# **ALBERTA** ENVIRONMENTAL APPEALS BOARD

## **Decision**

Date of Decision - September 9, 2014

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 Roxanne Walsh and Julie Walker and the Town of Turner Valley with respect to the decision of the Director, South Saskatchewan Region, Operations Division, Alberta Environment and Sustainable Resource Development, to Amending Approval No. 1242-02-02 under Environmental Protection and Enhancement Act and Approval No. 00334295-00-00 under the Water Act to the Town of Turner Valley.

Cite as: Preliminary Motions Decision: Walsh and Walker and Town of Turner Valley v. Director, South Saskatchewan Region, Operations Division, Alberta Environment

and Sustainable Resource Development, re: Town of Turner Valley (09 September 2014), Appeal Nos. 13-022-025 and 13-030-ID2 (A.E.A.B.).

**BEFORE:** Mr. Alex MacWilliam, Panel Chair;

Justice D.W. Perras (Ret.), Board Chair; and

Dr. Alan Kennedy, Board Member.

WRITTEN SUBMISSIONS BY:

**Appellants:** Ms. Roxanne Walsh and Ms. Julie Walker; and

the Town of Turner Valley, represented by Mr.

Ron Kruhlak, McLennan Ross LLP.

Approval Holder: Town of Turner Valley, represented by Mr.

Ron Kruhlak, McLennan Ross LLP.

**Director**: Mr. Brock Rush, Director, South

Saskatchewan Region, Operations Division, Alberta Environment and Sustainable Resource Development, represented by Ms. Alison Altmiks and Ms. Wendy Thiessen, Alberta

Justice and Solicitor General.

#### **EXECUTIVE SUMMARY**

Alberta Environment and Sustainable Resource Development (AESRD) issued an Amending Approval under the *Environmental Protection and Enhancement Act* and an Approval under the *Water Act* to the Town of Turner Valley (the Town) to construct, operate, and reclaim a waterworks system for the Town and to construct an infiltration gallery below the bank of the Sheep River.

Ms. Roxanne Walsh and Ms. Julie Walker appealed the decisions to issue the Amending Approval and *Water Act* Approval. The Town appealed the decision to issue the Amending Approval, specifically monitoring provisions included in the Amending Approval. The appeals will be dealt with through a hearing in accordance with the Board's procedures.

Preliminary matters arose on the questions of whether Ms. Walker is directly affected and the definition of the issues for the hearing. The Board requested, received, and reviewed written submissions from Ms. Walsh, Ms. Walker, AESRD, and the Town on these preliminary matters.

AESRD and the Town acknowledged Ms. Walker is directly affected by the EPEA Amending Approval. Ms. Walker was accepted to be directly affected by the EPEA Amending Approval, and as a party to the appeal, she has the right to provide evidence on all the issues before the Board. As the determination on whether she was directly affected by the *Water Act* Approval would not impact her level of participation in the appeal process, the Board did not have to make a determination on the directly affected status of Ms. Walker as it relates to the *Water Act* Approval.

After reviewing the Notices of Appeal and the submissions provided by the participants, the Board determined the following issues will be heard at the hearing:

- 1. Does the conversion from the well capture system to the infiltration gallery increase the level of risk of contamination to the Town's water supply system? The potential sources of contamination include:
  - a. the industrial landfill located across the Sheep River;
  - b. the residential subdivision (Calkins Place) septic tank and field system located near the infiltration gallery site;
  - c. agricultural activities upstream of the infiltration gallery site;
  - d. historical oil and gas activities upstream of the infiltration gallery

site; and

- e. current and historical oil and gas activities and infrastructure (wells and pipelines) around the infiltration gallery site.
- 2. If the answer to Issue 1 is "Yes", do the terms and conditions in EPEA Amending Approval 1242-02-02 and *Water Act* Approval 00334295-00-00 adequately address the increased level of risk of contamination?

In response to the appeal filed by the Town, and with the agreement of Ms. Walker, Ms. Walsh, the Town, and AESRD, and in return for the Town withdrawing its appeal, the Board added the following issue to address the concerns expressed in the Town's Notice of Appeal:

3. Should the minimum monitoring frequency, detailed in Table 1(found in section 8 of EPEA Amending Approval 1242-02-02) for PCBs, NORMs, and Petroleum Hydrocarbon Fractions F3 and F4 be: twice per year; one time prior to water from the infiltration gallery entering the raw water storage reservoir or water treatment plant; or some other frequency?

## TABLE OF CONTENTS

I.	INTRO	DDUCTION	1
II.	BACK	GROUND	2
11.	DACK	OKOOND	
III.	APPE	AL NO. 13-030	5
IV.	DIREC	CTLY AFFECTED	6
	A.	Submissions With Respect to the Water Act Approval	6
		<ol> <li>Appellants</li> <li>Approval Holder</li> <li>Director</li> </ol>	7
	B.	Analysis	9
V.	GROUNDS OF APPEAL		
	A.	Submissions	10
		<ol> <li>Appellants' Submissions</li></ol>	10 10
	B.	Analysis	19
VI.	ISSUE	S	19
	A.	Submissions	19
		<ol> <li>Appellants' Submissions</li> <li>Approval Holder's Submission</li> <li>Director's Submission</li> <li>Appellants' Rebuttal Submissions</li> </ol>	21 23
	B.	Analysis	24
	C.	General Summary	28
VII	CONC	LUSION	29

#### I. INTRODUCTION

- This is the Environmental Appeals Board's decision regarding preliminary matters in respect of appeals of Amending Approval No. 1242-02-02 (the "Amending Approval") issued under the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12 ("EPEA"), and Approval No. 00334295-00-00 (the "*Water Act* Approval") under the *Water Act*, R.S.A. 2000, c. W-3. The Amending Approval and the Approval (collectively, the "Approvals") were issued to the Town of Turner Valley (the "Approval Holder" or the "Town") by Alberta Environment and Sustainable Resource Development ("AESRD") for the purposes of constructing, operating, and reclaiming a water works system for the Town, and for the construction of an infiltration gallery below the bank of the Sheep River at NW 6-20-2 W5M. Ms. Roxanne Walsh and Ms. Julie Walker (collectively, the "Appellants") appealed the decision to issue the Approvals. The Town also appealed the Amending Approval with respect to a monitoring condition.
- [2] The Board received written submissions on the directly affected status of Ms. Walker and the issues for the hearing. The Approval Holder and AESRD agreed that Ms. Walker is directly affected by the Amending Approval. Accordingly, the Board did not have to rule on this question.
- [3] AESRD and the Town acknowledged Ms. Walker is directly affected by the EPEA Amending Approval. As the Board accepted Ms. Walker to be directly affected by the EPEA Amending Approval, she became a party to the appeal, and as such, she has the right to provide evidence on all the issues before the Board. As the determination on whether she was directly affected by the *Water Act* Approval would not impact her level of participation in the appeal process, the Board did not have to make a determination on the directly affected status of Ms. Walker as it relates to the *Water Act* Approval.
- [4] The Board determined the issues for the hearing to be:
  - 1. Does the conversion from the well capture system to the infiltration gallery increase the level of risk of contamination to the Town's water supply system? The potential sources of contamination include:

