended a 10-page written submission addressing both its standing and the reasons for the disposition it sought, namely suspension of approval of landfill disposal of NORM higher than 5 -10 Bq/g pending the development of policies governing the disposal of NORM.

Normtek's Standing to Appeal the Director's Decision Questioned

[31] Following submission of Normtek's notice of appeal Secure Energy questioned whether Normtek was directly affected by the Director's decision to amend its landfill approval.

[32] The Board then prescribed a procedure whereby the issue of Normtek's "directly affected" status would be determined. The procedure involved an initial written submission by Normtek, followed by a written response submission from Secure Energy and a rebuttal submission by Normtek, after which the Board would make its decision.

Normtek's Submission on Standing

[33] In its initial 19-page submission to the Environmental Appeals Board, Normtek identified what it considered to be the direct effect on it of the Director's decision to approve the receipt and disposal of high level of naturally occurring radioactive material by Secure Energy at its Pembina Landfill. Normtek submitted that it would be directly affected commercially by what it characterized as the Director's decision to approve the landfilling of higher activity radioactive waste and that the commercial impact on it would in turn lead to an adverse effect on the environment because its business, the business of decontaminating equipment and other media of higher levels of naturally occurring radioactive material and disposing of it in subterranean geological formations, would be discouraged. Normtek argued that its investment in developing decontamination methods was threatened by the Director's decision because its specialized proprietary decontamination equipment, which it claimed it spent thousands of dollars designing, would no longer be needed.

[34] Normtek also argued that its consulting services would also be directly and adversely affected by what it characterized as the Director's decision not to follow industry standard practices and regulatory best practices for disposing of radioactive waste. Normtek argued that it would now be inappropriate for it to advise clients to follow the International Atomic Energy Association Regulations which required that high activity long-lived radionuclides be disposed of in geological formations if they were permitted to be disposed of in a landfill.

[35] Normtek claimed that it would have to lay off employees and shut down its operations as a result of the Director's approval. But more importantly, having regard to the purposes of the *Environmental Protection and Enhancement Act*, Normtek argued that as a result of the approval, over 99% of radioactively contaminated oilfield and other equipment, as well as radioactive produced water, would now be approved for direct disposal into a landfill rather than what it argued was the more environmentally responsible method of disposal in a geological formation, following decontamination of radiologically impacted metal and other media for recycling or reuse. Normtek submitted that the approval would result in the acceptance of significant quantities of NORM waste which was currently being decontaminated (removed) and disposed of in a secure geological formation. Normtek argued that it was directly affected because the amending approval gave Secure Energy a competitive advantage of being permitted to simply landfill high level radioactive material rather than dispose of it in an environmentally sound manner after having decontaminated the media or the equipment upon which the radioactive waste was affixed or concentrated.

[36] In short, Normtek's position was that because its business was based on adhering to the international and national standards for disposal of NORM, the negative impact on its business and the negative effect on the environment would be inextricably intertwined.

[37] Normtek also addressed the view expressed by the Director in rejecting its statement of concern that it was not directly affected because neither the company nor its principals or employees resided near the landfill. Normtek pointed to prior decisions of the Environmental

Appeals Board where appeals by persons not residing close to the approved activity were found to be directly affected in the face of similar objections to their “directly affected” status.

[38] Normtek also argued that the Director’s decision and Secure Energy’s approval was precedent-setting in that only a limited number of companies currently specialize in decontamination and disposal of NORM waste.

Approval-Holder’s Submissions on Normtek’s Standing

[39] Secure Energy responded to Normtek’s submissions on standing. Their argument was that Normtek’s interests were purely commercial and that Normtek was making an improper use of the environmental appeal process to seek insulation from fair competition. Secure Energy also argued that there was no connection between the alleged economic impact on Normtek and any effects on the environment. It further submitted that Normtek was not directly affected because it failed to demonstrate that Secure Energy’s acceptance of NORM waste in accordance with the terms and conditions of its amending approval would harm a natural resource used by Normtek or would harm Normtek’s use of a natural resource. This latter submission was significant because it formed the basis of the Board’s decision.

[40] Also significant was the fact that Secure Energy took the position that the vast majority of Normtek’s submissions did not relate to standing, but rather related to the substantive merits of its appeal, a position which was accepted by the Board as a reason for ignoring that evidence. Secure Energy urged the Board to disregard Normtek’s submissions going to the merits of its appeal. Interestingly, Secure Energy did provide some responses to Normtek’s substantive submissions suggesting that they were either misleading or false. Unfortunately the Board, at the urging of both Secure Energy and the Director, declined to rule on this apparent conflict in the evidence. Clearly, resolution of that conflict would have assisted in determining whether or not Normtek was, in fact, directly affected.

[41] In fairness to the Board, the thrust of both Secure Energy and the Director’s submissions was that Normtek had failed to show that the amending approval would harm a natural resource that Normtek used and the Board was persuaded by that argument. Secure Energy’s solicitors conceded that Normtek did not have to demonstrate that it resided next to the landfill facility. But, they argued, Normtek nevertheless had to demonstrate a proximal connection between its use of a natural resource that would be harmed by the approval. Unless a natural resource near the landfill which Normtek used was being harmed, Normtek was not directly affected and standing ought not to be granted.

Director’s Submissions on Normtek’s Standing

[42] The Director, who two years prior had refused to accept Normtek’s statement of concern because he was of the view that Normtek was not directly affected by Secure’s application, also made submissions to the Environmental Appeals Board and opposed the granting of standing to

Normtek. The Director supported Secure Energy's motion to have Normtek's notice of appeal dismissed for lack of standing. We were not provided with a copy of the Director's submission; but we don't believe we were disadvantaged by this omission because much of it was reproduced in Normtek's response to the Director's submissions and in the Board's reasons for decision. The Director's submissions simply mirrored those advanced by Secure Energy.

[43] The Director did not respond to any of the regulatory concerns expressed by Normtek. The Director simply argued that Normtek's concerns were not tied to the environment and were simply due to the fact that Secure Energy was approved to engage in an activity that competed with Normtek. Normtek's main concern, the Director argued, was that the approval would eliminate demand for its decontamination services.

[44] The Director argued that the assertions of potential economic impacts were speculative and hypothetical. The Director argued that Normtek had provided no evidence to support its assertion that the need for decontamination would be eliminated or that the landfill disposal option would be cheaper.

[45] The Director reiterated the lack of geographic proximity and the absence of evidence of any harm to any natural resource which Normtek might use.

[46] The Director did not respond, either in its submission to the Board or in its factum in this appeal, to Normtek's argument that the acceptance limits in the approval did not comply with acceptance limits prescribed in the federal Guidelines for the Management of Naturally Occurring Radioactive Materials or the International Atomic Energy Association Regulations which were referenced in the approval. Nor did the Director respond to Normtek's argument that the acceptance limits in the approval represented a departure from generally accepted best practices.

[47] As an aside, one of the reasons the Director has typically been accorded "party" status on appeals of Director's decisions is that in order to assess the merits of an appeal of a Director's decision, the Environmental Appeal Board needs to understand the approval and the reasons therefor. But here the Director, who had already ruled that Normtek was not directly affected by Secure Energy's landfill approval application, took a position on Normtek's directly affected status. Whether that was appropriate, we leave for another day, although we note that it also troubled the reviewing judge. If the Director participates in a Board proceeding to determine a would-be appellant's standing, its contribution might appropriately be in the form of a response to the merits of the appellant's appeal, not in the form of an adoption of the position of the approval-holder with respect to the appellant's standing. Here the Director failed to assist the Board by not addressing the merits of Normtek's claims. Had the Director done so, it might have become apparent whether Normtek was directly affected or not.

Normtek's Rebuttal

[48] In separate letters dated September 19, 2016, Normtek replied to the submissions of both the Director and Secure Energy. The Board, surprisingly, characterized Normtek's letters as "improper rebuttal" notwithstanding that the process the Board prescribed provided for a "rebuttal submission" plus "any supporting materials" from Normtek by a certain date set by the Board. It is also not without significance that the Board's view of Normtek's rebuttal was that it did not result in any prejudice to Secure Energy because the Board considered much of the content of the rebuttal irrelevant to the issue of whether Normtek was directly affected. In other words, the Board gave Normtek's rebuttal short shrift on the issue of its directly affected status.

[49] Significantly, however, Normtek's rebuttal to the Director's submissions on its standing to appeal alludes to a potential factual dispute which appeared to have relevance to the issue of whether Normtek was directly affected by the Director's approval. The Director apparently had taken the position that he had not authorized acceptance of high activity radioactive waste at Secure's Pembina landfill. That issue required resolution if Normtek's directly affected status was to be properly determined because the International Atomic Energy Association's "Radioactive Best Practices (Recommended Practices)" document (IAEA, NORM Symposium 6) appeared to suggest otherwise and because the International Atomic Energy Association "Regulations" purported to be expressly incorporated in the approval for determining acceptance limits for NORM waste at the landfill. Normtek argued that International Atomic Energy Association classified low and intermediate volumes of pipe scale from the oil and gas industry as relatively high activity NORM. Normtek argued further that the Director, in approving up to 70 Bq/g as an acceptance limit for NORM waste, approved the landfilling of high activity radioactive waste, which appeared to be more than 10 times the radioactivity concentration limit for exempt materials which the federal and international guidelines apparently prescribed.

[50] Clearly this was an issue relevant to whether Normtek was directly affected because Normtek expressly conceded that if the approval did not include high concentrations of long-lived radionuclides, it would not be directly affected. Had the Board addressed the issue, Normtek's directly affected status, or lack thereof, might have been clearer.

[51] Normtek argued that the Director's approval of acceptance for landfilling of what it characterized as high activity and long-lived radioactive material would also cause environmental harm and that such environmental harm would directly affect Normtek. Normtek argued that its workers will be required to attend at the landfill to make deliveries of NORM and would thereby be exposed to radioactive dusts. Normtek claimed to have clients requiring NORM disposal in the vicinity of Secure Energy's landfill and further indicated that it would likely be making use of the Pembina landfill to dispose of some of the radioactive wastes of those clients.

[52] Normtek pointed out that the NORM waste management industry in Western Canada is still very small and in its infancy. The business of disposing of naturally occurring radioactive

waste in Alberta only began in the mid-1990s.¹ The Board itself noted that the Secure Energy landfill is “the first of its kind” in Alberta. Normtek argued that the approval was precedent-setting and was bound to directly affect industry participants. In Normtek’s view, recommended radioactive waste management practices and methods of disposal were being changed as a result of the Director’s decision.

[53] In its rebuttal of the Director’s submission, Normtek reiterated that it would be commercially impacted by the approval because disposal is much less costly than decontamination and disposal. Normtek provided the relative costs. They were not challenged. Normtek argued that the approval would obviate the need for decontamination and down-hole disposal of high activity long-lived radioactive waste and that if such decontamination and disposal was no longer required, there would be an adverse effect on the environment. The anticipated impact on its business, Normtek argued, would result in harm to the environment. Normtek argued that issues of human health, safety, economic growth and sustainable development were all engaged by the Director’s decision and were all part of the direct effect of the Director’s decision on it.

[54] In its rebuttal to the approval-holder’s submissions on standing, Normtek pointed out that none of the Board’s many decisions on standing involved an approval to dispose of wastes which persist in potentially harmful states for hundreds of years (long-lived radionuclides). Normtek argued that it was precisely because the adverse effects of long-lived radionuclides are not immediate that their disposal requires separating them permanently from the biosphere.

[55] Normtek also argued that in an industry where there are few regulations governing radioactive waste management or landfill acceptance criteria, approval by the Director of acceptance of radioactive waste by a landfill directly affects those industry participants who are already in the business of decontaminating equipment and other media contaminated with radioactive material and then disposing of the radioactive waste in either landfills or in underground formations.

[56] The acceptance limits for NORM waste prescribed by the approval were those of the International Atomic Energy Association Regulations. The approval also required that the landfill be operated in accordance with the Canadian Guidelines for the Management of Naturally Occurring Radioactive Materials. Normtek’s argument was that although the approval purported to be governed by these two very technical regulatory documents issued or adopted by the federal regulatory authority under the *Nuclear Safety and Control Act*, the limits prescribed in the approval

¹ The issue of the safe disposal of Naturally Occurring Radioactive Wastes gained currency in the late 1980’s with the filing of a claim in the U.S. District Court for the Southern District of Mississippi in *Street v Chevron USA Inc*, which was ultimately settled in the early 1990’s for millions of dollars and was popularized in a book written by the plaintiff’s lawyer, Stuart H. Smith entitled *Crude Justice* (Barbella Books Inc: Dallas TX, 2015). See also James R Fox, “Naturally Occurring Radioactive Materials in the Oilfield: Changing the Norm” (1992-1993) 67 Tul L Rev 1197 and RM Edmonson, MR Jelliffe, KN Holwand, “Naturally Occurring Radioactive Material (NORM)-A Primer” (1997) 16 E Min L Inst. Ch. 2.

itself were not in accordance with those documents and that the regulation of the NORM waste disposal industry was being changed as a consequence. As an industry participant, Normtek argued it was being directly affected by having to comply with these regulatory guidelines while another industry participant was not so required. Normtek also submitted that the effect of this relaxation of standards would be a detrimental effect on the environment.

Environmental Appeal Board’s Decision on Standing

[57] The Board’s decision on standing began with descriptions of the written submissions of the appellant, the approval holder and the Director. There was then a review of previously decided cases which Normtek’s counsel took issue with because it was almost a word-for-word copy of case law reviews the Board had utilized in a number of previous decisions. We found the review to provide a helpful roadmap of the prior jurisprudence and suspect others would too. We take no issue with the Board’s “cutting and pasting”, if that is what it was, because the Board later engaged in analysis specific to this case.

[58] The Board’s decision was that Normtek did not provide sufficient evidence to demonstrate that it was directly affected by the amending approval. The Board’s reasons were that Normtek’s concerns were primarily commercial or economic and that Normtek failed to demonstrate that its use of a natural resource would be affected by the amending approval.

[59] With respect to what the Board characterized as Normtek’s economic concerns, the Board dismissed them for what appears to have been four reasons. First, the Board said the economic concerns did not relate to the use of a natural resource near the landfill. Second, the Board said the appellant’s economic concerns were based solely on a concern about increased competition. Third, the Board said the appellant’s economic concerns were speculative. And fourth, the Board found that the appellant failed to demonstrate a causal connection between the alleged economic impact and the amending approval. To quote the Board, at paragraphs 147 and 148:²

In this case, the Appellant did not provide any evidence to show how its business relies on natural resources that would be impacted by the proposed project....The Appellant’s economic interest does not rely on the natural resources near the Landfill. The Appellant’s economic concerns are based on increased competition. It is not within the Board’s jurisdiction to determine the saturation point of a particular industry. It is also not the Board’s jurisdiction to determine what disposal method industry should use....

In the Board’s view, the Appellant’s argument that it is directly affected because of an economic impact fails on two grounds. First, the argument is speculative; the Appellant has not provided sufficient evidence even in a *prima facie* basis to

² *Normtek Radiation Services Ltd v Director, Red Deer-North Saskatchewan Region, Alberta Environment and Parks, re: Secure Energy Services Inc* (2 March 2018), Appeal No 16-024-D (AEAB) .

demonstrate it is directly affected. Second, the Appellant's argument does not demonstrate an adequate causal connection between the economic impact it is alleging and the Amending Approval being appealed. The Appellant's argument is that the Amending Approval will cause an economic effect, which in turn will cause an environmental effect. This is too remote a connection to establish that the Appellant is directly affected.

[60] With respect to what the Board found was Normtek's failure to demonstrate that its use of a natural resource near the landfill would be affected, the Board had this to say at paragraph 166:

For the Appellant to be directly affected, they need to demonstrate on a *prima facie* basis either they will be impacted from radiation coming from the Landfill or that their use of a natural resource will be impacted by radiation coming from the Landfill.

At paragraph 161:

The Board looks at the use of the natural resource in the area of the project. If a person uses the resources once in a lifetime, it is not sufficient to be found directly affected, nor is the possibility a person may use the resource in the future. Actual use is required, and arguments regarding this use must be supported by evidence, not just generic statements. [underlining in the original]

Judicial Review of the Environmental Appeals Board's Decision on Standing

[61] Normtek applied to the Court of Queen's Bench to have the Environmental Appeals Board's decision judicially reviewed. Specifically, Normtek sought an order quashing the Board's standing decision and remitting the matter back to the Board for a determination in accordance with the Court's directions.

[62] Normtek's main argument was that the Board erred in law by giving an unduly restrictive interpretation of the phrase "directly affected" in s 91(1)(a)(i) of the *Environmental Protection and Enhancement Act*, contrary to what the Act and its purposes contemplated. Normtek also argued that the Board erred in holding that it had no discretion to hear an appeal of an approval by a person not directly affected but with a genuine interest in an issue of public interest raised by the granting of the approval.

[63] Normtek's application for judicial review was dismissed. The reviewing judge found that the Board's interpretation of the phrase "directly affected" in s 91(1)(a)(i) of the Act was reasonable. The reviewing judge also found that the Board's application of its interpretation of "directly affected" was also reasonable. And finally, the reviewing judge found that the Act does not permit a person who is not directly affected by a decision of the Director to appeal a Director's decision.

[64] The reviewing judge endorsed the Board's view that in order to be directly affected the harm caused by the approval cannot be speculative and that there must be a direct causal connection between the economic harm and the approval. The reviewing judge also held that even assuming a direct economic effect which was not speculative, Normtek had to demonstrate a connection between the economic harm and an effect on the environment. The required connection between the economic harm and an environmental impact, she said, might be established by demonstrating that the approval would harm a natural resource that the appellant uses or would harm the appellant's use of a natural resource (para 66). The reviewing judge also expressed the view that it was not the role of the Board to become an economic regulator.

[65] The reviewing judge then went on to assess whether the Board's application of its "directly affected" test was reasonable and concluded that it was. She expressed reservations about the Board's characterization of Normtek's evidence of harm as being "speculative". But she said, "of larger importance" was the Board's determination that Normtek had failed to satisfy it that Normtek was "directly" affected by the approval, as opposed to simply being affected by it. That distinction is not clear to us. She also suggested that an economic effect in the future is not a direct effect. We disagree. All direct effects of Director's decisions to approve activities, including the economic effects, are in the future. The reviewing judge also endorsed the Board's view that the connection between the direct effect on Normtek and the harm to the environment was too remote. We question whether such a connection is even required.

[66] With respect to Normtek's argument that the Board failed to consider certain of Normtek's substantive submissions because they related to the merits of the appeal, the reviewing judge found that the Board reasonably exercised its discretionary authority in deciding it had sufficient information to decide that Normtek was not "directly" affected without considering the merits of the appeal. This ruling was made notwithstanding the reviewing judge's view that "[a]n exploration of the merits of the appeal may or may not support a stronger case for potential harm to the environment or human health and safety"(para 95). Nevertheless, the reviewing judge found that "an assessment of the merits of the appeal in this case does not assist Normtek in demonstrating that it is 'directly affected' by the Amending Approval" (para 95).

[67] The reviewing judge then went on to consider whether the Board had a discretion to hear Normtek's appeal even if it was not directly affected and concluded that the Board did not have such discretion. In so doing, she relied on the decision of Hall, J. in *Alberta Wilderness Association v Alberta (Environmental Appeal Board)*, 2013 ABQB 44 in which wording similar to section 95 of the *Environmental Protection and Enhancement Act* employed in the *Water Act*, RSA 2000, c W-3 was considered. The court in the *Alberta Wilderness Association* case held that the Environmental Appeal Board only has the jurisdiction which is expressly granted to it by the provisions of the statute. We agree.

[68] In the result, the reviewing judge concluded that she could not accept that the Board's interpretation of "directly affected" or its refusal to read section 95(a)(ii) as creating a statutory authority permitting public interest appeals to the Board subverted the intention of the legislature,

the purposes of the Act or the principles of administrative law. She dismissed Normtek's application for judicial review.

Standard of Review

[69] The issue on this appeal is whether, the Board employed an unduly restrictive, and therefore unreasonable, interpretation of the phrase "directly affected" in denying Normtek standing.

[70] The Supreme Court's decision in *Canada (Minister of Citizenship and Immigration) v Vavilov*, 2019 SCC 65 was rendered December 19, 2019, just prior to the hearing of this appeal on February 11, 2020. As a consequence of the *Vavilov* decision, the parties agreed that the standard of review analysis begins with the presumption that reasonableness is the applicable standard to be applied to the Board's decision and that the presumption of reasonableness was not rebutted in this case.