- a. the industrial landfill located across the Sheep River;
- b. the residential subdivision (Calkins Place) septic tank and field system located near the infiltration gallery site;
- c. agricultural activities upstream of the infiltration gallery site;
- d. historical oil and gas activities upstream of the infiltration gallery site; and
- e. current and historical oil and gas activities and infrastructure (wells and pipelines) around the infiltration gallery site.
- 2. If the answer to Issue 1 is "Yes", do the terms and conditions in EPEA Amending Approval 1242-02-02 and *Water Act* Approval 00334295-00-00 adequately address the increased level of risk of contamination?
- 3. Should the minimum monitoring frequency, detailed in Table 1(found in section 8 of EPEA Amending Approval 1242-02-02) for PCBs, NORMs, and Petroleum Hydrocarbon Fractions F3 and F4 be: twice per year; one time prior to water from the infiltration gallery entering the raw water storage reservoir or water treatment plant; or some other frequency?
- [5] The Town withdrew its appeal when the Board included the third issue as stated above, and the Appellants and AESRD accepted the issue as a valid issue to be heard at the hearing of the appeals filed by Ms. Walsh and Ms. Walker.

#### II. BACKGROUND

- [6] On February 10, 2014, the Director, South Saskatchewan Region, Operations Division, Alberta Environment and Sustainable Resource Development (the "Director"), issued the Approvals to the Approval Holder.
- [7] On February 19, 2014, the Board received Notices of Appeal from the Appellants appealing the Approvals. Supplemental information regarding the Notices of Appeal was received on February 27, 2014.
- [8] On February 24, 2014, the Board wrote to the Appellants, Approval Holder, and the Director (collectively, the "Participants") acknowledging receipt of the Notices of Appeal and notifying the Approval Holder and Director of the appeals. The Board asked the Director for a copy of the documents upon which the Director made his decision (the "Record").

- [9] On February 28, 2014, Ms. Walsh requested a stay of the Approvals. The Board asked Ms. Walsh to provide any additional information she may have that related to the Board's questions regarding her stay request.<sup>1</sup>
- [10] On February 28, 2014, the Board notified the Participants that, based on the information provided in Ms. Walsh's stay request, she had made a *prima facie* case for a stay. The Board asked the Director and Approval Holder to provide written responses to the stay request and on the directly affected status of Ms. Walsh.
- [11] On March 3, 2014, the Board received additional information from Ms. Walsh regarding her stay request.
- [12] On March 6, 2014, the Approval Holder requested an extension of time to file its response submissions because it had just retained legal counsel. The Board granted the request.
- [13] On March 7, 2014, Ms. Walsh requested an extension of time to file her final submission with respect to the stay. The Board granted the request.
- [14] On March 12 and 14, 2014, the Board received responses from the Director and the Approval Holder, respectively. Ms. Walsh provided her final submission regarding the stay on March 21, 2014.
- On March 27, 2014, the Board notified the Participants that Ms. Walsh was found to be directly affected, but the stay was not granted. On April 8, 2014 the Board provided the Participants its reasons for finding Ms. Walsh directly affected and for denying the stay request.<sup>2</sup>
- [16] The Board received the Director's Record on April 11, 2014, and copies were provided to the Participants on April 28, 2014.

\_

The Participants were asked to respond to the following questions:

<sup>1.</sup> What are the serious concerns of the Appellant that should be heard by the Board?

<sup>2.</sup> Would the Appellant suffer irreparable harm if the stay is refused?

<sup>3.</sup> Would the Appellant suffer greater harm if the Stay was refused pending a decision of the Board than the Town of Turner Valley would suffer from the granting of a stay?

<sup>4.</sup> Would the overall public interest warrant a stay?

<sup>5.</sup> Is the Appellant directly affected by AESRD's decision to issue the *Water Act* Approval and the Amending Approval to the Town of Turner Valley?

See: Stay Decision: Walsh v. Director, South Saskatchewan Region, Operations Division, Alberta

- [17] On April 28, 2014, the Board set the schedule to receive submissions on the following matters:
  - 1. Is Ms. Walker directly affected by the *Water Act* Approval?
  - 2. What are Ms. Walsh's and Ms. Walker's grounds for appeal included in the Notices of Appeal, and are those grounds for appeal properly before the Board?
  - 3. What are the issues to be heard at the hearing of these appeals?
- [18] On May 1 and 2, 2014, Ms. Walsh requested reports and additional information from the Approval Holder and Director.
- [19] On May 9, 2014, the Approval Holder notified the Board it intended to commission the infiltration gallery between June 9 and June 13, 2014, and start delivery of raw water to the raw water reservoir from the infiltration gallery on June 16, 2014. It was anticipated all work would be completed by July 31, 2014.
- [20] The Board received submissions to the preliminary motions questions from the Appellants on May 12, 2014. On May 26, 2014, the Board received response submissions from the Approval Holder and Director.
- [21] On May 27, 2014, the Appellants requested an extension of time to provide their rebuttal submissions because they were away the week prior to the date the submissions were due. The Board granted the extension.
- [22] On May 29, 2014, the Board responded to Ms. Walsh's request for documents.
- On June 5, 2014, the Approval Holder notified the Board that, due to a number of delays, the construction of the protective berm and infiltration gallery was delayed and the new infrastructure would not be commissioned until the end of June 2014. The Approval Holder said the raw water reservoir had only 44 days of supply to meet user demand, and as water levels in the reservoir dropped, the water quality was decreasing. The Approval Holder notified the Board it submitted an application to amend EPEA Approval 1242-02-00 to permit temporary diversion of groundwater from an infiltration pit to the raw water reservoir pursuant to *Water Act*

Environment and Sustainable Resource Development, re: Town of Turner Valley (08 April 2014), Appeal Nos. 13-022 and 13-023-ID1 (A.E.A.B.).