[71] The Supreme Court in *Vavilov* provided suggestions with respect to the proper application of the reasonableness standard, what the standard entails and how it might be applied in practice. The Supreme Court said courts may intervene in quasi-judicial administrative matters where it is necessary to do so to safeguard the legality, the rationality and the fairness of the administrative process. Otherwise, the starting point is one of restraint (respect or deference to the administrative tribunal's decision). Specifically, the Supreme Court had this to say in its headnote about applying the reasonableness standard:

In conducting reasonableness review, a court must consider the outcome of the administrative decision in light of its underlying rationale, to ensure that the decision as a whole is transparent, intelligible and justified. Judicial review is concerned with both the outcome of the decision and the reasoning process that led to that outcome.

[72] With respect to matters of statutory interpretation, the Supreme Court had this to say, again in its headnote:

Matters of statutory interpretation are not treated uniquely and, as with other questions of law, may be evaluated on a reasonableness standard. Where this is the applicable standard, the reviewing court does not undertake a *de novo* analysis of the question or ask itself what the correct decision would have been. But an approach to reasonableness review that respects legislative intent must assume that those who interpret the law, whether courts or administrative decision makers, will do so in a manner consistent with the modern principle of statutory interpretation. Administrative decision makers are not required to engage in a formalistic statutory interpretation exercise in every case. But whatever form the interpretive exercise

takes, the merits of an administrative decision maker's interpretation of a statutory provision must be consistent with the text, context and purpose of the provision.

[73] Consistency with the text, context and purpose of the statute then are the hallmarks of reasonable statutory interpretation. Quoting the Court at paragraph 118:

Those who draft and enact statutes expect that questions about their meaning will be resolved by an analysis that has regard to the text, context and purpose, regardless of whether the entity tasked with interpreting the law is a court or an administrative decision maker.

[74] Finally, the Supreme Court in *Vavilov* said that reasonableness requires the decision-maker to take into account the evidentiary record which bears on the decision and its decision must be reasonable in light of that factual matrix (para 126):

The reasonableness of a decision may be jeopardized where the decision maker has fundamentally misapprehended or failed to account for the evidence before it.

Court of Appeal's Analysis

Interpretation of "Directly Affected"

[75] At the heart of this appeal is an issue of statutory interpretation: the interpretation of what "directly affected" means. The so-called modern approach to statutory interpretation can be found in *Rizzo & Rizzo Shoes Ltd. (Re)*, [1998] 1 SCR 27 at para 21, 154 DLR (4th) 193, citing Elmer Driedger, *Construction of Statutes*, 2nd ed (Toronto: Butterworth, 1983) at 87:

Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament.

As Iacobucci J observed in *Rizzo*, this means statutory interpretation is not simply an exercise in reviewing the words of the legislation in isolation. Instead, a court must ask what is the purpose of this legislation, and in light of that purpose, what must the words mean? If a possible meaning runs counter to the scheme of the legislation, then that potential interpretation may be suspect.

[76] Ruth Sullivan, in *Sullivan on the Construction of Statutes*, 6th ed (Markham: LexisNexis, 2014) suggested the central principle articulated by Driedger and the courts has three elements. A valid interpretation of legislation must be:

1. plausible in that it complies with the legislative text,
2. efficacious in that it promotes the legislative intent, and

3. matches accepted legal norms in that the interpretation is reasonable and just.

[77] To start with, the use of the phrase “directly affected” must be interpreted as limiting the class of persons who can appeal an approval. But notwithstanding that, the generality of the phrase can also be interpreted as conferring broad discretion on the Board to decide who is directly affected by a Director’s decision.

[78] Secondly, trying to define in advance or limit the circumstances in which an appellant might be found to be directly affected is something the Environmental Appeals Board wisely avoided for at least the first decade of its existence. When one has regard for the many and diverse approvals, environmental protection orders and contaminated site designations which may be appealed by “directly affected” persons, it is apparent that trying to define the way in which a person must be directly affected in order to be accorded standing is impossible.

[79] It is not disputed that the words “directly affected” must be given their ordinary meaning. The Board canvassed the ordinary meaning of “affected” in its 1998 decision *Bildson v Acting Director of North Eastern Slopes Region, Alberta Environmental Protection, re Smoky River Coal Limited*³ at paragraph 25. The dictionary employed by the Board yielded “harmed or impaired” as one meaning for “affected”. On that basis, the Board concluded that an appellant must be harmed or impaired by the activity authorized by the approval being appealed. In other words, the Board interpreted “affected” to mean adversely affected. The distinction between directly affected and adversely affected arises when others who are directly benefitted by the approval seek standing to support the Director’s decision which is being appealed by a party who is directly and adversely affected. The *Concise Oxford Dictionary* which we consulted similarly defines the adjective “affected” as “attacked (as by a disease)” or “acted upon physically”. It defines the verb “affect” as “attack (as disease)” and as “producing a material effect on”. These meanings are not unlike those found by the Board over 20 years ago. And so, we too conclude that, without more, “directly affected” connotes directly affected in an adverse fashion.

[80] Significantly, in *Bildson*, the Board rejected what it termed a *per se* rule employed by the Director not unlike that which the Board itself employed in this case:

The Directors *per se* rules on the types of harms which can and cannot qualify for standing purposes cannot reasonably be supported by the open-ended nature of the plain meaning of “affected”.

³ *Bildson v Acting Director of North Eastern Slopes Region, Alberta Environmental Protection, re Smoky River Coal Limited* (19 October 1998), Appeal No. 98-230-D, online: Alberta Environmental Appeal Board <<http://www.eab.gov.ab.ca/dec/98-230-D.pdf>>.

All we can do is reiterate the Board's caution in *Bildson* against "*per se* rules" and apply it to the rather narrow or restricted interpretation of the phrase "directly affected" employed by the Board and confirmed by the reviewing justice in the *Normtek* case.

[81] The adverb, "directly" also restricts or limits the effects which can give rise to standing. The *Concise Oxford Dictionary* defines "directly" as meaning "in a direct manner". It defines "direct" as "straight, not crooked or roundabout, following an uninterrupted chain of causes and effect". There also appears to be a temporal aspect to "direct" and "directly". "Direct" is defined as "immediate". And "directly" is defined as "at once, without delay." It is acknowledged that some types of prospective harm may be too remote or too speculative, but not all will be.

[82] It can be seen from the forgoing that limiting "directly affected" to impacts on the appellant's use of natural resources affected by the activity approved by the Director is not supported by a plain reading of s 91(1)(a)(i) of the Act which requires only that the appellant be "directly affected by the Director's decision", however that direct effect manifests itself.

[83] Nor does the Act itself support a limitation based on a person's use of a "natural resource" in the vicinity of the approved activity. Nowhere in the *Environmental Protection and Enhancement Act* are the impacts on natural resources inextricably linked to standing. The term "natural resource" is rarely, if ever, employed in the Act. What is defined and employed is the term "adverse effect". It is defined in s 1(b) of the Act as the impairment of or damage to the environment, human health, safety or property. In other words, if one's health, safety or property is potentially impaired by the decision of the Director's approving an activity, that person may be directly affected and therefore have standing to appeal the Director's decision, regardless of whether that person's use or enjoyment of the environment or a natural resource is likely to be impacted.

[84] Another indication of the kinds of effects which were intended by the legislature's use of the phrase "directly affected" is found in the Director's power to amend a term or condition of an approval. Section 70(3)(a)(i) of the Act states that the Director may amend an approval if, in his or her opinion, an adverse effect (an impairment of or danger to the environment, human health, safety or property) is occurring or may occur. It would be incongruous for the Director to be conferred with jurisdiction to interpret the phrase "directly affected" in section 73(1) of the Act more broadly than the Board in section 95(5)(a)(ii).

[85] Section 40 of the *Environmental Protection Enhancement Act* also provides some indication of what effects might have been contemplated as causing a person to be directly affected. Section 40 states that the purpose of environmental assessment, among other things, is to predict the environmental, social, economic and even cultural consequences of a proposed activity and to assess plans to mitigate any adverse impacts resulting from the activity. While the proposed activity in this case was not deemed to have warranted consideration under the formal environmental impact assessment process established under Division 1 of the Act (ss 40-59), the Director is nevertheless obliged by the Act to consider the environmental, social, economic and

cultural consequences, if any, resulting from the proposed activity, as well as issues related to human health. Considerations relevant to the granting of an approval for a designated activity are not confined to impacts on natural resources. Nor are they even confined to impacts on the environment. And so the phrase “directly affected” could not be limited to impacts on one’s use of natural resources. Social, economic, cultural, safety, human health effects, if established, could also ground standing, as could adverse effects on property rights. They are all specifically mentioned in the *Environmental Protection and Enhancement Act*. If the direct effect on the person seeking to appeal a Director’s decision is economic, cultural, safety or health-related or is on a property right, then standing to appeal may be available whether or not there is any connection to an environmental impact to a natural resource proximate to the site of the approval as suggested by the Board and the reviewing court.

[86] The Board’s interpretation of “directly affected” as requiring the would-be appellant to establish that the Director’s decision would harm the appellant’s use of a natural resource near the approved activity is not only not consistent with the Act, but also is not supported by many of the Board and court decisions which the Board cited, beginning with the Board’s decision in *Dr Martha Kostuch v Director, Air and Water Approvals Division, Alberta Environmental Protection*⁴ two years after the *EPEA* was enacted and the Board was set up.

[87] The late Martha Kostuch was a Rocky Mountain House veterinarian and environmental activist who wished to appeal a Director’s decision to amend an approval for an existing cement plant 35 miles from her home. When asked how she was directly affected, Dr. Kostuch stated the plant’s emissions (CO₂, particulates, nitrogen oxide and heavy metals) directly affect her because she recreated in areas near the plant (i.e., she used the area near the cement plant to hunt deer).

[88] The Board’s decision was instructive. The Board made it clear that no one test for determining whether an appellant is or will be directly affected is likely to be found. Quoting from the beginning of the Board’s discussion of the standing issue:

Since the Board’s inception in 1993, we have received more than 60 appeals and, like the appeal before us, many of those appeals have raised the question of “directly affected”. We have not found a universal, simple and easy test to determine when a person is “directly affected” which can be applied automatically in all cases. We believe that this determination should be made on a case by case basis, taking into account the varying circumstances and facts of each appeal.

⁴ *Dr. Martha Kostuch v Director, Air and Water Approvals Division, Alberta Environmental Protection* (23 August 1995), Appeal No. 94-017, online: Alberta Environmental Appeal Board < <http://www.eab.gov.ab.ca/dec/94-017.html>>.

This echoed what Justice Laycraft of this Court said about the Local Authorities Board in the context of an annexation hearing (*Leduc (No 25) v Local Authorities Board* (1987), 84 AR 361 at paras 11-12, 54 Alta LR (2d) 396 (CA)):

If the section is to be construed as requiring the person proposing to intervene to show with certainty that his rights will be affected, how is he to do it? A tribunal cannot know with any certainty at the start of the hearing what the proceeding will involve. The only certain way to determine that would be to require each person to call evidence on the point. In the present case, Mr. Zajes would presumably be forced to call enough evidence to establish the potential for a serious effect on him if the proposed annexation takes place. That would be to force him to succeed on the principal issue in the hearing before he has a right to appear in it, which in our view would be applying the statute to bring about an absurd conclusion. On the other hand, if the Board were required to wait until the petitioning City had called evidence as to the effect of annexation and that had been answered by the other parties, the hearing would be virtually completed before the preliminary question of who are to be parties could be answered. Meanwhile, would those seeking status be permitted to take part?

In our view, the legislature cannot have intended that degree of certainty in this definition. The overriding purpose sought to be achieved by the *Administrative Procedures Act* is fairness in the administrative process. The Board must ensure that those persons with a serious interest in the proceeding are fairly heard. At the same time, it must protect itself, and the legitimate parties to the hearing, from having the whole proceeding complicated and made more expensive by those with no real interest at stake. The Board, by the nature of its task, is bound to make its ruling at an early stage of the proceeding. It is bound to rule fairly on a balance of probabilities whether the hearing has the potential to affect or vary a person's rights given the variations in result possible at the conclusion of the hearing. [emphasis in original]

[89] In *Kostuch*, the Board denied Dr. Kostuch standing on the basis that her use of areas near the cement plant, which she claimed gave her standing, would not be adversely affected by amending the existing plant's approval. The Board's decision was upheld on judicial review by Justice Marceau in *Kostuch v Alberta (Director, Air & Water Approvals Divisions, Environmental Protection)*(1996), 182 AR 384, 35 Admin LR (2d) 160 (QB). But to understand the relevance of this decision to the within appeal, it must be kept in mind that Dr. Kostuch's claim to be adversely affected was based on her use of areas near the plant for hunting deer. Her use of the area near the plant was the basis of her claim to be directly affected. The Board was not convinced that her use of those areas would be directly affected; but there was no suggestion that use of the land proximate to the approved activity was the only way one might be directly affected.

[90] The Board's interpretation of "directly affected" as requiring an appellant to establish that the Director's decision will harm a natural resource which the appellant uses in the vicinity of the approved activity may have had its genesis in the Board's 1998 decision in *Bildson* (cited earlier at para 80) because the Board's analysis in *Bildson* was relied upon by Justice McIntyre for the "test" he employed for determining whether the appellant was directly affected by the Director's decision in *Court v Alberta Environmental Appeal Board*, 2003 ABQB 456. Justice McIntyre's "test" in *Court* was, in turn, relied upon by the Board in the case before us for determining whether the appellant was "directly affected".

[91] In *Bildson*, the Director had approved an extension to an existing open pit coal mine 20 km northwest of Grande Cache Alberta. In the process, the Director also amended a wastewater discharge approval.

[92] The appellant Bildson filed a notice of appeal of the Director's decision on the basis that the approved activities were likely to adversely affect wildlife and water quality in the area.

[93] The Director responded by urging the Board to dismiss Mr. Bildson's appeal on the basis, *inter alia*, that he was not directly affected by the decision. The Board declined to dismiss Mr. Bildson's appeal.

[94] It is also significant that in declining to dismiss Mr. Bildson's appeal, the Board began by indicating that it considered it necessary to consider the merits of Mr. Bildson's objections in order to decide whether Mr. Bildson was directly affected. The merits of Mr. Bildson's objections revolved around the fact that he lived in Grande Prairie, miles from Grande Cache and the mine site. However, he used an alpine area near the mine site for a family-run business. That business involved taking clients out to the backcountry. Mr. Bildson claimed the mine expansion would impair the aesthetic value of the area.

[95] The Director argued that the only direct effect which suffices for standing is harm to a legal right or entitlement. Ironically, given its position with respect to Normtek's appeal, the Director also argued in *Bildson* that harm to a natural resource or to a person's use of a natural resource in the area of the approved activity did not constitute a direct affect because no legal right or entitlement was being affected. The Board disagreed and it was in the context of that disagreement that the Board made the statement upon which Justice McIntyre in *Court* and the current Board in *Normtek* relied. Here's what the Board in *Bildson* had to say:

The Board does not intend its discussion above to mean that injury to a legal right or entitlement is irrelevant to an appellant's ability to demonstrate standing, because it is relevant. The point is simply that it is not a prerequisite to standing nor even, as Smoky River Coal's fall-back position would suggest, "an extremely significant factor," in demonstrating standing. What is "extremely significant" is that the appellant must show that the approved project will harm a natural resource

(e.g. air, water, wildlife) which the appellant uses, or that the project will harm the appellant's use of a natural resource.

[96] We would say the same thing in the context of the Normtek appeal. We do not suggest that harm to a natural resource which an appellant uses or harm to an appellant's use of natural resource would not be sufficient to establish directly affected status. It is simply not a necessary prerequisite to establishing standing where other adverse effects are alleged. It is not only conceivable, but it also has happened, that appellants who had no concern about the environment and who made little use of it were found to be directly and adversely affected by Directors' decision. Examples include persons faced with the prospect of vacating their homes, changing the way they farm, conduct business, develop their lands or plan their enterprises as a result of an activity approved by the Director. This has happened in cases involving the creation of irrigation reservoirs on dry land, storm water retention ponds, off-stream reservoirs for flood control to name but a few projects which require *Environmental Protection and Enhancement Act* or *Water Act* approvals. Sometimes parties who made no use of natural resources near the project nevertheless faced the prospect of other adverse effects. In such cases, the parties' directly affected status was not questioned and, as a consequence, there are few decided cases on point.

[97] In *Bildson*, the Board said this of the Director's argument that one could only be directly affected if legal rights or entitlements were being affected:

the logical conclusion of the Director's position is that someone can be physically affected by a project to the point of death, but still lack standing to appeal an approval for the project if the person does not own land, or have a lease, or licence that is also affected by the project.

Likewise, the logical conclusion of the position taken by the approval-holder and the Director in Normtek's case, which appears to have been adopted by the Board, is that someone can be physically affected by an approved activity to the point of death, but still lack standing to appeal if that person's use of a natural resource is not being directly affected. We too exaggerate to make the point.

[98] Also, as noted above, the Board had the same concern in *Bildson* we have in this case. The lack of evidence adduced by the Director and the approval-holder on the "directly affected" issue was commented on in *Bildson*:

In its written submission, Smoky River Coal similarly asserts that Mr. Bildson's evidence "fails to demonstrate.., that he will suffer specific harm.., that is directly attributable to approvals under appeal." However, the company's submission provides no evidence to support, nor even makes any attempt to explain, this conclusory assertion.

The Director and approval-holder's submissions in the case at bar expressly declined to engage the appellant on the merits of its evidence, other than to argue that the appellant failed to establish a direct effect.

[99] On the issue of causation and the import of the word "directly" in "directly affected", the Board in *Bildson* had this to say:

The Board has long interpreted the term "directly" to mean that there must be an unbroken chain of causation between the project in question and a harm to the appellant. Obviously, the stronger the links in the chain--i.e, the greater the proof that the appellant will be harmed and that the harm stems from project in question--the more likely the Board will find that an appellant has standing. However, the Board has not construed "directly" so narrowly as to preclude standing simply because there are intermediate links between the project and the appellant's harm.

[100] In summary, the Board found in *Bildson* that the appellants' use of the area near the mine expansion sufficed to establish *prima facie* that he was directly affected. However, impacting the use of natural resources near an approved activity was not suggested to be an exhaustive interpretation of "directly affected".

[101] In *Court*, Justice McIntyre, citing *Bildson*, might unwittingly have been perceived to have elevated the proposition that an appellant may show that the approved activity will harm a natural resource in order to be accorded standing to the proposition that an appellant must show that it will do so. The Board in *Normtek*, relying on *Court*, certainly appears to have considered this the test which must be met in order to be accorded standing.

[102] In *Court*, the proposed activity was a gravel extraction operation less than a half a mile from the appellant's home in a country residential subdivision along the Bow River south and east of Calgary. Following a two-day hearing of the merits of her objections, the Environmental Appeals Board found that Ms. Court was not directly affected by the Director's decision to approve the gravel extraction operation. The Board's reason was that the appellant's real concern was the adverse effects of three other existing sand and gravel operations near her home. The appellant, Ms. Court, an asthmatic, had argued that she was directly affected because dust and other air pollutants and noise from existing gravel operations impacted her and so, presumably, would the approved one. It was not her use of a natural resource near the approved activity which was the basis of her claim to be directly affected. It was her health.

[103] Justice McIntyre found the Board's decision on Ms. Court's standing to be patently unreasonable and remitted the matter back to the Board to be dealt with on the basis that the appellant was entitled to standing. He held that the Board applied a patently unreasonable test for determining the appellant's standing; although, upon review of the Board's decision in *Court*, it is not clear that the Board employed any particular test. Nor did Justice McIntyre explain why the Board's conclusions were patently unreasonable. Justice McIntyre cited with approval the test

employed in *Bildson*, but did not elaborate on how he applied it. He simply concluded that Ms. Court had established, on a *prima facie*, but rebuttable basis, that there was a potential or reasonable probability that she would be harmed by the approval of the gravel extraction operation without any direct reference to the test he articulated.

[104] Justice McIntyre’s review of the Board’s decision in *Court* also revolved around the reasonableness of the Board’s decision to defer its ruling on Ms. Court’s standing until it had heard the merits of Ms. Court’s appeal. The Board had decided that it would “assume without deciding” that Ms. Court was directly affected and that it would decide the directly affected issue as part of the hearing of the appeal. Justice McIntyre found this procedural decision to be patently unreasonable and contrary to the logic of Justice Laycraft of this Court in *Leduc (No 25)* (see para 88 herein). Without opining on whether we would have found the procedure adopted by the Board to be unreasonable, the Board’s dilemma in *Court* illustrates the need for at least some consideration of the merits of the appellant’s objections or concerns in order to determine whether an appellant is directly affected. Certainly Justice Laycraft in *Leduc (No 25)* thought that some consideration of the merits was appropriate. Often, the issue of directly affected before the Environmental Appeals Board is inextricably linked to the substantive issues of the appeal. In *Normtek*, the Board declined to get into any of the merits of Normtek’s objections.

[105] In short, we are of the view that the Board and the chambers judge were unreasonable in concluding that an adverse impact cannot qualify a person as being “directly affected” unless the adverse impact is on the appellant’s actual use of a natural resource near the activity which the Director has approved. The Board’s view is not supported by the Act or its own jurisprudence. Nor does Justice McIntyre’s decision in *Court* justify the adoption of such a test for standing.

Alleged Regulatory, Economic and Environmental Impacts of the Director’s Decision

[106] In its decision, the Board also characterized Normtek’s concerns as being “primarily economic” and then dismissed them as providing standing because they were speculative and because they did not meet the test of having to relate to the use of a natural resource being affected by the Director’s decision (the approval of disposing of certain NORM in a landfill). At paragraph 148:

In the Board’s view, the Appellant’s argument that it is directly affected because of an economic impact fails on two grounds. First, the argument is speculative; the Appellant has not provided sufficient evidence even on a *prima facie* basis to demonstrate it is directly affected. Second, the Appellant’s argument does not demonstrate an adequate causal connection between the economic impact it is alleging and the Amending Approval being appealed. The Appellant’s argument is that the Amending Approval will cause an economic effect, which in turn will cause an environmental effect. This is too remote a connection to establish that the Appellant is directly affected.

[107] We begin our analysis with the Board's understanding of Normtek's concern. It appears that the Board began with a proper understanding that Normtek's appeal was based on a concern about its business being directly and adversely affected "due to the change in the way AEP is regulating radioactive materials" as reflected in the Director's decision. But the Board then proceeded to decide the issue of Normtek's directly affected status as if the concern was simply one of fear of competition. At paragraph 135 the Board said:

Putting aside the evidence and arguments that go to the merits of the appeal, in response to the question as to how it is directly affected, the main argument put forward by the Appellant is that its business will suffer because of the issuance of the Amending Approval. Specifically, the Appellant argued it is directly affected because it will suffer significant economic losses resulting from the competition created by the Director's decision to issue the Amending Approval.

Again, we have the Board putting aside the evidence and arguments which went not only to the merits of the appeal but also to Normtek's directly affected status. Indeed, as we will see later, the Board considered that evidence and those arguments irrelevant to the decision it had to make.

[108] The Board characterized Normtek's economic argument as being similar to those advanced by Byram Industries in *Byram Industrial Services Ltd. v. Director*⁵.

[109] *Byram Industrial* was a case in which the appellant, a landfill operator, was opposing the approval of a new landfill 50 km away from its existing landfill. Byram Industries' argument was that the new landfill would serve the same geographic area and thereby impact it economically making its business less profitable, perhaps not even viable, and the consequent oversupply of landfill capacity would jeopardize the proper disposal of industrial waste. Byram Industries argued that the economic impact of the new landfill on it would result in an environmental impact. The Board found that the economic impacts predicted by the appellant were speculative in that the evidence failed to persuade the Board that the economic viability of the appellant's landfill would be directly and adversely affected.

[110] The Board in *Normtek* interpreted the Board's decision in *Byram Industrial* as holding that an approval resulting in an economic impact leading to an environmental impact was insufficient to demonstrate a direct effect because the connection is too remote. However, that is not what the Board in *Byram Industrial* held. The Board simply held that they were not satisfied that the economic impact had been established. With respect to economic impacts which are established and which in turn result in an environmental impact, the Board in *Byram Industrial* made it clear that they could provide standing to appeal:

⁵ *Byram Industrial Services Ltd v Director, Central Region, Regional Services, Alberta Environment re: Wasteworks Inc* (28 April 2005), Appeal No. 04-057-D, online: Alberta Environmental Appeal Board <<http://www.eab.gov.ab.ca/dec/04-057-D.pdf>>.

Environmental effects as a result of economics are a valid concern. One of the purposes of *EPEA*, as stated in section 2(b) is "...to support and promote the protection, enhancement and wise use of the environment while recognizing ... the need for Alberta's economic growth and prosperity in an environmentally responsible manner and the need to integrate environmental protection and economic decisions in the earliest stages of planning...." This suggests to the Board an obligation on the Director's part to assess economics when reviewing an application.

The Board has in previous decisions determined a person is directly affected based on direct environmental impacts and direct economic impacts as a result of environmental impacts, but the Board also sees there is the possibility of a direct economic impact with an indirect environmental impact being the basis of standing. Indirect environmental effects can be just as significant as direct environmental impacts.

Therefore, it is important for the Director to at least consider the economics of a proposal, since there is a possibility economic effects may ultimately impact the environment. If an environmental impact assessment had been required, the economics of the proposal, as well as alternatives, would have been analyzed...

Here the Board was referring to section 49(d) and (e) of the *Environmental Protection and Enhancement Act* which requires the Director to consider the economic impact of the proposed activity and to analyze its significance.

[111] The Board in *Byram Industrial* went on to say that the commercial viability of a business facilitating environmental protection was a "potentially viable argument regarding indirect effects on the environment" of the direct economic effect on the appellant. The reason the Board dismissed the appeal was that the appellant failed to provide better evidence of the effect on it. But it did not hold that an economic impact which leads to an environmental impact could not found standing.

[112] The *Byram Industrial* case is also distinguishable because the anticipated economic impact there arose out of the fact of competition. In *Normtek*, the anticipated economic impact was said to arise out of what was characterized as a fundamental change in the regulatory regime governing the disposal of NORM. Normtek repeatedly told the Board that it did not compete directly with landfill disposal of radioactive wastes. Indeed, it gave evidence it made use of such landfills and anticipated using the approval-holder's landfill as well.

[113] The issue of the economic impacts of an environmental approval came before the Board in connection with an appeal of a water treatment plant approval which threatened to impose a financial obligation on the appellant, the purchaser of power from a power plant under a Power

Purchase Agreement. In *Enron Canada Power Corporation v Director*,⁶ the Director issued an approval to TransAlta Utilities Corporation for the construction of a water treatment plant at its Sundance Power Plant in order to mitigate the impact of TransAlta's operations on Lake Wabumun. Enron Canada Power Corporation claimed to be directly affected by the approval because, under its power purchase arrangements with TransAlta, it might be liable to pay for the water treatment plant.

[114] Enron opposed the approval to the extent that it imposed an obligation on it to contribute to the cost of the water treatment plant. TransAlta, the approval-holder, questioned Enron's directly affected status. The question before the Board was whether the interest claimed by Enron was sufficient to permit it to appeal the approval.

[115] The Board found that Enron was not directly affected by the Director's decision approving the water treatment plan because its challenge was not aimed at the Director's decision but at a commercial dispute with TransAlta which had the potential to affect its financial and economic interests.

[116] However, the Board did not foreclose the possibility of entertaining appeals by appellants whose economic interests were affected by a Director's decision, whether or not the effects on those economic interests caused environmental impacts:

Second, Enron claimed the Board's jurisdiction can include economic interests. We agree. However, in the history of the Board thus far, the economic interest has always been *tied to environmental interests as a matter of both fact and law*. ... While Enron has tried to present an environmental case, Enron's purpose is primarily, if not exclusively, economic. The Board does not believe that Enron really had any environmental interest in mind when arguing that the Water Treatment Plant should be smaller than proposed. [emphasis in original]

In the case at bar, Normtek's economic interests were said to be inextricably tied to environmental impacts.

[117] In rejecting Normtek's claim to be directly affected economically, the Board also relied on its decision in *Gadd v Director*⁷. *Gadd* was a case, like *Bildson*, where the appellant's business (eco-tourism) was potentially being directly affected by the Director's approval of a coal haul road from Cardinal River Coals' Cheviot mine to Luscar's coal processing plant downstream. Ben Gadd

⁶ *Enron Canada Power Corporation v Director, Northern East Slopes Region, Regional Services, Alberta Environment, re: TransAlta Utilities Corporation* (26 June 2002), Appeal No 01-081-D, online: Alberta Environmental Appeal Board <<http://www.eab.gov.ab.ca/dec/01-081-D.pdf>>

⁷ *Preliminary Motions: Gadd v Director, Central Region, Regional Services, Alberta Environment re: Cardinal River Coals Ltd* (8 October 2004), Appeal Nos. 03-150, 03-151 and 03-152-ID1, online: Alberta Environmental Appeals Board <<http://www.eab.gov.ab.ca/dec/03-150-152-ID1-Cardinal%20River-Oct%2008,%202004.pdf>>.

was an appellant who made use of natural resources in the area where the Director had approved the coal haul road. The Board concluded that Mr. Gadd was directly affected because he had provided evidence to indicate that his economic livelihood could be affected. However, the Board in *Normtek* used *Gadd* case to disregard any potential economic impact which was not a result of its use of natural resources in the area of the proposed activity. To quote the Board,

The Appellant's [Normtek's] economic interest does not rely on the natural resources near the Landfill. The Appellant's economic concerns are based on increased competition. It is not within the Board's jurisdiction to determine the saturation point of a particular industry. It is also not the Board's jurisdiction to determine what disposal method industry should use.

[118] The economic interest which Normtek argued was directly affected was based on its interest in ensuring that naturally occurring radioactive materials are managed in accordance with generally accepted regulatory standards to which it said it was required to adhere. Properly understood, Normtek's concern was as much regulatory concern as it was an economic or commercial concern. Normtek argued that the Director's decision directly affected its interest, as an industry participant, in a regulatory regime which governed its industry in the interests of protecting the environment. It is hard to think of a better basis for standing before the Environmental Appeals Board than a concern about a regulatory decision which is alleged to adversely impact a party economically and which also may have implications for environmental protection, particularly when the regulatory decision permits an activity which involves the disposal of a substance of concern under the *Environmental Protection and Enhancement Act* (i.e. radiation). The foregoing, of course, assumes that there is merit to Normtek's substantive submissions which the Board, at the urging of the Director and approval-holder, ignored.

[119] Section 91(1) of the Act provides that a person who is directly affected by the Director's decision may submit a notice of appeal. Ordinarily, the adverse effects which found standing are the anticipated adverse effects of the activity which the Director's decision approved. But the Director's decision itself may also directly affect an industry participant.

[120] Normtek's standing argument was as much directed at the Director's decision as it was at the activity which Secure Energy obtained approval to engage in. The "interest" which Normtek argued was directly affected was its interest in ensuring radioactive materials are managed in a manner which it claimed complied with generally-accepted regulatory standards which it was required to observe. Normtek claimed it was in the business of managing radioactive material in an environmentally responsible manner and in accordance with accepted principles and practices of radioactive waste management. The Director's decision, Normtek argued, approved and sanctioned the conducting of a designated activity in a manner which does not protect the environment or human health, is unsafe and impairs prospects for the use of the environment by further generations. And in so doing, Normtek argued, the Director's decision directly and adversely affects not only Normtek's commercial interests, but also its interest in a regulatory regime which provides level playing field for all industry participants, as well as providing

protection for the environment. The interest which Normtek claimed and which the Board did not deal with was that of an industry participant claiming that the way its industry had hitherto conducted its business was being directly affected. The Board did not deal with that issue.

[121] The Board stated that Normtek's concerns were based on a fear of increased competition. However, Normtek made it clear in its submission that it was not making use of the Environmental Appeal Board process to seek insulation from competition. Normtek stated clearly that it had no concern about landfilling low activity, short-lived radionuclides. To quote Normtek's response to the appeal-holder's submissions on its standing, "Normtek would not be at the table if Secure [had] applied for low concentrations of long-lived radioactive materials as recommended by the IAEA (International Atomic & Energy Association) and ICRP (International Commission on Radiological Protection)". Normtek's concern was with the landfilling of high activity, long-lived radionuclides which Normtek submitted are defined as those more than 10 times a certain so-called exemption of 0.3 Bq/g or 5 Bq/g. Normtek argued that the Director's decision approved the landfilling of material with a radioactivity level of up to 70 Bq/g.

[122] Normtek repeatedly argued that it does not compete with Secure Energy and that Secure Energy does not directly compete with it. Normtek claimed its core business was decontamination (of pipe and equipment) and Secure Energy's business at its Pembina landfill was the disposal of naturally-occurring radioactive material found in diffuse media. Normtek pointed out that it actually makes use of disposal services provided by landfill operators. Normtek pointed out that it sends its low activity level NORM to a landfill approved to accept NORM and it sends its high activity NORM for disposal in an underground geological formation. Normtek indicated it had clients in the vicinity of Secure Energy's Pembina landfill whose NORM they would seek to dispose of at Secure's facility. Secure Energy responded by dismissively saying it would not do business with Normtek. Regardless, Normtek expressly encouraged the Environmental Appeals Board to approve the landfilling of naturally occurring radioactive material at the Pembina landfill so long as the material it was approved to accept was at levels limited to 5 Bq/g. As previously indicated, Normtek's notice of appeal did not seek a denial of Secure Energy's application.

[123] The Board stated at paragraph 147 of its Decision that it was not within its jurisdiction to determine the saturation point of a particular industry. That is correct. The Board's jurisdiction is to hear appeals and make recommendations to the Minister. The Board was not being asked to determine the saturation point of the NORM industry. This case was not analogous to the *Byram Industrial* case where the appellant was opposed to the approval of another landfill for reasons of saturation. Normtek conceded that there was a place for both methods of disposal of NORM (landfill disposal and decontamination and geological disposal). Indeed, Normtek encouraged the Board to recommend approval of Secure's landfill, subject to conditions relating to the radioactivity of the material it accepted.

[124] But it would also be wrong to suggest, as the Board seemed to, that the landfill industry is any less regulated than the bottle recycling industry once was when market saturation may have been a relevant consideration for the Board to consider. The landfill industry is heavily regulated,

not by the Board, but by Alberta Environment, precisely because it is potentially so damaging to the environment and because it has the potential to adversely effect others, including those within the industry.

[125] The Board says it is not its jurisdiction to determine what disposal method industry should use. That determination was not being sought by Normtek. Normtek argued that both methods of disposal were needed and appropriate. In any event, the jurisdiction to prescribe disposal methods is not that of the Board. Ultimately, it is the jurisdiction of the Minister, with the assistance of his Director, to prescribe disposal methods and limits; but once they have been prescribed in an approval, it is the Board's responsibility, following a hearing where the issue is raised, to report to the Minister what it heard from those directly affected and to make recommendations to the Minister about the appropriateness of any disposal method and limits ordered by the Director or of the conditions under which such disposal might take place.

[126] The Environmental Appeal Board is not a regulator like some of the Province's energy boards. The Environmental Appeal Board is essentially an independent commission of inquiry reporting to the Minister. Vis-à-vis what are known as specified activity approvals, the Environmental Appeal Board has one function and one function only and that is to hear appeals by parties directly affected by Directors' decisions (s 90(2)). The Board reports to the Minister what it hears and makes non-binding recommendations (s 99(1)). Under the *Environmental Protection and Enhancement Act* the Minister, assisted by his Directors, is the regulator. The Board was established to provide the Minister with independent and expert advice with respect to such regulation by reporting to the Minister a summary of the representations which were made to it and any recommendations it might have as a result of those representations (s 99(1)).

[127] One of the goals of the *Environmental Protection and Enhancement Act*, when it was introduced by then Environment Minister Ralph Klein, was to achieve better environmental decision-making. The Environmental Appeals Board process was set up to help achieve that. By granting standing to those directly affected by Directors' decisions, the Minister receives the benefit of additional scrutiny which, in the case of directly affected industry participants, provides the Minister with a practical understanding of the effects of conditions of approvals, which industry participants are in a unique position to provide. The integration of environmental protection and economic impacts is one of the purposes of the *Environmental Protection and Enhancement Act* (ss 2(b) and 2(c)) and hearing appeals by those impacted economically helps the Minister achieve that purpose.

[128] In our view, the decisions of the Board and the reviewing judge that the economic effects of an approval are not enough to ground standing unless the economic effects can be linked back to the environment were unreasonable. The reviewing judge pointed out at paragraph 59 of her decision that the Act does not say that in order to be directly affected, a natural resource or the environment must be directly affected. We agree. Yet the reviewing judge also found that the Board's requirement that the potential for economic harm had to be connected to the environment

was reasonable. We disagree; but in any event, Normtek did present evidence which linked the economic impact on it back to the environment. That evidence was not dealt with by the Board.

Failing to Consider Relevant Evidence

[129] The Board dismissed much of Normtek's evidence as not being relevant to the issue of whether Normtek was directly affected by the Director's decision. The Supreme Court in *Vavilov* suggested that the failure to consider relevant evidence may be an indicator of unreasonableness. To quote the Board's decision at paragraph 10:

In its written submissions, the Appellant identified a number of environmental concerns it has with the disposal of NORM waste in the Approval Holder's Landfill, Most of these environmental concerns relate to the potential merits of the appeal. The *Court* decision states the determination whether an appellant is directly affected is a preliminary matter and must be determined before hearing the substantive issues. The Board cannot hear submissions related to the substantive merits of an appeal and then, based on those submissions, determine whether an appellant has standing to bring the appeal. It is necessary for an appellant to provide evidence along with its arguments, but the evidence presented needs to demonstrate the effect of the decision being appealed on the person seeking standing.

[130] A further quote from the Board's Decision illustrates the Board's disregard for Normtek's evidence:

Much of the Appellant's written submissions consisted of argument relating to the validity of the Director's decision. These arguments may be relevant in a hearing on the merits of the appeal; however, they are not relevant for the purposes of determining if the Appellant is directly affected. At this point in the Board's process, the Board is only determining a preliminary matter, namely whether the Appellant is directly affected by the decision to issue the Amending Approval.

The Appellant provided argument on several issues that were more appropriate for consideration at a hearing on the merits of the appeal, including:

1. whether the Minister and Director contravened EPEA by not developing formal policies, procedures, and regulations concerning radioactive material or whether best practices were followed;
2. whether the Approval Holder misled or downplayed the long-term hazards of high activity radioactive waste;
3. the acceptable limits for waste to be accepted at the Landfill;

4. who the Director should have consulted to determine the potential impacts of his decision; and
5. the classification of the waste as low-level waste.

None of these matters relate to the issue of whether the Appellant is directly affected. [emphasis added]

The Board did not explain why these matters did not relate to the issue of Normtek’s “directly affected” status. Clearly some of the evidence presented to the Board with respect to the foregoing matters was relevant to the issue of direct affect. Whether that evidence was sufficient to demonstrate that Normtek was potentially adversely affected by the Director’s decision remains a matter for the Board to determine. But the Board’s summary dismissal of this evidence and its failure to deal with the arguments based on it undermines the reasonableness of its conclusion that Normtek was not directly affected by the Director’s decision.

[131] As the Supreme Court stated in *Vavilov*, reasonableness requires the decision-maker to consider the evidence which bears on its decision. The Supreme Court in *Dunsmuir v New Brunswick*, 2008 SCC 9, [2008] 1 SCR 190 stated that reasonableness requires an approach which is justified, transparent and intelligible. What the Board did was focus on what was a restrictive and unjustified definition of “directly affected” and in so doing failed to deal with the merits of the appellant’s main argument. It was simply not reasonable to disregard relevant evidence on the basis of an unjustifiable restriction on the discretion conferred upon the tribunal by the legislature.

[132] Normally, the issue of standing is a preliminary matter to be determined at the outset. But that does not mean that a tribunal can ignore the merits of an appellant’s appeal when those merits go to the issue of whether the appellant is directly affected. The Board treated these two issues as separate and distinct, never the twain to meet. Two silos, so to speak. That too was unreasonable. We would echo Justice McIntyre’s comment in *Court*: “a review of the case law generated by the Board discloses that it would be unusual for an issue of standing not to be inextricably linked, more or less, to the substantive issues of an appeal” (para 68).

[133] The Board misinterpreted the law. The law is not, as the Board stated in paragraph 133, that the determination of whether an appellant is directly affected must be determined before hearing any of the substantive issues as if to say the determination of whether an appellant is directly affected must be determined without reference to the substantive issues. The law is simply that standing is a preliminary matter to be dealt with, if it can be, at the outset of the proceeding. Sometimes it cannot be.

[134] Determination of a preliminary issue just means that the issue has to be decided first, before the merits can be decided. It does not necessarily mean that a separate hearing and decision occur before any of the merits are heard. Rather, in the appropriate case, the Board may hear all the evidence, and as a matter of logical sequence, address the preliminary issue first. Again, how the

Board chooses to proceed will depend on the context of the case before it, but it should not place artificial, formalistic, constraints on its ability to address the issues before it in a reasonable manner.

[135] The issue of whether an appellant is directly affected by a proposed activity necessarily requires a consideration of the nature and merits of the appellant's objection (i.e. the substantive issues), especially if the basis of the appellant's objection is the "adverse effect" (defined as impairment of or danger to environment, human health, safety or property) of the Director's decision on it. Determining whether an appellant is directly affected may require the Board to consider whether the approval is sufficiently protective of the interests of the appellant which he or she alleges are being adversely affected (health, safety, property) or whether the conditions of the approval sufficiently mitigate what the Act defines as adverse effects such that the appellant may reasonably be found not likely to be directly affected. Such determination may also involve a consideration of what the Act refers to as "the environmental, social, economic and cultural consequences" of the proposed activity (s 40(c)) if those consequences directly affect the would-be appellant.