Temporary Diversion Licence No. 00332898, which had been issued after the June 2013 flood event.

- [24] On June 6, 2014, the Director provided a copy of Amending Approval 1242-02-03 authorizing the construction and operation of a temporary pumping system.
- [25] On June 9, 2014, the Approval Holder and Director provided the available documents as requested in the Board's May 29, 2014 letter.
- [26] Rebuttal submissions on the preliminary motions were received from Ms. Walsh and Ms. Walker on June 26 and July 7, 2014, respectively.
- [27] On July 21, 2014, the Board notified the Participants of the issues for the hearing with reasons to follow. These are the Board's reasons.

## III. APPEAL NO. 13-030

- On March 20, 2014, the Approval Holder submitted a Notice of Appeal regarding the Amending Approval. It specifically requested the testing frequency for the extra parameters, including polychlorinated biphenyls, NORMs, and petroleum hydrocarbon fractions F3 and F4, be varied from "Twice a year" to "One-time." On March 20, 2014, the Board wrote to the Participants acknowledging receipt of the Notice of Appeal and notifying the Director and Appellants of the appeal.
- [29] On March 20, 2014, Ms. Walsh noted to the Board that Appeal No. 13-030 was filed one week past the 30-day time period.
- [30] On March 24, 2014, the Director wrote to the Board explaining there was an error in the Amending Approval, and the minimum frequency for measuring polychlorinated biphenyls, NORMs, and petroleum hydrocarbon fractions F3 and F4 should be "One time prior to water from the infiltration gallery entering the raw water storage reservoir or water treatment plant" rather than "twice per year." The Director requested the Board determine how to proceed with making the correction to the Amending Approval.
- [31] On March 27, 2014, the Board proposed to the Participants that the following issue be included as one of the issues for the hearing:

"Should the minimum monitoring frequency, detailed in Table 1, for PCBs, NORMs, and Petroleum Hydrocarbon Fractions F3 and F4 be: twice per year, one time prior to water from the infiltration gallery entering the raw water storage reservoir or water treatment plant, or some other frequency?"

- [32] The Board asked the Participants to provide comments as to whether that was an acceptable approach. The Board considered the issues raised by Ms. Walsh in her Notice of Appeal were broad enough to include this issue. The Board explained that, if the approach was acceptable, the Approval Holder could withdraw its appeal and the timing issue would not have to be addressed. All of the Participants agreed to this approach.
- [33] Since all of the Participants have agreed to this approach, the Board will hear the following issue at the hearing:

"Should the minimum monitoring frequency, detailed in Table 1, for PCBs, NORMs, and Petroleum Hydrocarbon Fractions F3 and F4 be: twice per year, one time prior to water from the infiltration gallery entering the raw water storage reservoir or water treatment plant, or some other frequency?"

The Board notes Table 1 is located in section 8 of the Amending Approval.

[34] The Board accepted the Town's withdrawal of its appeal, discontinued the proceedings on Appeal No. 13-030, and closed the file.

#### IV. DIRECTLY AFFECTED

## A. Submissions With Respect to the Water Act Approval

- 1. Appellants
- [35] Ms. Walsh submitted Ms. Walker is directly affected by the *Water Act* Approval.
- [36] Ms. Walker stated she is directly affected by the *Water Act* Approval because of the possible contaminants that may enter her potable water supply. She said the possible contaminants may be disturbed by construction and enter the potable water supply.

[37] Ms. Walker requested a fish study be designed to determine the health of the aquifer based on testing for potential contaminants in riparian vegetation, aquatic invertebrates, and in fish tissues. Ms. Walker said this testing would reveal the potential for possible contaminants to exist in the aquifer.

## 2. Approval Holder

- [38] The Approval Holder submitted Ms. Walker failed to prove, on a balance of probabilities, that she is personally directly affected by the *Water Act* Approval.
- [39] The Approval Holder noted Ms. Walker's concerns are based on the fish study completed for the application and are that her water supply will be contaminated as a result of construction, an issue that had not been previously raised.
- [40] The Approval Holder stated Ms. Walker misconstrued the intent of the *Water Act* Approval and the fish study. The Approval Holder explained the *Water Act* Approval addresses the potential disruption to fish and fish habitat, but there is no reason to start collecting fish, invertebrates, and riparian vegetation for testing for potential contaminants in an aquifer underlying their habitat.
- [41] The Approval Holder stated the *Water Act* Approval allowed for construction activities but has no bearing on operations of the infiltration gallery.
- [42] The Approval Holder argued Ms. Walker did not establish any grounds to support her standing with respect to the *Water Act* Approval.

#### 3. Director

- [43] The Director submitted Ms. Walker is not directly affected by the *Water Act* Approval.
- [44] The Director explained the *Water Act* Approval authorizes the construction of the infiltration gallery in the Sheep River, an activity that involves a short-term disturbance over a small geographic area.

- [45] The Director stated Ms. Walker's Notice of Appeal does not demonstrate any direct effect to her as a result of the physical disturbance in the water body. The Director explained the construction of the infiltration gallery is in a generally dry area within a portion of the river channel that is isolated from the remainder of the channel by a berm.
- [46] The Director noted Ms. Walker did not indicate that she used the infiltration gallery construction area or that portion of the river. The Director stated Ms. Walker did not provide any information about how the construction of the infiltration gallery directly and personally affected her or how the timing or method of construction would affect her.
- [47] The Director said Ms. Walker's concerns about the potential for contaminants and testing for contaminants are within the scope of the Amending Approval, not the *Water Act* Approval. The Director explained the Amending Approval authorizes the construction and operation of a waterworks system, but the *Water Act* Approval only authorizes an activity within a water body, specifically the construction of the infiltration gallery.
- [48] The Director stated Ms. Walker did not provide any information linking construction of the infiltration gallery to potential contamination of the water. The Director noted the terms and conditions in the *Water Act* Approval address the impact of the construction of the infiltration gallery on the aquatic environment, including the prevention and mitigation of erosion, sedimentation, and introduction of deleterious substances.
- [49] The Director explained the Approval Holder was not drawing water from the infiltration gallery during construction. The Director stated the Amending Approval requires testing of the water from the existing wells and the infiltration gallery.
- [50] The Director argued Ms. Walker's interests in the environment and drinking water quality do not translate into a personal direct effect from the construction of the infiltration gallery.
- [51] The Director said Ms. Walker is concerned with municipal decision-making, but an interest in political and municipal issues does not demonstrate a direct effect.