[136] If the ground for objecting to an approval or a Director's decision is that the approval or Director's decision adversely affects the appellant, then the merit of the objection is directly tied to whether or not the appellant is in fact adversely affected. Often that is the only issue which the Board has to determine. The directly affected issue and the substantive issues are often effectively the same. In such cases, the issue of whether the appellant is directly and adversely affected is really not finally determined until after the hearing of the appeal is completed and the Board has made its decision and reported to the Minister (ss 98 and 99). The Board may summarily dismiss an appeal by an appellant whose appeal is based on anticipated adverse effects of the Director's decision on it where the Board is of the view that the appellant is not directly affected; but such summary dismissal can only be made after there has been some consideration of the merits of the appellant's appeal. Here the Board expressly ruled that the appellant's submissions with respect to the merits of the Director's decision were "not relevant for the purpose of determining if the appellant is directly affected." To quote the Board further:

The Board cannot hear submissions related to the substantive merits of an appeal and then, based on those submissions, determine whether an appellant has standing to bring the appeal.

[137] The appellant's submissions with respect to the merits of the Director's decision were all about the impacts of that decision on the appellant's business and the regulation of the appellant's industry. To summarily dismiss these impacts as speculative or too remote without dealing with them, at least in a preliminary way, makes assessing the reasonableness of the Board's decision to dismiss the appellant's appeal without a hearing impossible. In this case, the Board's actions precluded judicial review. The Board's reasons were not transparent enough to enable proper judicial review.

The Burden of Demonstrating that a Person is “Directly Affected”

[138] A word about onus. The Board cited its “Burden of Proof” rule (Rule 29) and found that Normtek had not discharged its onus to prove that it is or will be directly affected by the Director’s decision. The onus on the would-be appellant to show that he or she is directly affected is an adversarial principle imported from our legal system. It is not to be ignored, but it may not always be entirely appropriate for poly-centric environmental decision-making under an Act which has purposes as many and varied purposes as those which the legislature has declared in section 2 of the *Environmental Protection and Enhancement Act*.

[139] Also, the Board’s determination of whether a person is directly affected should also be tempered by the knowledge that there is not much time for a party claiming to be directly affected by a Director’s decision to review that decision or approval once it has been made. A notice of appeal must be submitted to the Board no later than 30 days after receipt of notice of the decision sought to be appealed (s 91(4)(c)). If it becomes apparent later that an appellant whose notice of appeal was dismissed without a hearing is directly and adversely affected, there are few remedies. The Director may on his own initiative, amend a term or condition of an approval if he is of the opinion that an adverse effect that was not reasonably foreseeable is occurring or may occur (s.70(3)(a)(i)). The Director may also cancel an approval; but as between the approval-holder and persons claiming to be adversely affected, only the approval-holder may apply to amend or cancel an existing approval (s 70(1)). That legislative scheme may call for some caution in summarily dismissing an appeal where there is a possibility that the person appealing may be directly and adversely affected. The opportunities to mitigate direct adverse effects once the designated activity has been approved and undertaken may be limited. As the Board pointed out in its decision, when an appeal is dismissed because the Board is of the opinion that the appellant is not directly affected by the Director’s decision, the Director’s decision is then final. It does not go to the Minister for his consideration. The Minister is deprived of the appellant’s input and the Board’s recommendation.

[140] As indicated above, the Board pointed to Rule 29 of its *Rules of Practice*, suggesting that it is clear that the onus is on the appellant to prove that it is directly affected. Strictly speaking, that is not correct. What the Rule states is this:

In cases which the Board accepts evidence, any Party offering such evidence shall have the burden of introducing appropriate evidence to support its position. Where there is conflicting evidence, the Board will decide which evidence to accept and will generally act on the preponderance of the evidence.

The only onus this Rule imposes is to adduce evidence in support of one’s position. The appellant did that. The approval-holder and the Director submitted little, if any evidence which conflicted with the evidence of Normtek. Indeed, both the Director and the approval holder expressly declined to engage the appellant on the merits of its objection. By way of example, Normtek argued that the Director’s decision approving the landfilling of certain high level naturally occurring

radioactive wastes would adversely affect its business of decontaminating equipment of those wastes and disposing of them in subterranean geological formations. In support of this submission, Normtek supplied the Board with the relative costs of the two disposal methods. That evidence was not contradicted by any evidence adduced by the approval-holder or the Director.

[141] As indicated above, the merits of Normtek's objection were relevant to its directly affected status. The approval holder and the Director expressly declined to get into the merits and so there was very little, if any, "conflicting evidence" which would engage the second part of the Rule. Furthermore, the onus on the appellant, when its standing is challenged, is not to prove conclusively that it is directly affected. As the Board stated in *Mizera v Director*⁸ at paragraphs 24 and 26, relying on this Court's decision in *Leduc (County No 25)*, the onus is on the appellant to establish a reasonable possibility that it will be directly affected by the Director's decision.

Discretion to Hear an Appeal by a Person Not Directly Affected

[142] We reject the appellant's argument that the Board fettered what was argued to be a discretion conferred upon it by section 95(5) of the *Environmental Protection and Enhancement Act* to hear an appeal of an approval by a person who is not directly affected by that approval based on a general public interest standing. We agree with the reviewing justice that the Act does not confer a discretionary authority on the Board to entertain an appeal by a person who is not directly affected.

[143] Section 91(1) makes it clear that only a person who is directly affected by an approval may appeal it to the Environmental Appeals Board.

[144] The rule against fettering discretion which requires a statutory tribunal with discretionary authority to actually exercise that discretion was not engaged in this case because what discretion there was to be exercised was exercised.

[145] The appellant argues that because subsection 95(5)(a) states that the Board "may dismiss" an appeal if it is of the opinion that the person submitting the appeal is not directly affected, there is a discretion to hear an appeal when the Board is of the opinion that the appellant is not directly affected.

[146] That argument, if sustained, would lead to an untenable situation in which the Board, already of the opinion that the appellant is not directly affected, would hear the appeal anyway. This would undermine the whole point of the limiting language of "directly affected". The appellant's statutory interpretation is particularly problematic when the basis for the appeal of the

⁸ *Mizera et al v Director, Northeast Boreal and Parkland Regions, Alberta Environmental Protection, re: Beaver Regional Waste Management Services Commission* (21 December 1998), Appeal No. 98-231-98-234-D, online: Alberta Environmental Appeal Board < <http://www.eab.gov.ab.ca/dec/98-231-234.htm>>.

Director's decision, as it was in this case, was the alleged direct effects of the decision on the party proposing to appeal.

[147] Section 91(1) stipulates who may submit an appeal to the Environmental Appeals Board when a Director issues an approval. Only the approval holder and a person who previously submitted a statement of concern and who is directly affected by the Director's decision may submit an appeal.

[148] Section 95(5)(a)(ii), in providing that if the Board is of the opinion that the person submitting an appeal is not directly affected by the Director's decision it "may" dismiss the appeal, simply reinforces the earlier statutory requirement that an appeal may only be submitted by a person directly affected. It makes it clear that the Board is empowered to dismiss appeals by a person whom the Board deems not to be directly affected.

[149] There is no curious ambiguity in the use of the word "may", as suggested. The explanation for the word "may" in section 95(5)(a) is simply that section 95(5)(a) provides a number of circumstances in which the Board is empowered to dismiss an appeal. Read as a whole, section 95(5)(a) is simply a permissive provision enabling the Board to dismiss appeals it ought not to have to hear or appeals by persons who have not been conferred with a right of appeal.

[150] The Board has no control over who might submit a notice of appeal. Section 95(5) simply makes it clear that the submission of an appeal does not confer an absolute right of appeal on the person submitting the notice of appeal. And so, upon receipt of a notice of appeal, if the Board is of the opinion, for example, that the appeal is frivolous, vexatious or without merit, it "may dismiss" it (s 95(5)(a)(i)). Conferring a discretion to dismiss a frivolous or vexatious appeal or an appeal without merit does not mean that the Board has the discretion to hear an appeal it considers to be frivolous or vexatious or without merit. That would be illogical. Likewise, the Board is conferred with the discretion to dismiss an appeal if the person submitting the appeal is not directly affected by the Director's decision. But that does not mean that the Board has a discretion to hear an appeal by a person who is not directly affected, especially not where the basis for the appeal of the decision is the direct effect of the approval on the person submitting the appeal. If the Board were to hear an appeal in those circumstances, it would not be doing so without an open mind, having already formed the opinion that the appellant was not directly affected.

[151] The appellant argues that the use of the words "may dismiss" in section 95(5)(a) when contrasted with the words "shall dismiss" in section 95(5)(b) indicates a legislative intention to confer a discretion on the Board to hear appeals it is empowered to dismiss (namely a discretion to hear an appeal even though the Board is of the opinion that the appellant is not directly affected). That argument ignores the reason for the use of the words "shall dismiss" in s 95(5)(b). The reason the Board must dismiss the appeals referred to in s 95(5)(b) is that the person submitting the appeal has already had his concerns heard and considered by another quasi-judicial administrative tribunal statutorily charged with considering the concerns of those directly affected by the activity which the subject of the Director's approval (or has had the opportunity to have his or her concerns heard

and considered). Section 95(5)(b) does not demonstrate a legislative intent to confer a discretion in s 95(5)(a). Section 95(5)(b) is of no assistance in interpreting section 95(5)(a).

[152] We agree with the decision of the reviewing judge and with the decision of Hall, J. in *Alberta Wilderness Association v Alberta (Environmental Appeal Board)* upon which she relied: Section 95(5)(a) does not give the Board jurisdiction to hear public interest appeals by persons not directly affected. There are those who argue that the legislature’s use of the phrase “directly affected” confers a very wide discretion and may indicate a legislative intent to confer jurisdiction to grant public interest standing. But even those who make that argument concede that the public interest standing must be grounded in a more or less direct interest (*Canada (Attorney General) v Downtown Eastside Sex Workers United Against Violence Society*, 2012 SCC 45). It is also true that an activity the Director approves may directly affect a large segment of the public which potentially might make the class of persons directly affected very large; but that is not the same as granting standing to a person who has been found not to be directly affected. The Act clearly does not confer jurisdiction on the Board to grant public interest standing to a party who the Board finds is not directly affected. Nor does current jurisprudence confer such jurisdiction on administrative tribunals in the absence of clear statutory authority.

[153] While courts may have inherent jurisdiction to accord a form of public interest standing to those seeking judicial review of the administrative tribunal decision in order to permit challenges of unconstitutional laws, they do not ordinarily accord such status to those who are not directly affected. But, regardless, tribunals do not possess the inherent jurisdiction which courts possess. If that represents a disconnect, and we are not certain that it does, then that is the current state of our law. Section 95(6) of the Act does, however, confer a discretion on the Board to give opportunities to persons it considers should be allowed to make representations to make representations at an appeal hearing; but that discretion can only be exercised once an appeal is properly before the Board and then only in accordance with the principles of natural justice. In short, we reject the argument that section 95(5)(a)(ii) of the Act confers a discretionary authority to entertain appeals from individuals who the Board finds are not directly affected by the Director’s decision sought to be appealed.

Court’s Disposition

[154] Having found that the Board’s interpretation of “directly affected” in sections 91 and 95 of *Environmental Protection and Enhancement Act* is too restrictive, we would remit the matter of Normtek’s directly affected status to be decided by the Board. The Board remains seized with the issue of Normtek’s standing. The Board must determine whether it is of the opinion that Normtek is directly affected by the decision of the Director. We express no view on that issue. It is the Board’s opinion which is determinative; but it must not decide the issue employing the restrictive interpretation of “directly affected” which it employed in this case. It must decide the issue having regard to the provisions of the Act and the evidence relevant to the determination to be made.

[155] Going forward, it is also the Board which must determine how to interpret the phrase “directly affected” in any given case. But, again, it must do so in accordance with its governing legislation.

[156] The appeal from the judicial review judge’s decision is accordingly allowed on the issue of the Environmental Appeals Board’s interpretation of “directly affected” in section 91(1)(a)(i) of the *Environmental Protection and Enhancement Act*. The appeal from the judicial review judge’s decision on the jurisdiction of the Board to entertain appeals from persons not directly affected is dismissed.

Appeal heard on February 11, 2020

Memorandum filed at Calgary, Alberta
this 11th day of December, 2020

O’Ferrall J.A.

Strekaf J.A.

Authorized to sign for: Khullar J.A.

Appearances:

S.C. Fluker
for the Appellant

D.J. Hannaford
for the Respondent Alberta Environmental Appeals Board

K.F. Miller
S.M. Graham
for the Respondent Secure Energy Services Inc.

C.L. Ghesquiere
for the Respondent Director of Alberta Environment and Parks

TAB C

Delta Air Lines Inc. *Appellant*

v.

Gábor Lukács *Respondent*

and

Attorney General of Ontario, Canadian Transportation Agency, International Air Transport Association and Council of Canadians with Disabilities *Interveners*

INDEXED AS: DELTA AIR LINES INC. v. LUKÁCS
2018 SCC 2

File No.: 37276.

2017: October 4; 2018: January 19.

Present: McLachlin C.J. and Abella, Moldaver, Karakatsanis, Wagner, Gascon, Côté, Brown and Rowe JJ.

ON APPEAL FROM THE FEDERAL COURT OF APPEAL

Administrative law — Boards and tribunals — Canadian Transportation Agency — Inquiry into complaint — Standing — Public interest standing — Complainant alleging air carrier's practices regarding transportation of obese persons are discriminatory — Agency dismissed complaint on basis that complainant lacked standing — Whether Agency reasonably exercised its discretion to dismiss complaint — Canada Transportation Act, S.C. 1996, c. 10, s. 37.

L filed a complaint with the Canadian Transportation Agency alleging that Delta Air Lines' practices in relation to the transportation of obese passengers are discriminatory and contrary to s. 111(2) of the federal *Air Transportation Regulations*. The Agency dismissed the complaint on the basis that L failed to meet the tests for private interest standing and public interest standing as developed by and for courts of civil jurisdiction. It found L lacked private interest standing because he was not himself obese, and so could not claim to be aggrieved or affected or to have some other sufficient interest. It also determined that L lacked public interest standing because

Delta Air Lines Inc. *Appelante*

c.

Gábor Lukács *Intimé*

et

Procureur général de l'Ontario, Office des transports du Canada, International Air Transport Association et Conseil des Canadiens avec déficiences *Intervenants*

RÉPERTORIÉ : DELTA AIR LINES INC. c. LUKÁCS
2018 CSC 2

N° du greffe : 37276.

2017 : 4 octobre; 2018 : 19 janvier.

Présents : La juge en chef McLachlin et les juges Abella, Moldaver, Karakatsanis, Wagner, Gascon, Côté, Brown et Rowe.

EN APPEL DE LA COUR D'APPEL FÉDÉRALE

Droit administratif — Organismes et tribunaux administratifs — Office des transports du Canada — Enquêtes sur les plaintes — Qualité pour agir — Qualité pour agir dans l'intérêt public — Allégations d'un plaignant quant au caractère discriminatoire des pratiques d'un transporteur aérien relativement au transport des personnes obèses — Rejet de la plainte par l'Office pour défaut de qualité pour agir du plaignant — L'Office a-t-il exercé son pouvoir discrétionnaire raisonnablement en rejetant la plainte? — Loi sur les transports au Canada, L.C. 1996, c. 10, art. 37.

L a déposé une plainte auprès de l'Office des transports du Canada dans laquelle il a fait valoir que les pratiques de Delta Air Lines à l'égard du transport de passagers obèses sont discriminatoires et contraires au par. 111(2) du *Règlement sur les transports aériens* fédéral. L'Office a rejeté la plainte, statuant que L ne satisfaisait pas aux tests relatifs à la qualité pour agir dans l'intérêt privé et à celle pour agir dans l'intérêt public établis par et pour les tribunaux de juridiction civile. L'Office a conclu que L n'avait pas qualité pour agir dans l'intérêt privé, puisqu'il n'était pas lui-même obèse, si bien qu'il ne pouvait prétendre avoir été lésé ou touché ou avoir un intérêt suffisant.

constitutionality of legislation or the illegality of administrative action. In sum, the Agency suggests the availability of public interest standing to bring a complaint of this type and then, in the same breath, precludes any possibility of granting it. The imposition of a test that can never be met could not be what Parliament intended when it conferred a broad discretion on this administrative body to decide whether to hear complaints.

[18] The Agency’s application of the test is also inconsistent with the rationale underlying public interest standing. In determining whether to grant public interest standing, courts must take a “flexible, discretionary approach”: *Downtown Eastside*, at para. 1. This requires balancing the preservation of judicial resources with access to justice: *ibid.*, at para. 23. The whole point is for the court to use its discretion, where appropriate, to allow more plaintiffs through the door. As the Agency rightly put it, the objective is to hear from those plaintiffs or complainants “with the most at stake” (para. 52). The Agency’s decision in this case, however, exhibits no balancing; it does not allow those with most at stake to be heard. Rather, it uses public interest standing simply to bar access. *Downtown Eastside* makes clear that at least *some* plaintiffs will be granted public interest standing. The Agency’s decision, in contrast, allows *no* complainants to have public interest standing. The Agency did not maintain a flexible approach to this question and in so doing unreasonably fettered its discretion. While the public interest standing test was designed to protect courts’ discretion, the Agency eliminated any of its own discretion under this test.

[19] The second problem with the decision is that the impact of the tests for private and public interest

conditions ne peut jamais, compte tenu de sa nature même, être une contestation de la constitutionnalité d’une loi ou de l’illégalité d’une mesure administrative. En somme, l’Office suggère qu’il pourrait y avoir qualité pour agir dans l’intérêt public pour présenter une plainte de ce type, puis, du même souffle, exclut toute possibilité de reconnaître cette qualité. L’imposition d’un test auquel il est impossible de satisfaire ne peut pas être ce que voulait le législateur lorsqu’il a conféré à cet organisme administratif le large pouvoir discrétionnaire de décider s’il entendra des plaintes.

[18] L’application du test par l’Office est également incompatible avec la raison d’être de la qualité pour agir dans l’intérêt public. Lorsqu’ils décident s’ils reconnaissent cette qualité pour agir, les tribunaux judiciaires doivent adopter une « approche souple et discrétionnaire » : *Downtown Eastside*, par. 1. Pour ce faire, ils doivent établir un équilibre entre la nécessité d’économiser les ressources judiciaires d’une part et l’accès à la justice d’autre part : *ibid.*, par. 23. Essentiellement, le tribunal judiciaire doit exercer son pouvoir discrétionnaire, s’il y a lieu, pour donner accès à un plus grand nombre de demandeurs. Comme l’Office l’affirme avec raison, l’objectif est d’entendre les demandeurs ou les plaignants « les plus concern[és] » : par. 52. Or, la décision de l’Office en l’espèce ne témoigne d’aucune recherche d’équilibre; elle ne permet pas aux personnes les plus concernées d’être entendues. Elle invoque plutôt la qualité pour agir dans l’intérêt public uniquement pour refuser l’accès. Il ressort clairement de *Downtown Eastside* qu’au moins *certain*s demandeurs se verront reconnaître la qualité pour agir dans l’intérêt public. La décision de l’Office, au contraire, ne permet à *aucun* plaignant de se voir reconnaître cette qualité. L’Office n’a pas adopté une approche souple à l’égard de cette question et, ce faisant, il a entravé son pouvoir discrétionnaire de manière déraisonnable. Si, certes, le test relatif à la qualité pour agir dans l’intérêt public a été conçu pour protéger le pouvoir discrétionnaire des tribunaux judiciaires, l’Office s’est défait de son pouvoir discrétionnaire par l’application de ce test.

[19] Le deuxième problème concernant la décision est que l’effet des tests relatifs à la qualité pour agir

standing, applied as they were in this decision, cannot be supported by a reasonable interpretation of how the legislative scheme is intended to operate. Applying these tests in the way the Agency did would preclude any public interest group or representative group from ever having standing before the Agency, regardless of the content of its complaint. A complaint by the Council of Canadians with Disabilities, like the one brought in *Council of Canadians with Disabilities v. VIA Rail Canada Inc.*, 2007 SCC 15, [2007] 1 S.C.R. 650, would not be heard. In effect, only a person who is herself targeted by the impugned policy could bring a complaint.

[20] This is contrary to the scheme of the Act. Parliament has seen fit to grant the Agency broad remedial authority. Section 5(d) of the Act requires the Agency to promote accessible transportation. And ss. 111 and 113 of the Regulations allow the Agency to act to correct discriminatory terms and conditions before passengers actually experience harm. Indeed, these provisions empower the Agency to investigate based on a complaint or of its own motion. To refuse a complaint based solely on the identity of the group bringing it prevents the Agency from hearing potentially highly relevant complaints, and hinders its ability to fulfill the statutory scheme's objective. This does not mean that every complaint from a public interest group must be heard. It is unreasonable, however, for the Agency to apply a test that would prevent it from hearing the complaint of any such group.

[21] For these reasons, I conclude that the Agency's decision fails to meet the indicia of reasonableness enumerated in *Dunsmuir*.

[22] Delta acknowledges that the Agency's reasons are deficient. It argues, however, that the reviewing court is required to examine not only the reasons given, but the reasons that *could* be given to support the Agency's decision: see *Alberta Teachers*, at para. 53; *Newfoundland and Labrador Nurses' Union v. Newfoundland and Labrador (Treasury Board)*, 2011 SCC 62, [2011] 3 S.C.R. 708, at

dans l'intérêt privé ou public, appliqués comme ils l'ont été dans la décision en cause, ne peut être justifié par une interprétation raisonnable de la façon dont le régime législatif est censé fonctionner. L'application de ces tests de la façon dont l'Office l'a faite empêcherait tout groupe de défense de l'intérêt public ou groupe représentatif de se voir reconnaître la qualité pour agir devant l'Office, sans égard au contenu de sa plainte. Ainsi, une plainte par le Conseil des Canadiens avec déficiences, comme celle qui a été portée dans l'affaire *Conseil des Canadiens avec déficiences c. VIA Rail Canada Inc.*, 2007 CSC 15, [2007] 1 R.C.S. 650, ne serait pas entendue. De fait, seule une personne qui est elle-même visée par la politique contestée pourrait déposer une plainte.

[20] Ce résultat est contraire à l'esprit de la Loi. Le législateur a jugé bon de conférer à l'Office un large pouvoir de réparation. L'alinéa 5d) de la Loi oblige l'Office à promouvoir le transport accessible. De plus, les art. 111 et 113 du Règlement permettent à l'Office d'agir pour corriger des conditions discriminatoires avant que les passagers ne subissent un préjudice. De fait, ces dispositions confèrent à l'Office le pouvoir d'enquêter par suite d'une plainte, ou de sa propre initiative. Rejeter une plainte sur le seul fondement de l'identité du groupe qui la porte empêcherait l'Office d'entendre des plaintes qui pourraient se révéler fort pertinentes et entraverait sa capacité à réaliser l'objectif du régime créé par la Loi. Cela ne veut pas dire que toutes les plaintes de groupes de défense de l'intérêt public doivent être entendues. Toutefois, il est déraisonnable que l'Office applique un test qui l'empêcherait d'entendre les plaintes de tels groupes.

[21] Pour ces motifs, je conclus que la décision de l'Office ne respecte pas le test de raisonabilité énoncé dans *Dunsmuir*.

[22] Delta reconnaît que les motifs de l'Office sont déficients. Toutefois, elle plaide que la cour de révision est tenue d'examiner non seulement les motifs donnés par l'Office, mais aussi les motifs qui *pourraient* être donnés au soutien de sa décision : voir *Alberta Teachers*, par. 53; *Newfoundland and Labrador Nurses' Union c. Terre-Neuve-et-Labrador (Conseil du Trésor)*, 2011 CSC 62, [2011]

TAB D

Philippe Adrien, Emilia Berardi, Paul Creador, Lorenzo Abel Vasquez and Lindy Wagner on their own behalf and on behalf of the other former employees of Rizzo & Rizzo Shoes Limited *Appellants*

v.

Zittrre, Siblin & Associates, Inc., Trustees in Bankruptcy of the Estate of Rizzo & Rizzo Shoes Limited *Respondent*

and

The Ministry of Labour for the Province of Ontario, Employment Standards Branch *Party*

INDEXED AS: RIZZO & RIZZO SHOES LTD. (RE)

File No.: 24711.

1997: October 16; 1998: January 22.

Present: Gonthier, Cory, McLachlin, Iacobucci and Major JJ.

ON APPEAL FROM THE COURT OF APPEAL FOR ONTARIO

Employment law — Bankruptcy — Termination pay and severance available when employment terminated by the employer — Whether bankruptcy can be said to be termination by the employer — Employment Standards Act, R.S.O. 1980, c. 137, ss. 7(5), 40(1), (7), 40a — Employment Standards Amendment Act, 1981, S.O. 1981, c. 22, s. 2(3) — Bankruptcy Act, R.S.C., 1985, c. B-3, s. 121(1) — Interpretation Act, R.S.O. 1990, c. I.11, ss. 10, 17.

A bankrupt firm's employees lost their jobs when a receiving order was made with respect to the firm's property. All wages, salaries, commissions and vacation pay were paid to the date of the receiving order. The province's Ministry of Labour audited the firm's records to determine if any outstanding termination or severance pay was owing to former employees under the *Employment Standards Act* ("ESA") and delivered a proof of claim to the Trustee. The Trustee disallowed the claims on the ground that the bankruptcy of an employer does not constitute dismissal from employment and accordingly creates no entitlement to sever-

Philippe Adrien, Emilia Berardi, Paul Creador, Lorenzo Abel Vasquez et Lindy Wagner en leur propre nom et en celui des autres anciens employés de Rizzo & Rizzo Shoes Limited *Appellants*

c.

Zittrre, Siblin & Associates, Inc., syndic de faillite de Rizzo & Rizzo Shoes Limited *Intimée*

et

Le ministère du Travail de la province d'Ontario, Direction des normes d'emploi *Partie*

RÉPERTORIÉ: RIZZO & RIZZO SHOES LTD. (RE)

N° du greffe: 24711.

1997: 16 octobre; 1998: 22 janvier.

Présents: Les juges Gonthier, Cory, McLachlin, Iacobucci et Major.

EN APPEL DE LA COUR D'APPEL DE L'ONTARIO

Employeur et employé — Faillite — Indemnités de licenciement et de cessation d'emploi payables en cas de licenciement par l'employeur — Faillite peut-elle être assimilée au licenciement par l'employeur? — Loi sur les normes d'emploi, L.R.O. 1980, ch. 137, art. 7(5), 40(1), (7), 40a — Employment Standards Amendment Act, 1981, L.O. 1981, ch. 22, art. 2(3) — Loi sur la faillite, L.R.C. (1985), ch. B-3, art. 121(1) — Loi d'interprétation, L.R.O. 1990, ch. I.11, art. 10, 17.

Les employés d'une entreprise en faillite ont perdu leur emploi lorsqu'une ordonnance de séquestre a été rendue à l'égard des biens de l'entreprise. Tous les salaires, les traitements, toutes les commissions et les paies de vacances ont été versés jusqu'à la date de l'ordonnance de séquestre. Le ministère du Travail de la province a vérifié les dossiers de l'entreprise pour déterminer si des indemnités de licenciement ou de cessation d'emploi devaient encore être versées aux anciens employés en application de la *Loi sur les normes d'emploi* (la «LNE») et il a remis une preuve de réclamation au syndic. Ce dernier a rejeté les réclamations pour le

the words, “Where . . . fifty or more employees have their employment terminated by an employer. . . .” Therefore, the question on which this appeal turns is whether, when bankruptcy occurs, the employment can be said to be terminated “by an employer”.

19 The Court of Appeal answered this question in the negative, holding that, where an employer is petitioned into bankruptcy by a creditor, the employment of its employees is not terminated “by an employer”, but rather by operation of law. Thus, the Court of Appeal reasoned that, in the circumstances of the present case, the *ESA* termination pay and severance pay provisions were not applicable and no obligations arose. In answer, the appellants submit that the phrase “terminated by an employer” is best interpreted as reflecting a distinction between involuntary and voluntary termination of employment. It is their position that this language was intended to relieve employers of their obligation to pay termination and severance pay when employees leave their jobs voluntarily. However, the appellants maintain that where an employee’s employment is involuntarily terminated by reason of their employer’s bankruptcy, this constitutes termination “by an employer” for the purpose of triggering entitlement to termination and severance pay under the *ESA*.

20 At the heart of this conflict is an issue of statutory interpretation. Consistent with the findings of the Court of Appeal, the plain meaning of the words of the provisions here in question appears to restrict the obligation to pay termination and severance pay to those employers who have actively terminated the employment of their employees. At first blush, bankruptcy does not fit comfortably into this interpretation. However, with respect, I believe this analysis is incomplete.

21 Although much has been written about the interpretation of legislation (see, e.g., Ruth Sullivan, *Statutory Interpretation* (1997); Ruth Sullivan, *Driedger on the Construction of Statutes* (3rd ed. 1994) (hereinafter “*Construction of Statutes*”); Pierre-André Côté, *The Interpretation of Legisla-*

licier un employé . . . » Le paragraphe 40a(1a) contient également les mots: «si [. . .] l’employeur licencie cinquante employés ou plus . . . » Par conséquent, la question dans le présent pourvoi est de savoir si l’on peut dire que l’employeur qui fait faillite a licencié ses employés.

La Cour d’appel a répondu à cette question par la négative, statuant que, lorsqu’un créancier présente une pétition en faillite contre un employeur, les employés ne sont pas licenciés par l’employeur mais par l’effet de la loi. La Cour d’appel a donc estimé que, dans les circonstances de l’espèce, les dispositions relatives aux indemnités de licenciement et de cessation d’emploi de la *LNE* n’étaient pas applicables et qu’aucune obligation n’avait pris naissance. Les appelants répliquent que les mots «l’employeur licencie» doivent être interprétés comme établissant une distinction entre la cessation d’emploi volontaire et la cessation d’emploi forcée. Ils soutiennent que ce libellé visait à décharger l’employeur de son obligation de verser des indemnités de licenciement et de cessation d’emploi lorsque l’employé quittait son emploi volontairement. Cependant, les appelants prétendent que la cessation d’emploi forcée résultant de la faillite de l’employeur est assimilable au licenciement effectué par l’employeur pour l’exercice du droit à une indemnité de licenciement et à une indemnité de cessation d’emploi prévu par la *LNE*.

Une question d’interprétation législative est au centre du présent litige. Selon les conclusions de la Cour d’appel, le sens ordinaire des mots utilisés dans les dispositions en cause paraît limiter l’obligation de verser une indemnité de licenciement et une indemnité de cessation d’emploi aux employeurs qui ont effectivement licencié leurs employés. À première vue, la faillite ne semble pas cadrer très bien avec cette interprétation. Toutefois, en toute déférence, je crois que cette analyse est incomplète.

Bien que l’interprétation législative ait fait couler beaucoup d’encre (voir par ex. Ruth Sullivan, *Statutory Interpretation* (1997); Ruth Sullivan, *Driedger on the Construction of Statutes* (3^e éd. 1994) (ci-après «*Construction of Statutes*»); Pierre-André Côté, *Interprétation des lois* (2^e éd.

tion in Canada (2nd ed. 1991)), Elmer Driedger in *Construction of Statutes* (2nd ed. 1983) best encapsulates the approach upon which I prefer to rely. He recognizes that statutory interpretation cannot be founded on the wording of the legislation alone. At p. 87 he states:

Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament.

Recent cases which have cited the above passage with approval include: *R. v. Hydro-Québec*, [1997] 1 S.C.R. 213; *Royal Bank of Canada v. Sparrow Electric Corp.*, [1997] 1 S.C.R. 411; *Verdun v. Toronto-Dominion Bank*, [1996] 3 S.C.R. 550; *Friesen v. Canada*, [1995] 3 S.C.R. 103.

I also rely upon s. 10 of the *Interpretation Act*, R.S.O. 1980, c. 219, which provides that every Act “shall be deemed to be remedial” and directs that every Act shall “receive such fair, large and liberal construction and interpretation as will best ensure the attainment of the object of the Act according to its true intent, meaning and spirit”.

Although the Court of Appeal looked to the plain meaning of the specific provisions in question in the present case, with respect, I believe that the court did not pay sufficient attention to the scheme of the *ESA*, its object or the intention of the legislature; nor was the context of the words in issue appropriately recognized. I now turn to a discussion of these issues.

In *Machtinger v. HOJ Industries Ltd.*, [1992] 1 S.C.R. 986, at p. 1002, the majority of this Court recognized the importance that our society accords to employment and the fundamental role that it has assumed in the life of the individual. The manner in which employment can be terminated was said to be equally important (see also *Wallace v. United Grain Growers Ltd.*, [1997] 3 S.C.R. 701). It was in this context that the majority in *Machtinger* described, at p. 1003, the object of the *ESA* as being the protection of “... the interests of employees by requiring employers to comply with

1990)), Elmer Driedger dans son ouvrage intitulé *Construction of Statutes* (2^e éd. 1983) résume le mieux la méthode que je privilégie. Il reconnaît que l’interprétation législative ne peut pas être fondée sur le seul libellé du texte de loi. À la p. 87, il dit:

[TRADUCTION] Aujourd’hui il n’y a qu’un seul principe ou solution: il faut lire les termes d’une loi dans leur contexte global en suivant le sens ordinaire et grammatical qui s’harmonise avec l’esprit de la loi, l’objet de la loi et l’intention du législateur.

Parmi les arrêts récents qui ont cité le passage ci-dessus en l’approuvant, mentionnons: *R. c. Hydro-Québec*, [1997] 1 R.C.S. 213; *Banque Royale du Canada c. Sparrow Electric Corp.*, [1997] 1 R.C.S. 411; *Verdun c. Banque Toronto-Dominion*, [1996] 3 R.C.S. 550; *Friesen c. Canada*, [1995] 3 R.C.S. 103.

Je m’appuie également sur l’art. 10 de la *Loi d’interprétation*, L.R.O. 1980, ch. 219, qui prévoit que les lois «sont réputées apporter une solution de droit» et doivent «s’interpréter de la manière la plus équitable et la plus large qui soit pour garantir la réalisation de leur objet selon leurs sens, intention et esprit véritables».

Bien que la Cour d’appel ait examiné le sens ordinaire des dispositions en question dans le présent pourvoi, en toute déférence, je crois que la cour n’a pas accordé suffisamment d’attention à l’économie de la *LNE*, à son objet ni à l’intention du législateur; le contexte des mots en cause n’a pas non plus été pris en compte adéquatement. Je passe maintenant à l’analyse de ces questions.

Dans l’arrêt *Machtinger c. HOJ Industries Ltd.*, [1992] 1 R.C.S. 986, à la p. 1002, notre Cour, à la majorité, a reconnu l’importance que notre société accorde à l’emploi et le rôle fondamental qu’il joue dans la vie de chaque individu. La manière de mettre fin à un emploi a été considérée comme étant tout aussi importante (voir également *Wallace c. United Grain Growers Ltd.*, [1997] 3 R.C.S. 701). C’est dans ce contexte que les juges majoritaires dans l’arrêt *Machtinger* ont défini, à la p. 1003, l’objet de la *LNE* comme étant la protection «... [d]es intérêts des employés en exigeant que

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TAB E

TELUS Communications Inc. *Appellant*

v.

Avraham Wellman *Respondent*

and

**Attorney General of British Columbia,
ADR Chambers Inc.,
Canadian Chamber of Commerce,
Public Interest Advocacy Centre,
Consumers Council of Canada,
Canadian Federation of Independent
Business, Samuelson-Glushko Canadian
Internet Policy and Public Interest Clinic
and Consumers' Association of Canada**
Interveners

**INDEXED AS: TELUS COMMUNICATIONS INC. v.
WELLMAN**

2019 SCC 19

File No.: 37722.

2018: November 6; 2019: April 4.

Present: Wagner C.J. and Abella, Moldaver,
Karakatsanis, Gascon, Côté, Brown, Rowe and
Martin JJ.

**ON APPEAL FROM THE COURT OF APPEAL FOR
ONTARIO**

Civil procedure — Stay — Class actions — Consumer and non-consumer claims — Arbitration clause — Customer filing class action for damages alleging cell phone service provider engaged in deceptive practices — Class consisting of both consumers and non-consumers — Cell phone service provider's standard terms and conditions containing mandatory arbitration clause — Arbitration clause invalidated by provincial consumer protection legislation with respect to claims by consumers — Cell phone service provider relying on arbitration clause to seek stay of proceedings with respect to non-consumers' claims — Whether provincial statute governing arbitration grants court discretion to refuse to stay non-consumers' claims — Arbitration Act, 1991, S.O. 1991,

TELUS Communications Inc. *Appelante*

c.

Avraham Wellman *Intimé*

et

**Procureur général de la Colombie-
Britannique, ADR Chambers Inc.,
Chambre de commerce du Canada,
Centre pour la défense de l'intérêt public,
Consumers Council of Canada,
Fédération canadienne de
l'entreprise indépendante,
Clinique d'intérêt public et de politique
d'internet du Canada Samuelson-Glushko et
Association des consommateurs du Canada**
Intervenants

**RÉPERTORIÉ : TELUS COMMUNICATIONS INC.
c. WELLMAN**

2019 CSC 19

N° du greffe : 37722.

2018 : 6 novembre; 2019 : 4 avril.

Présents : Le juge en chef Wagner et les juges Abella,
Moldaver, Karakatsanis, Gascon, Côté, Brown, Rowe et
Martin.

**EN APPEL DE LA COUR D'APPEL DE
L'ONTARIO**

Procédure civile — Sursis — Recours collectifs — Réclamations de consommateurs et de non-consommateurs — Clause d'arbitrage — Dépôt par un consommateur d'un recours collectif en dommages-intérêts pour pratiques trompeuses alléguées de la part d'un fournisseur de services de téléphonie cellulaire — Groupe formé à la fois de consommateurs et de non-consommateurs — Clause d'arbitrage obligatoire parmi les conditions types du contrat du fournisseur de services de téléphonie cellulaire — Clause d'arbitrage invalidée par une loi provinciale de protection des consommateurs en ce qui a trait aux réclamations des consommateurs — Clause d'arbitrage invoquée par le fournisseur de services de téléphonie cellulaire pour obtenir le sursis des procédures en ce qui

costs award made by the Superior Court and order that the parties bear their own costs in that court.

The reasons of Wagner C.J. and Abella, Karakatsanis and Martin JJ. were delivered by

[106] ABELLA AND KARAKATSANIS JJ. (dissenting) — This appeal involves a class action against TELUS Communications Inc. The mandatory, non-negotiable contract which all purchasers of TELUS cell phone plans must sign, requires individual arbitration for any claim, and prevents court remedies such as class actions. Legislation in Ontario exempts consumers from the operation of these compulsory arbitration clauses. Businesses, on the other hand, no matter their size, and even if they are pursuing identical claims as consumers, can be caught by the operation of the arbitration clause in the contract. The Ontario courts, however, have recognized the denial of access to justice created by this disparity and have interpreted the *Arbitration Act, 1991* in a way that gives a court discretion to redress this anomaly and allow both sets of claimants to access a class action.

[107] Statutory interpretation is the art of inferring what words mean. Sometimes the meaning is obvious, either because of the clarity of the language or of its relationship to the legislative context. But sometimes interpreting words literally in isolation, undermines the policy objectives of the statutory scheme. The debate between those who are “textualists” and those who are “intentionalists” was resolved in Canada in 1998 when this Court decided that “there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament.”⁸ We do

⁸ Elmer Driedger in *Construction of Statutes* (2nd ed. 1983), at p. 87, cited in *Rizzo & Rizzo Shoes Ltd. (Re)*, [1998] 1 S.C.R. 27, at para. 21.

TELUS les dépens en Cour supérieure. Je suis donc d’avis d’annuler l’ordonnance quant aux dépens rendue par la Cour supérieure et d’ordonner que chaque partie assume ses propres dépens devant cette cour.

Version française des motifs du juge en chef Wagner et des juges Abella, Karakatsanis et Martin rendus par

[106] LES JUGES ABELLA ET KARAKATSANIS (dissidentes) — Le présent pourvoi concerne un recours collectif contre TELUS Communications Inc. Le contrat obligatoire et non négociable que doivent signer tous les acheteurs de forfaits de téléphonie cellulaire TELUS exige l’arbitrage individuel pour toutes les réclamations, et empêche la formation de recours judiciaires comme le recours collectif. La loi ontarienne soustrait les consommateurs à l’application de ces clauses d’arbitrage obligatoire. Cependant, les entreprises, peu importe leur taille, et même si elles présentent des réclamations identiques à celles des consommateurs, peuvent être assujetties à l’application de la clause d’arbitrage prévue dans le contrat. Les tribunaux de l’Ontario ont toutefois reconnu le déni d’accès à la justice que créait cette disparité et ont interprété la *Loi de 1991 sur l’arbitrage* de manière à ce que les tribunaux aient le pouvoir discrétionnaire de corriger cette anomalie et de permettre aux deux catégories de demandeurs d’exercer un recours collectif.