The Director stated Ms. Walker failed to establish an interest greater than the generalized interest that all Albertans have in protecting the environment. The Director argued Ms. Walker failed to demonstrate a direct and personal affect related to the construction of the infiltration gallery.

#### B. Analysis

[53] The issue before the Board is whether Ms. Walker is directly affected by the Director's decision to issue the *Water Act* Approval. The Approval Holder and Director accepted Ms. Walker is directly affected with respect to the Amending Approval.<sup>3</sup>

[54] In the Board's previous decision, the Board found, based on the submissions provided at that time, the other appellant in these appeals, Ms. Walsh, was directly affected by the Amending Approval and the *Water Act* Approval.<sup>4</sup> The Board notes its previous decision regarding Ms. Walsh does not automatically determine the directly affected status of Ms. Walker regarding the *Water Act* Approval. The Board must base its decision on the submissions and information available to it at this time.

Since Ms. Walker has been accepted by all Participants as being directly affected by the issuance of the Amending Approval, she will have standing as an appellant at the hearing. Once a person has standing in an appeal, that person has the right to present arguments and cross examine the other parties adverse in interest on all of the issues before the Board. As the Board has determined the hearing will involve issues relating to both Approvals, Ms. Walker, as a recognized appellant with standing, will be able to participate in all of the proceedings before the Board in relation to all of the specified issues. Therefore, in this case, it is irrelevant as to whether Ms. Walker is directly affected by the *Water Act* Approval. It will not impact her rights as an appellant in these appeals.

[56] Therefore, in this case, the Board does not consider it necessary to determine whether or not Ms. Walker is directly affected by the issuance of the *Water Act* Approval.

See: Approval Holder's letter, dated April 1, 2014, and the Director's letter dated April 2, 2014.

See: Stay Decision: Walsh v. Director, South Saskatchewan Region, Operations Division, Alberta Environment and Sustainable Resource Development, re: Town of Turner Valley (08 April 2014), Appeal Nos. 13-

#### V. GROUNDS OF APPEAL

#### A. Submissions

### 1. Appellants' Submissions

[57] Ms. Walsh believed the Notices of Appeal were broad enough to consider all issues already identified and any other issues that arise based on information in the Record and any additional documents that have been requested or may be requested in the future.

[58] Ms. Walker stated she objected to both Approvals in their entirety and may add further details after reviewing the provided materials. Ms. Walker said her concerns are valid as a resident of Turner Valley, and she should have the opportunity to ask questions about the issues that concern her.

## 2. Approval Holder's Submission

The Approval Holder stated the Appellants failed to identify grounds of appeal in their Notices of Appeal or in their submissions. The Approval Holder said Ms. Walker suggested the grounds considered for standing are relevant for the appeal, and Ms. Walsh suggested the Notices of Appeal were broad enough to consider all issues. The Approval Holder submitted the Appellants' submissions were not helpful in determining the grounds of appeal.

The Approval Holder explained the grounds of appeal should identify relevant factors which the Director should have considered in issuing an approval. The Approval Holder noted the Board's Rules of Practice suggest that, until deficiencies are addressed, the Board is not obligated to proceed with an appeal.

#### 3. Director's Submission

[61] The Director stated that neither of the Appellants identified grounds of appeal.

- [62] The Director responded to the issues raised by the Appellants:
  - 1. A fish containment monitoring study would not be a requirement for the construction and operation of an infiltration gallery;
  - 2. A qualified aquatic environmental specialist ("QAES") assessment was not required because it is typically associated with Code of Practice activities which establish objectives, standards, and conditions to be met when undertaking the activity. The QAES assessment may involve a fish and fish habitat assessment and may require a fish research licence depending on the scope, methodology, and existing available inventory data. Although not required if the work was done when dry on a gravel bar as proposed, the Approval Holder submitted a QAES assessment, and it was considered during the Director's review of the application;
  - 3. Proposed upgrades to the water treatment plant, including UV and activated charcoal filtration should not be considered. The Director will issue a separate decision on the upgrades to the water treatment plant;
  - 4. Issues related to the water treatment plant, reservoir, and distribution system are not properly before the Board except as it relates to the addition of the infiltration gallery;
  - 5. The post-flood berm is the subject of its own application and approval;
  - 6. The location of the water treatment plant, the location of the infiltration gallery, the proximity to subdivisions, the proximity to oil and gas pipelines, and pedestrian use are municipal decisions and outside the Director's jurisdiction;
  - 7. Concerns with respect to site location, adjacent land uses, municipal land use planning, and policy matters are outside the scope of the Director and the Board;
  - 8. The former industrial landfill referred to by the Appellants is located on the other side of the Sheep River and, as it was remediated in 2008-2009, is a moot issue:
  - 9. The Appellants, as members of the public, have access to the information of public bodies;
  - 10. Considering the septic systems and field in the Calkins Place subdivision as a potential source of contamination is a moot issue, because all septic tanks and field systems will be decommissioned prior to the commissioning of the infiltration gallery. The conditions in the Amending Approval would have been different had the Director been aware the septic tank and field systems would be decommissioned prior to the commissioning of the infiltration gallery; and

11. The Appellants' concerns with the septic systems are only relevant to the hearing to the extent the concerns relate to the potential for residual substances which may have been released by the septic systems in the past.

## 4. Appellants' Rebuttal Submissions

- [63] Ms. Walsh stated that, in response to the Director's explanation that a QAES assessment was not required, existing legislation and requirements may be acceptable for most locations in Alberta, but Turner Valley is like no other location in Alberta given it has had to deal with 100 years of contamination from conventional and experimental oil and gas activities.
- Ms. Walsh said the Director and Approval Holder discussed the extra parameters that must be tested for in the water as a result of the hearing in 2008 as though they are a burden to test for and the historic facts of the area are not applicable. Ms. Walsh argued the Director and Approval Holder were attempting to view the Town as if it is like other municipalities that do not have contamination from historic waste management practices. Ms. Walsh stated any critical inquiry was met with resistance. She said public presentations, instead of public consultation, lacked any detail that could encourage intelligent questioning about the water works project.
- [65] Ms. Walsh stated the fish study and other information included in the application did not provide any meaningful information to base an informed decision upon considering the oil and gas industry's historic contamination. She stated the issues that should be of concern to residents of the Town, the Town of Black Diamond, and to the municipal leaders are not being addressed.
- Ms. Walsh stated compartmentalizing the water works project such that the water treatment plant and berm require separate approvals from the infiltration gallery takes away the ability to address concerns about the aging oil and gas infrastructure and its close proximity to the source of the Town's drinking water. She argued this approach blocks attempts to critically assess this and future water projects from a holistic perspective. Ms. Walsh stated the process should assess what is good for the health and safety of the people in the Town and Black Diamond, as well as the environment.