[107] L’interprétation législative est l’art de déduire le sens des mots. Celui-ci est parfois évident, que ce soit en raison de la clarté du libellé ou de son lien avec le contexte législatif. Parfois, cependant, l’interprétation littérale des mots pris isolément compromet les objectifs de politique générale du régime législatif. La Cour suprême a réglé, en 1998, le débat au Canada entre les « textualistes » et les « intentionnalistes » lorsqu’elle a décidé qu’« il n’y a qu’un seul principe ou solution : il faut lire les termes d’une loi dans leur contexte global en suivant le sens ordinaire et grammatical qui s’harmonise avec l’esprit de la loi, l’objet de la loi et l’intention du législateur⁸ ». Nous ne faisons pas

⁸ Elmer Driedger dans *Construction of Statutes* (2^e éd. 1983), p. 87, cité dans *Rizzo & Rizzo Shoes Ltd. (Re)*, [1998] 1 R.C.S. 27, par. 21.

not just look at the words. Moreover, in Ontario all statutes are to be read in accordance with s. 64(1) of the *Legislation Act, 2006*, S.O. 2006, c. 21, Sched. F., which states that: “An Act shall be interpreted as being remedial and shall be given such fair, large and liberal interpretation as best ensures the attainment of its objects.”

[108] In other words, words matter, policy objectives matter, and consequences matter.

[109] The majority’s approach, with respect, in effect represents the return of textualism. The words have been permitted to dominate and extinguish the contextual policy objectives of both the *Arbitration Act, 1991*, S.O. 1991, c. 17, and the *Class Proceedings Act, 1992*, S.O. 1992, c. 6, creating a dispute-resolution universe that has the effect of forcing litigants to spend thousands of dollars to resolve a dispute worth a fraction of that cost; denies others meaningful access to a remedy if they are not prepared, or cannot afford to, engage in a cost-benefit losing proposition; and invites the very proliferation of proceedings a class action was invented to avoid. The result of these disincentives is that business consumers will simply not enforce their rights.

[110] That is why the Ontario Court of Appeal has consistently interpreted the words of s. 7(5) of the *Arbitration Act, 1991* in a way that avoids the unpalatable consequences while invigorating the purposes and effective functioning of the relevant legislative schemes. This aligns with the Court’s modern approach to statutory interpretation and should, as a result, be endorsed by this Court.

[111] The Ontario Legislature enacted the *Arbitration Act, 1991*, to allow willing parties to pursue arbitration as an alternate form of dispute resolution. To ensure expedient resolution and lower litigation

qu’observer les mots. De plus, en Ontario, toutes les lois doivent être interprétées en tenant compte du par. 64(1) de la *Loi de 2006 sur la législation*, L.O. 2006, c. 21, ann. F, qui prévoit que « [l]a loi est censée apporter une solution de droit et s’interprète de la manière la plus équitable et la plus large qui soit compatible avec la réalisation de ses objets. »

[108] Autrement dit, les mots comptent, les objectifs de politique générale comptent et les conséquences comptent.

[109] Soit dit en tout respect, l’approche des juges majoritaires représente en réalité le retour du textualisme. Les mots ont dominé et supprimé les objectifs contextuels de politique générale à la fois de la *Loi de 1991 sur l’arbitrage*, L.O. 1991, c. 17, et de la *Loi de 1992 sur les recours collectifs*, L.O. 1992, c. 6, créant de cette façon un univers de règlement des différends qui a pour effet de contraindre les parties à un litige à dépenser des milliers de dollars en vue de régler un différend qui ne vaut qu’une fraction de ce coût; de priver d’autres personnes d’un accès concret à un recours si elles ne sont pas préparées ou ne peuvent se permettre de prendre part à une affaire où elles perdraient sur le plan des coûts et des bénéfices; et de susciter la multiplication d’instances, ce que le recours collectif visait justement à éviter. Ces facteurs dissuasifs ont pour résultat que les clients commerciaux ne feront tout simplement pas valoir leurs droits.

[110] C’est pourquoi la Cour d’appel de l’Ontario a toujours interprété le libellé du par. 7(5) de la *Loi de 1991 sur l’arbitrage* de façon à éviter les conséquences inacceptables tout en renforçant les objets et le fonctionnement efficace des régimes législatifs pertinents. Cette façon de faire est conforme à la méthode moderne d’interprétation législative de notre Cour, et devrait, en conséquence, être entérinée par celle-ci.

[111] Le législateur ontarien a adopté la *Loi de 1991 sur l’arbitrage* pour permettre aux parties qui le souhaitent de recourir à l’arbitrage comme autre forme de règlement des différends. Afin d’assurer

TAB F

Minister of Citizenship and Immigration
Appellant

v.

Alexander Vavilov *Respondent*

and

**Attorney General of Ontario,
Attorney General of Quebec,
Attorney General of British Columbia,
Attorney General of Saskatchewan,
Canadian Council for Refugees,
Advocacy Centre for Tenants Ontario -
Tenant Duty Counsel Program,
Ontario Securities Commission,
British Columbia Securities Commission,
Alberta Securities Commission,
Ecojustice Canada Society,
Workplace Safety and Insurance
Appeals Tribunal (Ontario),
Workers' Compensation Appeals Tribunal
(Northwest Territories and Nunavut),
Workers' Compensation Appeals
Tribunal (Nova Scotia),
Appeals Commission for Alberta
Workers' Compensation,
Workers' Compensation Appeals
Tribunal (New Brunswick),
British Columbia International Commercial
Arbitration Centre Foundation,
Council of Canadian Administrative Tribunals,
National Academy of Arbitrators,
Ontario Labour-Management
Arbitrators' Association,
Conférence des arbitres du Québec,
Canadian Labour Congress,
National Association of Pharmacy
Regulatory Authorities,
Queen's Prison Law Clinic,
Advocates for the Rule of Law,
Parkdale Community Legal Services,
Cambridge Comparative
Administrative Law Forum,**

**Ministre de la Citoyenneté et de
l'Immigration** *Appelant*

c.

Alexander Vavilov *Intimé*

et

**Procureur général de l'Ontario,
procureure générale du Québec,
procureur général de
la Colombie-Britannique,
procureur général de la Saskatchewan,
Conseil canadien pour les réfugiés,
Centre ontarien de défense des droits
des locataires - Programme d'avocats de
service en droit du logement,
Commission des valeurs mobilières de l'Ontario,
British Columbia Securities Commission,
Alberta Securities Commission,
Ecojustice Canada Society,
Tribunal d'appel de la sécurité professionnelle
et de l'assurance contre les accidents
du travail (Ontario),
Workers' Compensation Appeals Tribunal
(Territoires du Nord-Ouest et Nunavut),
Tribunal d'appel des décisions de la Commission
des accidents du travail de la Nouvelle-Écosse,
Appeals Commission for Alberta
Workers' Compensation,
Tribunal d'appel des accidents au
travail (Nouveau-Brunswick),
British Columbia International Commercial
Arbitration Centre Foundation,
Conseil des tribunaux administratifs canadiens,
National Academy of Arbitrators,
Ontario Labour-Management
Arbitrators' Association,
Conférence des arbitres du Québec,
Congrès du travail du Canada,
Association nationale des organismes de
réglementation de la pharmacie,
Queen's Prison Law Clinic,
Advocates for the Rule of Law,**

of appeal under the pragmatic and functional approach.

[44] More generally, there is no convincing reason to presume that legislatures mean something entirely different when they use the word “appeal” in an administrative law statute than they do in, for example, a criminal or commercial law context. Accepting that the word “appeal” refers to the same type of procedure in all these contexts also accords with the presumption of consistent expression, according to which the legislature is presumed to use language such that the same words have the same meaning both within a statute and across statutes: R. Sullivan, *Sullivan on the Construction of Statutes* (6th ed. 2014), at p. 217. Accepting that the legislature intends an appellate standard of review to be applied when it uses the word “appeal” also helps to explain why many statutes provide for both appeal and judicial review mechanisms in different contexts, thereby indicating two roles for reviewing courts: see, e.g., *Federal Courts Act*, R.S.C. 1985, c. F-7, ss. 27 and 28. This offers further support for giving effect to statutory rights of appeal. Our colleagues’ suggestion that our position in this regard “hinges” on what they call a “textualist argument” (at para. 246) is inaccurate.

[45] That there is no principled rationale for ignoring statutory appeal mechanisms becomes obvious when the broader context of those mechanisms is considered. The existence of a limited right of appeal, such as a right of appeal on questions of law or a right of appeal with leave of a court, does not preclude a court from considering other aspects of a decision in a judicial review proceeding. However, if the same standards of review applied regardless of whether a question was covered by the appeal provision, and regardless of whether an individual subject to an administrative decision was granted leave to appeal or applied for judicial review, the appeal provision would be completely redundant — contrary to the well-established principle that the legislature

que joue le droit d’appel accordé par la loi dans la détermination de la norme de contrôle applicable et n’ont pas parlé du traitement réservé autrefois aux droits d’appel de cette nature par l’approche pragmatique et fonctionnelle.

[44] De façon plus générale, il n’y a aucune raison convaincante de présumer que le législateur voulait que le mot « appel » revête un sens tout à fait différent dans une loi à caractère administratif que, par exemple, dans un contexte du droit criminel ou commercial. Accepter que le mot « appel » porte sur le même type de procédure dans tous ces contextes s’accorde également avec la présomption d’uniformité d’expression, selon laquelle le législateur est présumé employer des mots de telle sorte que les mêmes termes ont le même sens, dans une même loi ainsi que d’une loi à l’autre : R. Sullivan, *Sullivan on the Construction of Statutes* (6^e éd. 2014), p. 217. Le fait de tenir pour acquis que le législateur entend par « appel » le recours à une norme de contrôle applicable en appel permet également d’expliquer pourquoi bon nombre de textes législatifs prévoient à la fois des mécanismes d’appel et de contrôle judiciaire dans différents contextes, conférant ainsi deux rôles possibles aux cours de révision : voir, p. ex., la *Loi sur les Cours fédérales*, L.R.C. 1985, c. F-7, art. 27 et 28. Cela vient renforcer l’idée qu’il est nécessaire de donner effet aux droits d’appel conférés par la loi. La suggestion de nos collègues que notre position à cet égard « repose » sur ce qu’elles appellent un « argument textuel » (par. 246) est inexacte.

[45] L’examen du contexte général des mécanismes d’appel prévus par la loi fait ressortir l’absence de justification rationnelle au fait de ne pas tenir compte de ceux-ci. Ainsi, l’existence d’un droit d’appel circonscrit, par exemple sur des questions de droit ou sur autorisation judiciaire, ne fait pas obstacle à l’examen d’autres éléments de la décision par voie de contrôle judiciaire. Par contre, si les mêmes normes de contrôle s’appliquaient, que la question en cause soit visée ou non par le droit d’appel ou que la personne faisant l’objet de la décision administrative ait obtenu ou non l’autorisation d’interjeter appel ou ait présenté ou non une demande de contrôle judiciaire, la disposition créant le droit d’appel serait alors tout à fait redondante. Or, cela serait contraire

TAB G

**ALBERTA
ENVIRONMENTAL APPEALS BOARD**

Decision

Date of Decision – May 31, 2022

IN THE MATTER OF sections 91, 92, 95, and 101 of the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12, and section 115 of the *Water Act*, R.S.A. 2000, c. W-3;

-and-

IN THE MATTER OF appeals filed with respect to the decision of the Director, South Saskatchewan Region, Operations Division, Alberta Environment and Parks, to issue *Water Act* Approval No. 00406489-00-00 to Badlands Recreation Development Corp.

Cite as: *McMillan et al. v. Director, South Saskatchewan Region, Operations Division, Alberta Environment and Parks, re: Badlands Recreation Development Corp* (31 May 2022), Appeal Nos. 19-066 to 071, 074, 081, and 083-085-ID4 (A.E.A.B.), 2022 ABEAB 22.

3. whether the person demonstrated on a *prima facie* basis the impact on the identified interest was direct.

For a person to be directly affected, they must meet all three components.

[57] With respect to the interest being asserted that would be directly affected, it is important to remember that in *Kostuch*, at paragraph 28, the Board stated, "...the word 'directly' requires the Appellant establish, where possible to do so, a direct personal or private interest (economic, environmental or otherwise) that will be impacted or proximately caused by the Approval in question." However, as confirmed in *Normtek*, the qualifying interests might come from a number of sources, including the appellant's use of the natural resource in the vicinity of the approved activity and adverse effects on the appellant's economic, cultural, safety, or human health-related interests, or property rights. In *Kostuch*, at paragraph 34, one of the considerations was the interest of a directly affected person had to be greater than "the abstract interest of all Albertans in generalized goals of environmental protection."

[58] Trying to define in advance or limit the circumstances in which an appellant might be found directly affected is to be avoided.¹⁹ The Board will interpret directly affected as limiting the class of persons who can appeal a Director's decision.²⁰ However, the Board retains broad discretion to determine who is directly affected.²¹ *Normtek* and other decisions provide several principles that will guide the Board's application of its directly affected test:

1. The Board will determine the directly affected status of an appellant on a case-by-case basis, considering the varying circumstances and facts of each appeal;
2. The Board will examine the adverse effects alleged by the appellant of the Director's decision or the activity authorized by the Director's decision on (a) the environment, (b) human health, (c) safety, or (d) property interests. The Board may also examine (a) social, (b) economic, and (c) cultural

PRIMA FACIE EVIDENCE: ... [E]vidence that is (1) an established fact but not conclusive, or (2) supportive of a judgement until the presentation of contradictory evidence."

¹⁹ *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraph 78.

²⁰ *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraph 77.

²¹ *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraph 78.

impacts alleged by the appellants of the Director's decision or the activity authorized by the Director's decision if those impacts directly affect the appellant's identified interests;²²

3. The Board will examine the harm to a natural resource, which an appellant uses, or harm to an appellant's use of a natural resource. This may be sufficient to find an appellant directly affected, but it is not a prerequisite to establishing an appellant is directly affected where other adverse effects are alleged;
4. The Board will interpret "directly" as meaning the Director's decision must have a clear and uninterrupted chain of cause and effect, which links the decision to the appellant's identified interest. The effect must be one that will occur immediately or without delay and not at an undetermined time in the future. Some types of future harm, but not all, may be too remote or speculative to be considered direct;²³
5. The Board will interpret "affected" as meaning the Director's decision or the activity authorized by the Director's decision will harm or impair the appellant's identified interests.²⁴ Directly affected connotes an adverse impact;²⁵
6. The Board will consider the nature and merits of the appellant's notice of appeal when considering if they are adversely affected by the Director's decision or the activity authorized by the Director's decision.²⁶ The appellant must provide *prima facie* evidence to support their position they

²² *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraphs 79, 83, 85, and 135.

²³ *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraphs 79 and 81. As discussed in *Normtek*, the adverb "directly" restricts or limits the effects that can give rise to standing. The *Concise Oxford Dictionary* defines "directly" as meaning "in a direct manner." It defines "direct" as "straight, not crooked or roundabout, following an uninterrupted chain of causes and effect." There also appears to be a temporal aspect to "direct" and "directly." "Direct" is defined as "immediate." Further, "directly" is defined as "at once, without delay."

²⁴ *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraph 79; which cites *Bildson v. Acting Director of North Eastern Slopes Region, Alberta Environmental Protection, re: Smoky River Coal Limited* (19 October 1998), Appeal No. 98-230-D, (A.E.A.B.), 1998 ABEAB 42, at paragraph 25. The *Concise Oxford Dictionary* defines the adjective "affected" as "acting on physically" or "producing a material effect on." The Court in *Normtek* agreed with the Board previously defining "affected" as meaning "harmed or impaired."

²⁵ *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraph 79.

²⁶ *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraph 135.

are directly affected.²⁷ This evidence need only establish a reasonable possibility they will be directly affected;²⁸ and

7. The Board may summarily dismiss a notice of appeal where it determines the appellant is not directly affected, but such summary dismissal can only be made after there has been some consideration of the merits of the appellant's appeal.²⁹

[59] The Board will apply these principles to its reconsideration of the directly affected status of each of the Applicants.

[60] The Board finds it must determine the issue of standing of the Applicants as a preliminary matter in this proceeding, given this issue is core to the motion before it. In the Board's view, it has no authority under EPEA to grant provisional standing to the Applicants. The case law is clear. The issue of standing must be decided first before the merits can be decided.

[61] The Board must also address: "How should the Director's decision on directly affected be considered in the Board's decision-making on directly affected?"

[62] The Applicants argued the Board should not be applying an interpretation of directly affected that is more limited than the Director's interpretation. They submitted only Ms. Shauna Murphy and Mr. Jon Groves were not found to be directly affected by the Director. The Applicants stated the Director held that Ms. Della Poulsen, Ms. Ruth Bellamy, Ms. Shauna Kenworthy, and their corporate entities were each directly affected.

[63] The Approval Holder and Director made no submissions on this issue.

[64] Section 115(1)(a)(i) of the *Water Act* stipulates two requirements to file a valid Notice of Appeal in response to the Director's decision to issue the Approval:

²⁷ *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraph 140, and Rule 29 of the Board's *Rules of Practice*.

²⁸ *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraph 141. This paragraph referred to *Mizera et al. v. Director, Northeast Boreal and Parkland Regions, Alberta Environmental Protection*, re: *Beaver Regional Waste Management Services Commission* (21 December 1998), Appeal Nos. 98-231-98-234-D, at paragraphs 24 and 26, and relied on *Leduc (No 25) v. Local Authorities Board* (1987), 84 AR 361 at paragraphs 11 and 12, 54 Alta LR (2d) 396 (ABCA).

²⁹ *Normtek Radiation Services Ltd. v. Alberta Environmental Appeal Board*, 2020 ABCA 456, at paragraph 136.

1. the person filing the Notice of Appeal must have filed a Statement of Concern; and
2. the person filing the Notice of Appeal must be directly affected.

[65] The Applicants met the first part of the test under section 115(1)(a)(i) of the *Water Act* – the requirement to file a Statement of Concern under section 109(1)(a). However, before a Statement of Concern is considered valid, the Director determines if the person filing the Statement of Concern is directly affected. Section 109(1)(a) of the *Water Act* reads as follows:

“If notice is provided

- (a) under section 108(1), any person who is directly affected by the application or proposed amendment ...

may submit to the Director a written statement of concern setting out that person’s concerns with respect to the application or proposed amendment.”

[66] The Board notes the Director accepted the Statements of Concern of Ms. Della Poulsen, Ms. Ruth Bellamy, Ms. Shauna Kenworthy, and their corporate entities on the basis that, in his view, they were directly affected. However, the Director did not accept the Statements of Concern of Ms. Shauna Murphy, Mr. Patrick Murphy, and Mr. Jon Groves on the basis that, in his view, they were not directly affected.

[67] The Board has previously noted in *Ouimet et al. v. Director, Regional Support, Northeast Boreal Region, Regional Services, Alberta Environment, re: Ouellette Packers (2000) Ltd.*, (28 January 2002) Appeal No. 01-076-D, 2002 ABEAB 1:

“[24] ...the decision-making function of the Director and the appellate function of the Board are different and that in keeping with this, it is appropriate for the Director to apply a more inclusive test with respect to directly affected than is applied by the Board. The purpose of the directly affected test with respect to the Statement of Concern process, and the Director’s decision, is to promote good decision-making taking into account a broad range of interests. The process that the Director is engaged in is non-adversarial information collection – he is collecting information regarding the views and concerns of a broad range of parties to assist him in making a decision....”

[68] The Director’s more inclusive approach to directly affected, for the purposes of his decisions, was entirely appropriate. In fact, it is to be encouraged and is in keeping with section 2 of the *Water Act*.

[69] The purpose of Statements of Concern and the Director’s decision-making process are reflected in the “Administrative Policy: Statements of Concern (2014),” which is found at Tab 22 of the Director’s Record. This policy, established by Alberta Environment and Sustainable Resource Development (now Alberta Environment and Parks (“AEP”)), states:

“... The purpose of [a Statement of Concern] is to notify the Director and the project proponent of the person’s concerns and to preserve the person’s right to file an appeal following the Director’s decision on the application or proposed amendment....

To be considered [a Statement of Concern], the submission must relate to the application or proposed amendment and must identify specific concern(s) with the application or proposed amendment.

Specific Considerations

Below is a listing of criteria to determine if [a Statement of Concern] should be considered valid.

| | |
|-------------------|---|
| Directly Affected | The person must demonstrate: 1. The application or proposed amendment will affect the person 2. The effect will be to the person; 3. The effect will be direct; and 4. There is a reasonable probability of the effect occurring. |
| ... | |

Considerable judgement needs to be exercised in determining what constitutes a valid [Statement of Concern] and where there is any doubt the submission should be considered [a Statement of Concern]....”