[67] Ms. Walsh believed the cost of the different projects will be more than the cost of a well thought out design away from the oil and gas infrastructure, and that cost will be passed on to the taxpayers.

[68] Ms. Walsh acknowledged municipal land use planning and policy matters are outside the Director's and the Board's scope. However, she wondered if the Director questioned the decision to locate the source of the Town's drinking water in the complex and high risk location.

Ms. Walsh stated there was no indication that: (1) a proper study was done on the landfill; (2) any documents were reviewed to determine the extent of the plume or the hydrogeology of the area of the landfill; or (3) an inventory was completed to determine the historic contents of the landfill used by the Turner Valley Gas Plant. She said this would provide a better understanding as to what additional parameters should be tested for. Ms. Walsh noted that, in the 2008 hearing on the raw water reservoir location,<sup>5</sup> Talisman Energy Inc. indicated everything was alright with its wells, but the Phase II Environmental Site Assessment recommended further delineation to determine the extent of the contamination given the levels exceeded criteria. Ms. Walsh said the Director and the Approval Holder proceeded without reviewing this information even though it was available prior to the project starting.

[70] Ms. Walsh stated there are no documents to show the Director and Approval Holder considered the effect the June 2013 flood had on the pipelines to determine how deep the pipelines are now, the age of the pipelines, whether the pipelines were excavated by hand or by equipment, or the actual conditions of the pipelines. Ms. Walsh questioned whether any consideration was given as to whether the pipelines or existing infrastructure are or could act as conduits for contamination to enter the river and to reach the infiltration gallery.

[71] Ms. Walsh explained her comments regarding the remediation of the industrial landfill that were quoted in the local newspaper were based on the fact an oil and gas company was doing remediation in town and she was hoping others would do the same. Ms. Walsh

See: Walsh v. Director, Southern Region, Regional Services, Alberta Environment, re: Town of Turner Valley (28 February 2008), Appeal No. 06-071-R (A.E.A.B.).

explained she was not concerned about the landfill until she read the Stantec Reports<sup>6</sup> that indicated it was a high risk that contaminants could leach from the landfill. Ms. Walsh said that no critical investigation was completed to rule out any issues from the landfill. Ms. Walsh stated she hoped that, in making his decision to issue the Approvals, the Director considered the operations of the Turner Valley Gas Plant, including its waste practices and location of the landfill, the contents of the landfill site, and how it may impact human health, public safety, and the environment.

[72] Ms. Walsh stated there is no mention in the Approvals about delineating the extent of the sewage plume from the Calkins Place septic fields and no consideration of any increased parameters to identify contaminants of concern.

In response to the Approval Holder's comments that Ms. Walsh had the opportunity to make use of the Waterworks Advisory Committee to ask questions and obtain information, Ms. Walsh rejected the Approval Holder's perspective. She explained she was invited to attend a meeting in the fall of 2012, and the Town preferred to simply present information instead of truly consulting and engaging the public. Ms. Walsh stated she was next invited to the meeting in January 2014. She said the invitation to the January 2014 meeting did not explain they were going to discuss the water infiltration gallery project, and if it had, she would have likely attended the meeting, particularly if she felt the Town was genuinely interested in her thoughts on the project. Ms. Walsh stated that, since the information provided at the January 2014 meeting was targeted to certain individuals and not to the general public and was irrelevant to the issues before the Board, she did not feel the information presented would have been sufficient to allow well thought out questions to be asked.

[74] Ms. Walsh noted the June 5, 2014 letter from the Approval Holder regarding a landslide west of the Town limits that deposited a significant amount of soil on the north bank of the Sheep River, compromising the construction schedule of the infiltration gallery. The letter also stated the raw water reservoir was at its lowest since before the June 2013 flood, and it only had 44 days of water supply to meet user demand. Ms. Walsh stated this information should be

The "Stantec Reports" include: Stantec 2011 Surface Water Inventory, May 18, 2012; Stantec 2011 Wellhead Protection Area Monitoring Well Inventory, May 18, 2012; and Stantec 2011 Oil and Gas Well and

considered in determining whether the infiltration gallery is the ideal location from which to obtain the Town's drinking water. Ms. Walsh said this shows it was a business decision and not a decision based on human health or rights, public safety, or the laws of nature.

- [75] Ms. Walsh questioned how, given the number of oil and gas spills that happen daily in the province, the location of the infiltration gallery could be considered an ideal location since it is more vulnerable to surficial contamination than drilled water wells. Ms. Walsh said it would be more reasonable to have the whole project moved upstream of all oil and gas activities.
- [76] Ms. Walsh stated drilled water wells and surficial water infiltration galleries are fundamentally different. Ms. Walsh referred to a report concerning the Turner Valley Gas Plant, and said it was her understanding the containment wall failed to do what it was intended to do, allowing it to continue to leach contaminants that exceed criteria. Ms. Walsh stated the erosion wall is in its third construction due to recent and past flooding. Ms. Walsh stated this does not create confidence in the ability to build something that is going to work over the long term. Ms. Walsh said that some community members suggested the water reservoir is showing signs of leakage.
- [77] Ms. Walsh stated she understands Turner Valley has been the site where many experiments have occurred, but they should not be experimenting with the Town's drinking water. Ms. Walsh said all available knowledge, expertise, and technology should be used to address the site, and she could not understand why the Director did not use the in-house expertise of the AESRD's drinking water specialist.
- Ms. Walsh acknowledged the Approval Holder has done testing and monitoring for contamination, but she did not believe it had gone far enough given the history of the Turner Valley oil and gas field. Ms. Walsh stated it appeared the Approval Holder does not require any substantiated proof that the information provided regarding the oil and gas infrastructure in the area is accurate and collected using well thought out sampling procedures. Ms. Walsh questioned how the Town is supposed to function well when there are gaps in the information it receives. Ms. Walsh stated that any attempt to question the gaps is met with resistance or vague

information or insufficient information for the public to formulate important questions that need to be, and should be, asked of or by the consultants and the Director.

[79] Ms. Walsh said that, if the Approval Holder is amenable to public participation, it should not object to ensuring all relevant information is made available, including documents indicating what type of waste was dumped into the industrial landfill over the 40 years the Turner Valley Gas Plant was in operation.