[70] The purpose of the directly affected test *vis-a-vis* the Board is somewhat different. The Board’s decision respecting directly affected determines whether a person (or, in this case, the Applicants) has a right to appeal. As a quasi-judicial body, the Board must follow the Court of Appeal’s decision in *Normtek*, and other court decisions regarding standing, and not the

Director's decisions, which were made prior to *Normtek*. It is important to note that the Board's appeal proceedings are more adversarial.

[71] The Board made its determination as to whether the Applicants were directly affected after a full submission process. As part of the Board's process, the Applicants provided their Notices of Appeal and an initial submission arguing how they were each directly affected. They had previously submitted Statements of Concern to the Director. Subsequently, the Approval Holder and Director provided their responses to the Applicants' submissions. Finally, the Applicants provided their rebuttal to the Approval Holder's and Director's submissions. As a result, the Board has more information than when the Director made his decisions.

[72] Having regard to the above, the Board's interpretation of the directly affected status for each of the Applicants must be based on the standing test guided by the principles identified in *Normtek* and other court decisions, and not the Director's interpretation.

[73] The Board must determine: "Are the Applicants directly affected by the Director's decision to issue the Approval, given the guidance set out in *Normtek*?"

[74] The Applicants stated the Board decided in *Reiffenstein* that the onus was on them to show they were directly affected. However, they argued the only onus Rule 29 of the Board's *Rules of Practice* imposed on them was to adduce evidence in support of their position that they were directly affected. The Applicant referred to paragraph 140 of *Normtek*.

[75] The Approval Holder did not file any submissions in response to the Applicants' submissions. Further, the Director made no submissions on this issue.

1. Ms. Elaine Bellamy and Will Farms Ltd.

i. Submissions

[76] Ms. Bellamy is the owner of Will Farms Ltd. Ms. Bellamy and Will Farms Ltd. own property in and around the Rosebud River Valley. One parcel of land is diagonally opposite and immediately east of the Approval Holder's property.

[77] By an application dated May 18, 2020, Ms. Bellamy applied to have a conservation easement placed on approximately 3,200 acres of her land in the Rosebud River

TAB H

ALBERTA ENVIRONMENTAL APPEALS BOARD

Decision

Date of Decision – June 1, 2023

IN THE MATTER OF sections 91, 92, and 95 of the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12, and section 115 of the *Water Act*, R.S.A. 2000, c. W-3;

-and-

IN THE MATTER OF appeals filed by Mary Ellen Jeans-Moline and Melvin Moline, Melanie Parker and Charles Parker, Debbie Stephenson Nesbitt and Bruce Nesbitt, the Chickakoo Lake Area Stewardship Society, the Chickakoo Water Protection Group, Deborah Bloomer, Shelley Gordon, Susanne Greenhowe-Weis, Genevieve Olivier, Leanne Warrenchuk, Amy Garrison, Courtney Dahl and Bryan Dahl, Karen Fisher and Ed Fisher, Heather Warrenchuk, Tyler Lawrence, Melanie Silliphant, Mike Hillaby and Misty Tomashewsky Hillaby, Rachel Melynychuk and Michael Melynychuk, Tracy Shoup and Mark Shoup, Kate Meads and Kel Meads, Warren Kudras, Michael Fyk, Vern Trimble and Buffy Trimble, Brian Skov and Shelley Gordon, James Sorenson, Leah Vanderjagt, Heidi Hoflin, Wendy Tiemer, Louis Babin and Rochelle Chamczuk, Tom Hughes, Kate Polkovsky, Barbara Riczu and Brent Riczu, Tina Leblanc, James Steven, Tim Wimbleton, Rochelle Chamczuk, Sheila Perdue, and Colin LeBray with respect to the decision of the Director, North Region, Regulatory Assurance Division, Alberta Environment and Parks, to issue *Water Act* Licence No. 00469305-00-00 to the Canadian Carmelite Charitable Society Inc.

Cite as: Standing Decision: *Jeans-Moline et al. v. Director, North Region, Regulatory Assurance Division, Alberta Environment and Parks, re: Canadian Carmelite Charitable Society Inc.* (1 June 2023), Appeal Nos. 21-025-026 and 22-001-034, 036-037-ID1 (A.E.A.B.), 2023 ABEAB 9.

position that they are directly affected. This evidence need only establish a reasonable possibility they will be directly affected.

7. **Summary dismissal.** The Board may summarily dismiss a notice of appeal where it determines that the appellant is not directly affected, but such summary dismissal can only be made after there has been some consideration of the merits of the appellant's appeal.

[76] The Board has previously considered standing of a community group to bring an appeal before the Board. In *Hazeldean Community League v. Alberta (Director, Air & Water Approvals Division, Environmental Protection)*,⁴⁵ the residents of the community in the immediate vicinity of a facility were concerned that the emissions to the atmosphere from the facility would affect them, and they had no choice but to breathe the ambient air. The Board found that, unlike the quality of water which leaves the ultimate choice (to drink or not) to the user, there was no real option to breathing the ambient air.

[77] The Board considered how an appellant can discharge the onus of proving that he or she is directly affected when the nature of air emissions is such that all residents within the impact area may be directly affected to the same degree. Noting the risk in such situations that no person would have standing to appeal, because of their inability to differentiate the effect upon them from their neighbour's, the Board held that it would be unreasonable and contrary to the intent of the Act to deny standing in such cases. On the facts of that case, the Board found the community group to be directly affected, and its notice of appeal valid, because the individual members of the affected group would have surely had standing in their own right.

[78] In *Kostuch v. Alberta (Director, Air & Water Approvals Division, Environmental Protection)*,⁴⁶ the Board considered an argument that the appellant was not differentially affected from the general community in the area. The Board noted that while the point is significant, it is not determinative in every case. The Board confirmed that it would be unreasonable to deny standing where the adverse impacts are common to a group of people living in close proximity to the source of that impact, and the nature of the impact renders it impossible to prove or to differentiate impacts between individuals who would clearly be directly affected. The Board

⁴⁵ *Hazeldean Community League v. Alberta (Director, Air & Water Approvals Division, Environmental Protection)*, 1995 ABEAB 9 (11 May 1995), Appeal No. 95-002 (A.E.A.B.), at page 4.

⁴⁶ *Kostuch v. Alberta (Director, Air & Water Approvals Division, Environmental Protection)*, 1995 ABEAB 16.

reiterated that denying standing in such cases would mean that nobody could question widespread events that generate direct effect on groups of individuals or an entire community.

[79] In *Jericho v. Director, Southern Region, Regional Services, Alberta Environment re: St. Mary River Irrigation District*,⁴⁷ the Board considered a group appeal by the Southern Alberta Environmental Group (“SAEG”) to an amendment of a water licence. The Board noted that the cornerstone of the previous cases before it was the factual impact of the proposed project on individuals. A single group Notice of Appeal usually does not contain sufficient information to determine whether the individual members of the group are directly affected.

[80] The Board noted that while it is acceptable for a group or an organization to file an appeal, individual members of the organization should also file an appeal, either jointly with the organization, or separately, to demonstrate the personal impact required by section 115 of the *Water Act*. As a result, the Board encourages groups to file both as an organization and as individual members.⁴⁸

[81] The Board also noted that it has been the exception rather than the general rule to have a group deemed to be directly affected. While those exceptions exist, such as *Hazeldean*, the Board will need to be clearly convinced that the majority of the individual members of the organization are individually and personally impacted by the project. It is not enough for a group to show that more than half of its membership “supports” the filing of an appeal, the group must show that more than half of its membership is directly affected by the Director’s decision.⁴⁹ Therefore, in that case, for the Board to accept SAEG as directly affected, SAEG had to prove that over half of its 77 individual members were directly affected.⁵⁰

[82] The Board also determined that in cases where only an individual member or members of a group can meet the directly affected test, they can have an organization or association

⁴⁷ *Jericho v. Director, Southern Region, Regional Services, Alberta Environment re: St. Mary River Irrigation District*, 2004 ABEAB 57, (4 November 2004) Appeal Nos. 03-145 and 03-154-D, at paras. 70 to 71, and 110 to 123.

⁴⁸ See also *Bailey et al. v. Director, Northern East Slopes Region, Environmental Service, Alberta Environment, re: TransAlta Utilities Corporation*, 2001 ABEAB 10, (2001), 38 C.E.L.R. (N.S.) 68, Appeals No. 00-074, 075, 077, 078, 01-001-005 and 011-ID, at paras 52 and 53.

⁴⁹ *Jericho v. Director, Southern Region, Regional Services, Alberta Environment re: St. Mary River Irrigation District*, 2004 ABEAB 57, (4 November 2004) Appeal Nos. 03-145 and 03-154-D, at paras. 114, and 119 to 121.

⁵⁰ See also *Castle-Crown Wilderness Coalition v. Director, Southern Region, Regional Services, Alberta Environment re: Castle Mountain Resort Inc.* 2006 ABEAB 19, (8 August 2006) Appeal No. 03-144-D2 (A.E.A.B.) at paras. 145 to 180.

represent them if they wish. However, the organization or association will only be a representative of the individual or individuals, confined to the concerns expressed in the valid Notices of Appeal, and cannot argue the organization's or association's own agenda.⁵¹

[83] In *Bailey et al. v. Director, Northern East Slopes Region, Environmental Service, Alberta Environment*,⁵² the Lake Wabamun Environmental Protection Association ("LWEPA") was one of the appellants against the approval issued to TransAlta Utilities Corporation for the Wabamun Thermal Electric Power Plant. LWEPA alleged that its members were owners and occupants who made use of the lake and had been party to the approval application process with the Director and TransAlta. Upon reviewing LWEPA's membership list, the Board found that most members of LWEPA were probably riparian owners, and at least two LWEPA members were Appellants with established standing before the Board.

[84] The Board found that, in essence, LWEPA was created for the express purpose of engaging in the regulatory approval process by the lake resident owners and occupants. Most, if not all, of the members of LWEPA could have filed appeals in their own right, given their proximity to the lake.⁵³ The Board concluded that there was sufficient evidence to determine that LWEPA, whose member owners and occupants surround and use the lake, had standing as an appellant.

[85] In this decision, the Board clearly distinguishes associations or organizations that have distinctive personal or private interests separate from their members, such as property rights or other recognized interests. Each association or organization with its own distinctive personal or private interest will be considered in its own right or merit under the *EPEA* and the *Water Act*. The Board also recognizes that "person" under both pieces of legislation includes natural and non-natural persons.⁵⁴

⁵¹ See also *Graham v. Director, Chemicals Assessment and Management, Alberta Environmental Protection*, (1996) 20 C.E.L.R. (N.S.) 287, at paras. 21 to 29.

⁵² *Bailey et al. v. Director, Northern East Slopes Region, Environmental Service, Alberta Environment, re: TransAlta Utilities Corporation*, 2001 ABEAB 10, (2001), 38 C.E.L.R. (N.S.) 68, Appeals No. 00-074, 075, 077, 078, 01-001-005 and 011-ID, at paras. 47 to 56.

⁵³ *Jericho v. Director, Southern Region, Regional Services, Alberta Environment re: St. Mary River Irrigation District*, 2004 ABEAB 57, (4 November 2004) Appeal Nos. 03-145 and 03-154-D, at para. 121.

⁵⁴ *Interpretation Act*, RSA 2000, c I-8, section 28(1)(nm).

[86] The Board will consider groups, associations or organizations that have no personal or private interests distinct from their members as collective interest groups. The Board only uses the term “collective interest” to capture the various interests of all the members of the group and does not mean or equate this term with public interest.

[87] From the foregoing review, the Board confirms that it is an exception rather than the general rule to have a collective interest group, association or community deemed to be directly affected. The Board recognizes that the majority rule generally applies in organizations under various governing statutes and the *Interpretation Act*.⁵⁵ In light of the direction of the Alberta Court of Appeal in *Normtek*, the Board sets out the following framework to determine “directly affected”, in section 115(1) of the *Water Act* and section 91(1) of EPEA, when a collective interest group, association or community files an appeal before the Board. Such group, association or community appellant must meet all six parts of the following test:

1. is there a personal or private interest, consistent with the underlying policies of the applicable statutes, being asserted by persons in the group;
2. is there an adverse effect to the identified personal or private interests;
3. is the adverse effect to the identified interests direct;
4. is the direct adverse effect shared by, or common to, the persons in the group who have clearly identified interests;
5. does the nature of the adverse impact render it impossible to prove, or to differentiate, impacts between persons in the group who would clearly be directly affected; and
6. will a majority (more than half) of the persons in the group be directly affected personally and therefore have standing in their own right.⁵⁶

[88] In the following paragraphs, the Board applies the legal principles from this section to its consideration of whether the Appellants are directly affected by the Director’s decision, or the activity authorized by the Licence.

⁵⁵ *Interpretation Act*, RSA 2000, c I-8, section 17.

⁵⁶ *Jericho v. Director, Southern Region, Regional Services, Alberta Environment re: St. Mary River Irrigation District*, 2004 ABEAB 57, (4 November 2004) Appeal Nos. 03-145 and 03-154-D paras. 70 to 71, and 110 to 123. See also *Bailey et al. v. Director, Northern East Slopes Region, Environmental Service, Alberta Environment, re: TransAlta Utilities Corporation* (2001), 38 C.E.L.R. (N.S.) 68 (A.E.A.B.) at para. 53; and *Graham v. Director, Chemicals Assessment and Management, Alberta Environmental Protection*, (1996) 20 C.E.L.R. (N.S.) 287. See also *Graham v. Director, Chemicals Assessment and Management, Alberta Environmental Protection* (1997), 22 C.E.L.R. (N.S.) 141 (Alta. Q.B.) and (1997) 23 C.E.L.R. (N.S.) 165 (Alta. C.A.).

TAB I

In the Court of Appeal of Alberta

Citation: Bowden Institution v Khadr, 2015 ABCA 159

Date: 20150507
Docket: 1503-0118-A
Registry: Edmonton

Between:

**Dave Pelham, Warden of Bowden Institution
and Her Majesty the Queen**

Applicants
(Appellants)

- and -

Omar Ahmed Khadr

Respondent
(Respondent)

**Oral Reasons for Decision of
The Honourable Madam Justice Myra Bielby**

Application for Order for Stay of Enforcement of
Judicial Interim Release Pending Appeal

[7] In the decision under appeal Justice Ross observed that there was unchallenged expert evidence before her showing that Khadr's appeal is not barred by his having earlier signed a waiver of appeal rights, and that he has a strong probability of success on that appeal in the United States. She observed, however, that it is likely that the appeal, together with further appeals, will still be pending at the time of his statutory release date, and perhaps even at his warrant expiry date. Thus, if she did not grant bail, his appeal could be rendered nugatory; he would have served the entire custodial portion of his entire sentence by the time the appellate tribunal in the United States heard his appeal.

[8] Usually a candidate for bail pending appeal makes that application to a single judge of the Court of Appeal, as that is the court in which the appeal will be heard, pursuant to s 679 of the *Criminal Code*, RSC 1985, c C-46 or s 37(1) of the *Youth Criminal Justice Act*, SC 2002, c 1. Khadr did not make his application directly to a judge of this court because those statutory provisions do not apply here. He is not appealing his conviction pursuant to either of these statutes, or, indeed, to a Canadian court.

[9] Rather, he brought on his application for release under the common law provisions of *habeas corpus* and the *Canadian Charter of Rights and Freedoms* because his appeal is from convictions for offences contrary to the law of the United States and is made to an American tribunal.

[10] The Crown submitted that I had jurisdiction to grant a stay of the bail order through the combined operation of rule 14.48 of the *Alberta Rules of Court*, AR 124/2010 and rule 825 of Part 60 of the *Alberta Rules of Court*, AR 390/1968. Khadr agrees that I have jurisdiction although he disagrees that its source is rule 825 and instead argues that it arises under rule 840(3) of Part 61 of the *Alberta Rules of Court*, AR 390/368. I am satisfied that I have jurisdiction to issue a stay in this case, and I do not find it necessary to decide between the different positions as to its statutory source.

[11] The criteria for granting a stay of a decision under appeal are the same criteria as those for granting an interlocutory injunction, established by *RJR-MacDonald v Attorney General of Canada*, [1994] 1 SCR 311 [*RJR-MacDonald*]. The applicant must demonstrate that there is a serious issue to be tried, that it will suffer irreparable harm if the relief is not granted and that the balance of convenience favours the granting of a stay; see *Canadian Natural Resources Limited v Arcelormittal Tubular Products Roman SA*, 2013 ABCA 357 at para 6, 561 AR 180; *Vaccaro v Twin Cities Power, LLC*, 2014 ABCA 146. The Crown concedes that it has the onus to prove the existence of each of these factors on a balance of probabilities; see *Morrow v Zhang*, 2008 ABQB 125 at para 7, 424 AR 131; *Canada (Attorney General) v Canada (International Trade Tribunal)*, 2006 FCA 395 at para 34, 357 NR 161.

[12] In relation to the first factor, the existence of a serious issue, the questions raised by Khadr's appeal include those relating to the jurisdiction of a Canadian court to grant judicial interim release pending a Canadian offender's foreign conviction appeal, the right to seek bail

pending appeal as a principle of fundamental justice guaranteed by s 7 of the *Charter* and the chambers judge's application of the test for bail pending appeal in these circumstances. While Khadr does not concede that there is merit to any of Crown's grounds of appeal, he does concede that the threshold required for this factor has been met.

[13] The test for determining whether an appeal is arguable or not, i.e. whether it raises a serious issue, has a low threshold; see *RJR-MacDonald* at 337-38. I accept that the Crown has proven, to the required standard, that its appeal from Justice Ross's order raises serious issues to be decided.

[14] In relation to the second factor, the irreparable harm component of the test, the Crown argues that it will suffer irreparable harm if the stay is not granted, although not because Khadr is a flight or security risk if released. The Crown itself filed an affidavit from Nancy Shore, Acting Deputy Warden of the Bowden Institution where Khadr is currently housed, showing that as recently as April 20, 2015 his security level was reduced from medium security to minimum security. From all of this I therefore assume that there is little, if any, risk that he will not surrender himself back into custody when ordered to do so, should the Crown's appeal succeed. And, if it is successful, Khadr's judicial interim release will come to an end at that time, and he will return to custody. So the Crown does not claim any irreparable harm will likely arise from Khadr's actions should he be released.

[15] The Crown submits that if Khadr is released pending the Crown's appeal of Justice Ross's decision, that will (1) have a significant negative impact on the ability of other offenders in the future to secure transfer to Canada to serve the balance of sentences imposed by foreign states, or reduce the likelihood that they will agree to transfer Canadian prisoners back to Canada to serve their sentences, and (2) harm Canada's diplomatic relations with the other nations that are also parties to the *Treaty*.

[16] I am satisfied that if either of these consequences would follow Khadr's release between the date of this decision and the determination of his appeal, they would qualify as irreparable harm. The issue is whether there is adequate evidence before me to establish that these consequences will flow from Khadr's release pending appeal.

[17] The Crown did not lead evidence from any representative of the United States or any other *Treaty* partner to the effect that the release of Khadr pending his appeal to this Court will have these negative consequences. Rather, in hoping to prove irreparable harm if the stay is not imposed, the Crown relied on the affidavit evidence of Lee Redpath, Acting Director, Institutional Reintegration Operations Division, Offender Programs and Reintegration Branch with CSC. She deposes that Khadr's judicial interim release pending the Crown's appeal to this Court, may have these consequences. Other states presumably agree to transfer prisoners in the belief that the terms of the sentence imposed in the foreign state will be enforced on those terms in Canada. The granting of bail to Khadr, pending appeal, might well challenge that trust and thus reduce the likelihood of their agreeing to transfer prisoners in the future.

TAB J

RJR — MacDonald Inc. *Applicant*

v.

**The Attorney General of
Canada** *Respondent*

and

The Attorney General of Quebec
Mis-en-cause

and

**The Heart and Stroke Foundation of
Canada, the Canadian Cancer Society, the
Canadian Council on Smoking and Health,
and Physicians for a Smoke-Free
Canada** *Intervenors on the application for
interlocutory relief*

and between

Imperial Tobacco Ltd. *Applicant*

v.

**The Attorney General of
Canada** *Respondent*

and

The Attorney General of Quebec
Mis-en-cause

and

**The Heart and Stroke Foundation of
Canada, the Canadian Cancer Society, the
Canadian Council on Smoking and Health,
and Physicians for a Smoke-Free
Canada** *Intervenors on the application for
interlocutory relief*

RJR — MacDonald Inc. *Requérante*

c.

^a **Le procureur général du Canada** *Intimé*

^b et

Le procureur général du Québec
Mis en cause

^c et

^d **La Fondation des maladies du cœur du
Canada, la Société canadienne du cancer, le
Conseil canadien sur le tabagisme et la
santé, et Médecins pour un Canada sans
fumée** *Intervenants dans la demande de
redressement interlocutoire*

^e et entre

Imperial Tobacco Ltd. *Requérante*

^f c.