[80] Ms. Walker stated the legislation requires a fish study be done to determine the likelihood of fish being in the habitat that will be disturbed by the construction of the infiltration gallery. She recommended a fish study or invertebrate study be used to determine if there is contamination in the Sheep River due to the historic oil and gas activities in the area. Ms. Walker said Turner Valley was the "guinea pig" for the oil and gas industry and there seems to be little interest in cleaning up past mistakes.

[81] Ms. Walker stated she did not notice if any study was done or any documents were reviewed by the Director to determine the extent of any contamination plume or the hydrogeology of the landfill area. She noted there was no mention of the historic contents that would have been found in the landfill site, the solubility of the substances, or the potential of the substances to leach into the Sheep River even though this information would help better understand the impacts these chemicals could have on downstream water wells. Ms. Walker explained that, depending on what these chemicals are, it may determine what additional parameters should be tested for in the Town's water supply. Ms. Walker stated the industrial landfill was used from the 1930s to the late 1970s as a dump for liquid and solid wastes from the Turner Valley Gas Plant, but there was no containment wall between the landfill and the river. Ms. Walker stated that even though the Approval Holder said the landfill was cleaned up and of no concern, she was concerned about the historic and long term leaching of the industrial chemicals into the clay and bedrock of the Sheep River and into the Town's water source. Ms. Walker believed it was the responsibility of AESRD to delineate the plume from the landfill site. She stated the Town deserves better assessments of the risks to its water than it received in the past.

[82] Ms. Walker noted in the 2008 Board hearing held regarding the raw water reservoir location,<sup>7</sup> Talisman Energy Inc. indicated everything was alright with its wells, but a Phase II report recommended further delineation was needed to determine the extent of the contamination that exceeded regulations. Ms. Walker said both the Approval Holder and Director were satisfied to proceed with the raw water reservoir without reviewing this information.

[83] Ms. Walker stated she did not see any documents prior to her filing her Statement of Concern indicating the Calkins Place septic fields would be cleaned up prior to the construction of the infiltration gallery. She commented it is difficult to address all the issues appropriately when all of the information is not available. Ms. Walker noted there is no evidence to rule out past leaching from the septic fields and, if there was leaching, that the plume was delineated.

[84] Ms. Walker said the previous Town water wells varied in depth from 8 to 30 feet, so they did not draw from the shallow alluvial aquifer of the river bed as in the infiltration gallery. Ms. Walker stated these differences are significant enough to suggest contaminants from a shallow layer of the river may access the infiltration gallery that would not have entered the well water.

[85] Ms. Walker referred to the June 5, 2014 letter provided by the Approval Holder indicating that, due to a landslide, construction of the infiltration gallery may be impacted. Ms. Walker stated this should be considered in determining whether the infiltration gallery was located in the ideal place.

[86] Ms. Walker noted the Stantec Reports indicated in 2011 that there is a risk of the landfill site leaching into the Sheep River. Ms. Walker questioned whether the Stantec Reports were completed after the landfill site was cleaned up. She stated leaching from the landfill site occurred over 30 years, there was no containment protocol for the chemicals, and it is not known what petrochemicals were dumped at the landfill. Ms. Walker said she has not seen any record or research into the delineation of the plume, which is key to understanding the distance and

See: Walsh v. Director, Southern Region, Regional Services, Alberta Environment, re: Town of Turner Valley (28 February 2008), Appeal No. 06-071-R (A.E.A.B.).

deposition pattern that occurred. Ms. Walker stated the Director did not seem to find 30 years of leaching from the industrial landfill a concern to look into prior to approving this project.

- [87] Ms. Walker acknowledged the Appellants will need to prove:
  - 1. the landfill has leached into the Sheep River;
  - 2. the plume has deposited contaminants into the Sheep River or in the sediments in the river bed;
  - 3. the construction of the infiltration gallery disturbed the plume or enabled it to enter into the infiltration gallery and area; or
  - 4. the contaminants may have been piled up into the flood berm, if it was made of in-situ material.

Ms. Walker noted none of the above possibilities were taken into consideration by the Director prior to issuing the Approvals.

- [88] Ms. Walker acknowledged the Appellants are required to prove an infiltration gallery, which draws water from a shallower layer of the river, is at greater risk from the possibilities listed above than the wells currently and previously used on the site, given the wells draw water from a different depth of the aquifer.
- [89] Ms. Walker stated that, given the infiltration gallery is three-quarters finished, the disturbance of the sediment is already complete, making it more difficult to delineate the plume from the landfill site.
- [90] Ms. Walker noted the Approval Holder turned down the request for documents that would identify the materials used at the Turner Valley Gas Plant even though this information would provide a better understanding of the materials dumped into the landfill. She stated all of the materials dumped into the landfill would travel, deposit, or wash away in the river at different speeds and depths. Ms. Walker argued they need to know what was at the site.
- [91] Ms. Walker was disappointed the Director did not consider the landfill site as a potential area of concern when the application to build the infiltration gallery was submitted. Ms. Walker suggested the Approval Holder should conduct the study to assess the impacts of the landfill given the "polluter pays" principle prescribed in EPEA, and given the Approval Holder has more time, expertise, and resources available.

[92] Ms. Walker stated she has no issue with the Approval Holder or its need to create a new water source quickly. She said she is concerned with what appeared to be an oversight in the process that the industrial landfill was not addressed or taken into consideration when the site was chosen and the Approvals given.

#### B. Analysis

[93] Upon reviewing the submissions provided by the Participants, the Board notes the arguments relate more to the question of what issues should be heard at the hearing. By determining if there are any identifiable issues properly before the Board, the question of whether there are grounds of appeal included in the Notices of Appeal that are properly before the Board will be answered.