^g **Le procureur général du Canada** *Intimé*

et

^h **Le procureur général du Québec**
Mis en cause

et

ⁱ **La Fondation des maladies du cœur du
Canada, la Société canadienne du cancer, le
Conseil canadien sur le tabagisme et la
santé, et Médecins pour un Canada sans
fumée** *Intervenants dans la demande de
redressement interlocutoire*

Charter and might encourage a government to prolong unduly final resolution of the dispute.

Are there, then, special considerations or tests which must be applied by the courts when *Charter* violations are alleged and the interim relief which is sought involves the execution and enforceability of legislation?

Generally, the same principles should be applied by a court whether the remedy sought is an injunction or a stay. In *Metropolitan Stores*, at p. 127, Beetz J. expressed the position in these words:

A stay of proceedings and an interlocutory injunction are remedies of the same nature. In the absence of a different test prescribed by statute, they have sufficient characteristics in common to be governed by the same rules and the courts have rightly tended to apply to the granting of interlocutory stay the principles which they follow with respect to interlocutory injunctions.

We would add only that here the applicants are requesting both interlocutory (pending disposition of the appeal) and interim (for a period of one year following such disposition) relief. We will use the broader term "interlocutory relief" to describe the hybrid nature of the relief sought. The same principles apply to both forms of relief.

Metropolitan Stores adopted a three-stage test for courts to apply when considering an application for either a stay or an interlocutory injunction. First, a preliminary assessment must be made of the merits of the case to ensure that there is a serious question to be tried. Secondly, it must be determined whether the applicant would suffer irreparable harm if the application were refused. Finally, an assessment must be made as to which of the parties would suffer greater harm from the granting or refusal of the remedy pending a decision on the merits. It may be helpful to consider each aspect of the test and then apply it to the facts presented in these cases.

à prolonger indûment le règlement final des différends.

Existe-t-il alors des considérations ou des critères spéciaux que les tribunaux doivent appliquer quand on allègue la violation de la *Charte* et que le redressement provisoire demandé touche l'exécution et l'applicabilité de la loi?

Généralement, un tribunal devrait appliquer les mêmes principes, que le redressement demandé soit une injonction ou une suspension d'instance. Dans l'arrêt *Metropolitan Stores*, le juge Beetz exprime ainsi cette position (p. 127):

La suspension d'instance et l'injonction interlocutoire sont des redressements de même nature. À moins qu'un texte législatif ne prescrive un critère différent, elles ont suffisamment de traits en commun pour qu'elles soient assujetties aux mêmes règles et c'est avec raison que les tribunaux ont eu tendance à appliquer à la suspension interlocutoire d'instance les principes qu'ils suivent dans le cas d'injonctions interlocutoires.

Nous ajouterons seulement que les requérantes en l'espèce demandent à la fois un redressement interlocutoire (en attendant le règlement du pourvoi) et provisoire (pendant une période d'une année suivant le jugement). Nous utiliserons l'expression générale «redressement interlocutoire» pour décrire le caractère mixte du redressement demandé. Les mêmes principes régissent les deux types de redressements.

L'arrêt *Metropolitan Stores* établit une analyse en trois étapes que les tribunaux doivent appliquer quand ils examinent une demande de suspension d'instance ou d'injonction interlocutoire. Premièrement, une étude préliminaire du fond du litige doit établir qu'il y a une question sérieuse à juger. Deuxièmement, il faut déterminer si le requérant subirait un préjudice irréparable si sa demande était rejetée. Enfin, il faut déterminer laquelle des deux parties subira le plus grand préjudice selon que l'on accorde ou refuse le redressement en attendant une décision sur le fond. Il peut être utile d'examiner chaque aspect du critère et de l'appliquer ensuite aux faits en l'espèce.

The *Charter* protects fundamental rights and freedoms. The importance of the interests which, the applicants allege, have been adversely affected require every court faced with an alleged *Charter* violation to review the matter carefully. This is so even when other courts have concluded that no *Charter* breach has occurred. Furthermore, the complex nature of most constitutional rights means that a motions court will rarely have the time to engage in the requisite extensive analysis of the merits of the applicant's claim. This is true of any application for interlocutory relief whether or not a trial has been conducted. It follows that we are in complete agreement with the conclusion of Beetz J. in *Metropolitan Stores*, at p. 128, that "the American Cyanamid 'serious question' formulation is sufficient in a constitutional case where, as indicated below in these reasons, the public interest is taken into consideration in the balance of convenience."

What then are the indicators of "a serious question to be tried"? There are no specific requirements which must be met in order to satisfy this test. The threshold is a low one. The judge on the application must make a preliminary assessment of the merits of the case. The decision of a lower court judge on the merits of the *Charter* claim is a relevant but not necessarily conclusive indication that the issues raised in an appeal are serious: see *Metropolitan Stores*, *supra*, at p. 150. Similarly, a decision by an appellate court to grant leave on the merits indicates that serious questions are raised, but a refusal of leave in a case which raises the same issues cannot automatically be taken as an indication of the lack of strength of the merits.

Once satisfied that the application is neither vexatious nor frivolous, the motions judge should proceed to consider the second and third tests, even if of the opinion that the plaintiff is unlikely

La *Charte* protège les libertés et droits fondamentaux. Compte tenu de l'importance des intérêts auxquels, selon la requête, il a été porté atteinte, tout tribunal appelé à se prononcer sur une violation de la *Charte* doit procéder à un examen soigneux de la question. Tel est le cas même lorsque d'autres tribunaux ont conclu qu'il n'y avait pas eu violation de la *Charte*. Par ailleurs, compte tenu du caractère complexe de la plupart des droits garantis par la Constitution, le tribunal saisi d'une requête aura rarement le temps de faire l'analyse approfondie requise du fond de la demande du requérant. Ceci est vrai pour toute demande de redressement interlocutoire, que le procès ait eu lieu ou non. Nous sommes donc pleinement d'accord avec la conclusion du juge Beetz dans l'arrêt *Metropolitan Stores*, à la p. 128: «la formulation dans l'arrêt *American Cyanamid*, savoir celle de l'existence d'une «question sérieuse» suffit dans une affaire constitutionnelle où, comme je l'indique plus loin dans les présents motifs, l'intérêt public est pris en considération dans la détermination de la prépondérance des inconvénients.»

Quels sont les indicateurs d'une «question sérieuse à juger»? Il n'existe pas d'exigences particulières à remplir pour satisfaire à ce critère. Les exigences minimales ne sont pas élevées. Le juge saisi de la requête doit faire un examen préliminaire du fond de l'affaire. La décision sur le fond que rend le juge de première instance relativement à la *Charte* est une indication pertinente, mais pas nécessairement concluante que les questions soulevées en appel constituent des questions sérieuses: voir *Metropolitan Stores*, précité, à la p. 150. De même, l'autorisation d'appel sur le fond qu'une cour d'appel accorde constitue une indication que des questions sérieuses sont soulevées, mais un refus d'autorisation dans un cas qui soulève les mêmes questions n'indique pas automatiquement que les questions de fond ne sont pas sérieuses.

Une fois convaincu qu'une réclamation n'est ni futile ni vexatoire, le juge de la requête devrait examiner les deuxième et troisième critères, même s'il est d'avis que le demandeur sera probablement

suffer irreparable harm". The harm which might be suffered by the respondent, should the relief sought be granted, has been considered by some courts at this stage. We are of the opinion that this is more appropriately dealt with in the third part of the analysis. Any alleged harm to the public interest should also be considered at that stage.

At this stage the only issue to be decided is whether a refusal to grant relief could so adversely affect the applicants' own interests that the harm could not be remedied if the eventual decision on the merits does not accord with the result of the interlocutory application.

"Irreparable" refers to the nature of the harm suffered rather than its magnitude. It is harm which either cannot be quantified in monetary terms or which cannot be cured, usually because one party cannot collect damages from the other. Examples of the former include instances where one party will be put out of business by the court's decision (*R.L. Crain Inc. v. Hendry* (1988), 48 D.L.R. (4th) 228 (Sask. Q.B.)); where one party will suffer permanent market loss or irrevocable damage to its business reputation (*American Cyanamid, supra*); or where a permanent loss of natural resources will be the result when a challenged activity is not enjoined (*MacMillan Bloedel Ltd. v. Mullin*, [1985] 3 W.W.R. 577 (B.C.C.A.)). The fact that one party may be impecunious does not automatically determine the application in favour of the other party who will not ultimately be able to collect damages, although it may be a relevant consideration (*Hubbard v. Pitt*, [1976] Q.B. 142 (C.A.)).

The assessment of irreparable harm in interlocutory applications involving *Charter* rights is a task which will often be more difficult than a comparable assessment in a private law application. One reason for this is that the notion of irreparable harm is closely tied to the remedy of damages, but damages are not the primary remedy in *Charter* cases.

pas accordée, un préjudice irréparable». Certains tribunaux ont examiné, à cette étape, le préjudice que l'intimé risque de subir si le redressement demandé est accordé. Nous sommes d'avis qu'il est plus approprié de le faire à la troisième étape de l'analyse. Le préjudice allégué à l'intérêt public devrait également être examiné à cette étape.

À la présente étape, la seule question est de savoir si le refus du redressement pourrait être si défavorable à l'intérêt du requérant que le préjudice ne pourrait pas faire l'objet d'une réparation, en cas de divergence entre la décision sur le fond et l'issue de la demande interlocutoire.

Le terme «irréparable» a trait à la nature du préjudice subi plutôt qu'à son étendue. C'est un préjudice qui ne peut être quantifié du point de vue monétaire ou un préjudice auquel il ne peut être remédié, en général parce qu'une partie ne peut être dédommée par l'autre. Des exemples du premier type sont le cas où la décision du tribunal aura pour effet de faire perdre à une partie son entreprise (*R.L. Crain Inc. c. Hendry* (1988), 48 D.L.R. (4th) 228 (B.R. Sask.)); le cas où une partie peut subir une perte commerciale permanente ou un préjudice irrémédiable à sa réputation commerciale (*American Cyanamid*, précité); ou encore le cas où une partie peut subir une perte permanente de ressources naturelles lorsqu'une activité contestée n'est pas interdite (*MacMillan Bloedel Ltd. c. Mullin*, [1985] 3 W.W.R. 577 (C.A.C.-B.)). Le fait qu'une partie soit impécunieuse n'entraîne pas automatiquement l'acceptation de la requête de l'autre partie qui ne sera pas en mesure de percevoir ultérieurement des dommages-intérêts, mais ce peut être une considération pertinente (*Hubbard c. Pitt*, [1976] Q.B. 142 (C.A.)).

L'appréciation du préjudice irréparable dans le cas de demandes interlocutoires concernant des droits garantis par la *Charte* est une tâche qui sera habituellement plus difficile qu'une appréciation comparable dans le cas d'une demande en matière de droit privé. Une des raisons en est que la notion de préjudice irréparable est étroitement liée à la réparation que sont les dommages-intérêts, lesquels ne constituent pas la principale réparation dans les cas relevant de la *Charte*.

This Court has on several occasions accepted the principle that damages may be awarded for a breach of *Charter* rights: (see, for example, *Mills v. The Queen*, [1986] 1 S.C.R. 863, at pp. 883, 886, 943 and 971; *Nelles v. Ontario*, [1989] 2 S.C.R. 170, at p. 196). However, no body of jurisprudence has yet developed in respect of the principles which might govern the award of damages under s. 24(1) of the *Charter*. In light of the uncertain state of the law regarding the award of damages for a *Charter* breach, it will in most cases be impossible for a judge on an interlocutory application to determine whether adequate compensation could ever be obtained at trial. Therefore, until the law in this area has developed further, it is appropriate to assume that the financial damage which will be suffered by an applicant following a refusal of relief, even though capable of quantification, constitutes irreparable harm.

D. *The Balance of Inconvenience and Public Interest Considerations*

The third test to be applied in an application for interlocutory relief was described by Beetz J. in *Metropolitan Stores* at p. 129 as: "a determination of which of the two parties will suffer the greater harm from the granting or refusal of an interlocutory injunction, pending a decision on the merits". In light of the relatively low threshold of the first test and the difficulties in applying the test of irreparable harm in *Charter* cases, many interlocutory proceedings will be determined at this stage.

The factors which must be considered in assessing the "balance of inconvenience" are numerous and will vary in each individual case. In *American Cyanamid*, Lord Diplock cautioned, at p. 408, that:

[i]t would be unwise to attempt even to list all the various matters which may need to be taken into consideration in deciding where the balance lies, let alone to suggest the relative weight to be attached to them. These will vary from case to case.

À plusieurs reprises, notre Cour a accepté le principe que des dommages-intérêts peuvent être accordés relativement à une violation des droits garantis par la *Charte*: (voir par exemple *Mills c. La Reine*, [1986] 1 R.C.S. 863, aux pp. 883, 886, 943 et 971; *Nelles c. Ontario*, [1989] 2 R.C.S. 170, à la p. 196). Toutefois, il n'existe pas encore de théorie juridique relative aux principes susceptibles de régir l'octroi de dommages-intérêts en vertu du par. 24(1) de la *Charte*. Compte tenu de l'incertitude du droit quant à la condamnation à des dommages-intérêts en cas de violation de la *Charte*, il sera dans la plupart des cas impossible pour un juge saisi d'une demande interlocutoire de déterminer si un dédommagement adéquat pourrait être obtenu au procès. En conséquence, jusqu'à ce que le droit soit clarifié en cette matière, on peut supposer que le préjudice financier, même quantifiable, qu'un refus de redressement causera au requérant constitue un préjudice irréparable.

D. *La prépondérance des inconvénients et l'intérêt public*

Dans l'arrêt *Metropolitan Stores*, le juge Beetz décrit, à la p. 129, le troisième critère applicable à une demande de redressement interlocutoire comme un critère qui consiste «à déterminer laquelle des deux parties subira le plus grand préjudice selon que l'on accorde ou refuse une injonction interlocutoire en attendant une décision sur le fond». Compte tenu des exigences minimales relativement peu élevées du premier critère et des difficultés d'application du critère du préjudice irréparable dans des cas relevant de la *Charte*, c'est à ce stade que seront décidées de nombreuses procédures interlocutoires.

Il y a de nombreux facteurs à examiner dans l'appréciation de la «prépondérance des inconvénients» et ils varient d'un cas à l'autre. Dans l'arrêt *American Cyanamid*, lord Diplock fait la mise en garde suivante (à la p. 408):

[TRADUCTION] [i]l serait peu sage de tenter ne serait-ce que d'énumérer tous les éléments variés qui pourraient demander à être pris en considération au moment du choix de la décision la plus convenable, encore moins de proposer le poids relatif à accorder à chacun de ces éléments. En la matière, chaque cas est un cas d'espèce.

TAB K

In the Court of Appeal of Alberta

Citation: ARLS v MD, 2014 ABCA 292

Date: 20140910
Docket: 1401-0201-AC
Registry: Calgary

Between:

ARLS

Applicant
(Appellant on Appeal)

- and -

MD

Respondent
(Respondent on Appeal)

**Reasons for Decision of
The Honourable Madam Justice Carole Conrad**

Motion for a Stay of Proceedings Pending Appeal

children out of care of a parent for lengthy periods of time and in her view it is in the best interests of the children to remain with her rather than someone other than a parent.

The test

[14] The test for a stay pending appeal is the tripartite test: *Manitoba (AG) v Metro Stores Ltd*, [1987] 1 SCR 110, 38 DLR (4th) 321; *RJR MacDonald Inc v Canada (AG)*, [1994] 1 SCR 311, 111 DLR (4th) 385. The second and third branches of the test are modified in family law matters to reflect the paramount importance of the best interests of the child and should be considered holistically: *CB v PC* 2003, 2003 ABCA 321 at para 3, 346 AR 121. The first question requires a preliminary assessment of the merit of the case. The court must determine if this is a serious question as opposed to a frivolous or vexation one.

[15] The appellant argues that the chambers judge failed to recognize that it is the *de facto* status quo that is important with children to maintain consistency and that he should have left the children with the mother pending any further applications. In addition, she argues that the chambers judge failed to deal with the fact that there is a changed circumstance since the February 2014 order as the children have remained with the mother. The only thing that changed after the order was the declaration of no support.

[16] I am satisfied that there is a serious issue to be tried.

[17] The primary care part of the February 2014 order was not implemented by the father on a timely basis and thus, although the legal direction changed, the *de facto* status quo remained the same as the children remained in the care of the mother. The only change was that she had that care without the adult interdependent support order or the approximately \$25,000 arrears that had accumulated.

[18] Considering all of these factors and the evidence, I am satisfied that there is a serious argument to be addressed on appeal and that an appeal could result in the February 2014 order being varied or, at a minimum, the direction for a full hearing on all parenting and support issues.

[19] Turning to irreparable harm and balance of convenience, these issues are inextricably woven with the overriding best interests of the children.

[20] These children have remained with the mother since birth. In my view, it is in the children's best interest to maintain the *de facto* status quo whereby the children remain in the care of the custodial parent with whom they have become accustomed until such time as there is a final determination of the appeal. At that time, the court of appeal can direct whether they should remain with the mother pending a hearing on variation, should one be ordered.

[21] Leaving the children with the mother provides stability and avoids the possibility of two moves should the mother's appeal be successful. The 2014 order was not based on allegations that the mother was not providing proper care. Even now, apart from an infected hangnail, the main

TAB L

ALBERTA ENVIRONMENTAL APPEALS BOARD

Decision

Date of Decision – November 7, 2013

IN THE MATTER OF sections 91, 92, 95, and 97 of the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12, and section 115 of the *Water Act*, R.S.A. 2000, c. W-3;

-and-

IN THE MATTER OF appeals filed by David and Donna Hanson and Roy and Gordon Lindberg with respect to the decision of the Director, Northern Region, Operations Division, Alberta Environment and Sustainable Resource Development, to issue *Water Act* Approval No. 00297021-00-00 to the County of St. Paul.

Cite as: Stay and Issue Decision: *Hanson and Lindberg v. Director, Northern Region, Operations Division, Alberta Environment and Sustainable Resource*

[45] The Approval Holder took no position on the stay request, and the Director acknowledged the Appellants had raised a serious concern regarding the impacts on the aquatic environment.

[46] The first step in the stay test is to determine whether there is an issue that should be heard. The Appellants raised concerns regarding the impacts on the aquatic environment that will occur as a result of the proposed road being built. They also raised concerns regarding soil erosion and the adequacy of the studies relied on by the Director when making his decision to issue the Approval. These are serious issues that are relevant to the Approval and are within the Board's jurisdiction to consider.

[47] As the Appellants have raised relevant concerns, the Board finds there is a serious issue to be determined, and the first part of the stay test has been met.

C. Step 2 - Irreparable Harm

1. Appellants' Submission

[48] The Appellants argued they would suffer irreparable harm, because if construction proceeds there will be irreversible damage to the wetland and surrounding habitat.

2. Approval Holder's Submission

[49] The Approval Holder took no position with respect to the stay application.

3. Director's Submission

[50] The Director had no comment.

4. Analysis

[51] The second step is to determine whether the Appellants would suffer irreparable harm if the stay is not granted.

[52] In determining if the Appellants will suffer irreparable harm if the stay is not granted, the Board looks at whether the Appellants could be compensated monetarily for any damages that may occur.

[53] In this case, the major concern presented by the Appellants was the impacts of the proposed project on the aquatic environment and the existing wetland would be irreparably harmed.

[54] When there is the potential for impacts to a wetland, the Board considers whether the wetland could be restored. If the Board recommends and the Minister orders an approval be reversed, it is the responsibility of the proponent to restore the impacted site if any work has been completed. When it is a wetland that has been disturbed, it is often difficult and sometimes impossible to restore the wetland without causing further environmental impacts. Although the costs of restoring the wetland could be determined, the harm to the wetland may be irreparable.

[55] Therefore, although harm to the Appellants, such as land values, may be compensated for monetarily, the harm to the environment, which is the major concern of the Appellants, cannot be effectively compensated for if the Approval is reversed or if amendments result in changes to the proposed design.

[56] The Board assures the Participants that it has not made any decision regarding the issuance of the Approval at this stage of the process. It is only after the Board has heard all of the evidence at the substantive hearing that it will determine whether it should recommend the Approval be confirmed, reversed, or varied.

[57] The Board finds there will be irreparable damage to the wetland during the time the appeals are heard if the Approval Holder proceeded with the construction of the road and, thereby, the Appellants' use of the wetland. The second test of the stay application has been met.

[58] As the Approval Holder and Director took no position regarding the stay, and given the Board found irreparable harm would occur if the stay was not granted, the Board does not consider it necessary to assess the final step in the stay test.

[59] Therefore, the Board considers it appropriate the stay remain in place until the Minister issues her decision or the Board orders otherwise. Under the stay, the Approval Holder