#### VI. ISSUES

#### A. Submissions

- 1. Appellants' Submissions
- [94] Ms. Walsh stated the issues for the hearing should consider:
  - 1. the location of the septic fields given the potential contaminants not being identified or tested for such as pharmaceuticals, household chemicals, pesticides, and herbicides;
  - 2. potential contaminants from oil and gas infrastructure within close proximity of the infiltration gallery;
  - 3. NORM/TENORM related to unknown oil and gas activities in the area and the industrial landfill;
  - 4. chemicals used for fracking;
  - 5. testing for historically used chemicals, including corrosion inhibitors, biocides, diesel fuel, PCBs, lubricants, amines, herbicides and pesticides used at the gas plant and not considered with respect to the industrial landfill and the potential impact on the Town's water supply and human health;
  - 6. the use of invert drilling mud chemicals;

- 7. introduction of methylmercury resulting from the changes that occurred because of the flood in June 2013;
- 8. pharmaceuticals, herbicides, and pesticides from upstream ranching and livestock activities;
- 9. testing frequency;
- 10. the inability of the water treatment plant to filter out potential, unidentified contaminants from the drinking water that may impact human health;
- 11. whether the fish study was adequate for the project;
- 12. the location of the infiltration gallery given the identified oil and gas infrastructure; and
- 13. human error as a risk factor.
- [95] Ms Walker stated the issues that should be heard are:
  - 1. the infiltration gallery was built before the Calkins subdivision septic fields were cleaned up and there was no indication the septic fields were tested for leaks. Some of the septic fields are in the same flood plain as the infiltration gallery and some septic fields may be up-gradient in the same aquifer. The septic fields likely contained household wastes such as pharmaceuticals, cleaning products, pesticides, or herbicides, in addition to sewage;
  - 2. the possibility of contaminants from cattle operations upstream;
  - 3. the possibility of contaminants from oil and gas lines that cross the Sheep River;
  - 4. the industrial landfill site located directly south and across the river from the infiltration gallery and whether the high impact of a subsurface pathway for contaminants entering the Sheep River was considered;
  - 5. the fish study was incomplete and did not necessarily give an accurate representation of conditions at the infiltration gallery site, The test was based on a couple of fish being caught. The study appeared to determine if the section of river where the infiltration gallery was built was suitable fish habitat. A thorough fish study is an indicator of the health of the ecosystem and has the potential to reveal long term problems the oil and gas exploration in a river zone can cause. A thorough fish study is required to determine the current health of water quality. Studies of the food chain, including riparian vegetation, algae, and specific aquatic invertebrate species can determine if toxins or pollutants are in the food chain;
  - 6. chemicals from the oil and gas industry may be disturbed by constructing the infiltration gallery; and

7. the Granulated Activated Charcoal filters and ultraviolet treatment in the water treatment facility will not be in place in time to prevent potential contaminants from entering the raw water reservoir.

## 2. Approval Holder's Submission

[96] The Approval Holder commented on Ms. Walsh's statement that she "simply requests the opportunity to ask questions." The Approval Holder submitted that Ms. Walsh refused to attend or make use of the Waterworks Advisory Committee, which was established as a result of her previous appeal and the mediation meeting the Approval Holder had with her. The Approval Holder said Ms. Walsh could have used that forum to ask her questions and obtain information.

The Approval Holder stated it is inappropriate to add new issues in response to the Board's request to identify issues for the hearing. The Approval Holder said the Appellants should not be allowed to use the appeal process to re-argue issues associated with the original EPEA Approval No. 1242-02-00. The Approval Holder stated the issues must relate to the new *Water Act* Approval and Amended Approval. The Approval Holder noted EPEA Approval No. 1242-02-00 and *Water Act* Approval No. 00334295-00-00 already authorize collection from this water source, and the Amending Approval only changes the collection method from a well capture system to an infiltration gallery.

[98] The Approval Holder objected to the inclusion of any issues pertaining to:

- 1. the adequacy of the Town's testing parameters, except for the issue added by the Board in its April 7, 2014 letter;
- 2. the adequacy, frequency, and veracity of the Town's monitoring or reporting requirements; and
- 3. the location and installation of the Town's piezometers for groundwater under the direct influence of surface water, collected from within W1/2 6-20-2-W5M,

unless the Appellants can demonstrate:

See: Walsh v. Director, Southern Region, Environmental Management, Alberta Environment, re: Town of Turner Valley (15 July 2009), Appeal No. 08-019-DOP (A.E.A.B.).

- 1. how the switch from a well capture system to an infiltration gallery exposes them to identifiable, additional risks that were not contemplated in the underlying EPEA Approval No. 1242-02-00; and
- 2. the additional risks are not already addressed in the testing, reporting, and monitoring requirements included in the Amending Approval.

[99] The Approval Holder also objected to issues relating to the installation of filters in the water treatment plant or reservoir testing unless the Appellants can show how the switch from a well system to an infiltration gallery affects these matters.

[100] The Approval Holder submitted the Appellants failed to demonstrate any factual basis for many of the issues raised. The Approval Holder acknowledged the Appellants do not have to prove the issues they raise at this stage, but said they are obliged to identify issues which they can reasonably identify may exist. They should be able to point to the basis for raising the issue rather than just pure conjecture. The Approval Holder stated any suggestion the Appellants lack access to information or the Approval Holder failed to provide access to relevant information is contradicted by the existence and operation of the Waterworks Advisory Committee.

The Approval Holder stated it is not enough for the Appellants to raise vague allegations of uncertainty, such as the Director should have created conditions for unknown or potential contaminants. The Approval Holder said its test data, extending back five years in most cases, suggests there is a low risk of contamination from the remediated landfill, the Calkins septic field, the decommissioned gas plant, and historical and current oil and gas infrastructure and activities. The Approval Holder stated there are appropriate protocols and procedures in place to monitor and respond to the risk.

[102] The Approval Holder stated the parameters measured and the sampling frequency were scrutinized and refined by the Approval Holder's independent consultants, AESRD, and through the Board's previous hearing in 2008<sup>9</sup> and mediation process in 2009.<sup>10</sup> The Approval Holder noted Ms. Walsh was involved in the Board's previous hearing and mediation meeting.

See: Walsh v. Director, Southern Region, Regional Services, Alberta Environment, re: Town of Turner Valley (28 February 2008), Appeal No. 06-071-R (A.E.A.B.).

See: Walsh v. Director, Southern Region, Environmental Management, Alberta Environment, re: Town of

[103] The Approval Holder argued the Appellants' issues are largely based on conjecture, and they failed to provide a *prima facie* case that would indicate the sampling parameters are inadequate.

[104] The Approval Holder submitted the issues pertaining to the remediated landfill and Calkin's septic field are essentially moot as the former is remediated and the latter is being de-commissioned with an expected completion date at the end of May 2014.

[105] The Approval Holder submitted the only issue before the Board is the issue identified by the Board in its April 7, 2014 letter.

[106] The Approval Holder submitted there are no valid issues under the *Water Act* Approval to be considered as those activities do not impact the water quality issues raised by the Appellants.

[107] The Approval Holder stated any other issues considered under the Amending Approval must be specifically defined and they must result from a conversion from the well capture system to the infiltration gallery and which were not already addressed in the Amending Approval.

#### 3. Director's Submission

[108] The Director submitted the issues:

- 1. should be limited to the EPEA Amending Approval and the *Water Act* Approval;
- 2. should not be used to open up EPEA Approval 1242-02-00 in its entirety; and
- 3. should not extend past the infiltration gallery to other aspects such as the water treatment plant.

[109] The Director agreed the issue identified by the Board in its April 7, 2014 letter should be dealt with at the hearing.

[110] The Director stated additional issues for the hearing should be:

- 1. Did the Director comply with applicable legislation in providing Notice of Decision?
- 2. Is the source of water from the infiltration gallery fundamentally the same as the source water already used by the Town?
- 3. If not, are any additional approval conditions required to reasonably address differences in the source water collection infrastructure (i.e. the addition of the infiltration gallery)?

## 4. Appellants' Rebuttal Submissions

In response to the issues for the hearing suggested by the Director, Ms. Walsh stated it appeared the Director did not review material from third party sources, such as from the oil and gas industry. Ms. Walsh noted there was no mention of remediation of the landfill site in the Record, and no maps included in the application indicated the location of the landfill site except the maps in the Stantec Reports that were not initially included in the application but were subsequently provided when Ms. Walsh requested the data.

[112] Ms. Walsh stated that, with no critical review of any data from industry, no proper delineation of plumes associated with the industrial landfill or septic fields, no inquiry into the status of the 32 oil and gas pipelines within 200 metres of the site which may have been impacted by the June 2013 flood, and no inquiry into the oil and gas wells in the area, the issues should include: (1) "Are the parameters adequate?" and (2) "Are there measures in place to shut down the system immediately if there is a spill or other oil and gas related emergency?"

[113] Ms. Walker stated that, due to the potential damage that may have occurred to upstream pipelines in the Sheep River, and without proper delineation of any plumes associated with the industrial landfill or leaching from the Calkins septic field, the questions that should be considered could be: (1) Are the parameters for water monitoring adequate; and (2) Are there measures in place to shut down the system immediately if there is a spill or other oil and gas related emergency?

#### B. Analysis

- [114] In order for a matter to be considered at the hearing, the matter must be: (1) identified in the Notice of Appeal; (2) within the Board's jurisdiction; and (3) connected to the Director's decision being appealed.
- [115] A matter must be raised in the Notice of Appeal in order to provide the Director and an approval holder notice of the concerns of an appellant. Filing an appeal does not give an appellant the right to continually add issues as the appeal process progresses. This would result in an unfair process to the other parties in an appeal.
- [116] Before the Board can consider a matter, it must be within the Board's jurisdiction. What the Board can consider is confined to what the legislation states it can consider being environmental matters only.
- [117] Appealing the Amending Approval does not provide the Appellants with the opportunity to argue issues relating to the original Approval. What can be considered are the amendments to the original Approval and such provisions in that Approval as are necessarily incidental to comply with the amendments. It does not open up the original Approval in its entirety.
- [118] The Appellants raised concern on the adequacy of the water treatment plant to remove all contaminants from the drinking water. This is an issue related to the water treatment facility itself and the effectiveness of the water treatment system is not an issue in these appeals of the issuance of the Approvals. Therefore, the adequacy of the water treatment plant and its operations cannot be an issue before the Board in these appeals.
- One of the issues raised by the Appellants was the need for a fish study to determine the possible effects of contaminants in the water on fish. A fish study is usually required to determine the impacts the construction of the proposed project would have on fish and fish habitat. The Director explained such a study is not required, and the Approval Holder did conduct a QAES assessment even though it was not required. Although the Appellants may not be satisfied that a fish study was not conducted to determine if there are contaminants in the water that are impacting fish species in the Sheep River, this type of fish study is beyond the

scope of what the Director can request. As a result, the Board cannot consider the fish study as an appropriate issue for the hearing.

- [120] The Appellants also raised concerns that problems will be encountered because of human error. This is purely speculative and not the basis of a proper issue before the Board.
- In general, the concerns expressed by the Appellants relate to the potential contamination of the water supply entering into the infiltration gallery and the testing for contaminants. The Appellants noted the following as potential contamination sources: (1) the subdivision septic field; (2) the industrial landfill located across from the infiltration gallery; (3) historical oil and gas activity in the area; (4) current upstream oil and gas activities; (5) existing pipelines that run near the infiltration gallery; and (6) upstream agricultural activities.
- [122] The Director stated the location of the infiltration gallery is a municipal decision and not within the Board's jurisdiction. Although the location chosen may be a municipal decision, the Board has the jurisdiction to consider the location with respect to the ability of contaminants being able to enter the infiltration gallery from various sources.
- The Approvals allow for a different method of capturing the Town's water supply. The existing water capture system is being converted from a well capture system to an infiltration gallery, but the source of the water remains the same. As a result of the different method of capturing the water, there may be increased or different risks of contaminants entering the water sources or less opportunity of contaminants being removed from the water sources through natural means. The infiltration gallery is closer to the surface than the well capture system, potentially increasing or changing the pathways for contaminants to enter the water. It is the difference in risk of contaminants entering the infiltration gallery that marks the concerns of the Appellants between the original Approval and the Approvals and which must be demonstrated by the Appellants in their evidence before the Board.
- The Approval Holder notified the Board that the septic field was closed and should not be considered as an issue. The Board notes the septic field was just recently closed and there is no indication that any assessment was done on the site to determine if any contaminants exist at the site and if there is a potential for any existing contaminants to enter the

Sheep River. Although the septic field may no longer be used by the residents, it does not mean all contaminants have been removed. No additional contaminants may be entering the septic field, but it does not eliminate the possibility that contaminants already exist and may be migrating off the septic field site. There has been no delineation of a residual contamination plume, if one exists. Since the septic field could be a possible source of contamination, the Board will hear evidence on the risks associated with the Calkins septic field on the water source of the infiltration gallery.

The Approval Holder and Director indicated the industrial landfill is now closed. The Stantec Reports, prepared by a consultant for the Approval Holder, indicated there was a high risk for contamination from the industrial landfill. Although it appears that Stantec believed the industrial landfill was not yet decommissioned, there is still the possibility of residual contamination migrating from the landfill site to the Sheep River and potentially reaching the infiltration gallery. This could result in contaminants entering the infiltration gallery and impacting the water source for the Town. Since there is no indication of whether any delineation of any possible contamination plume has been completed or was required under the Approvals, the Board considers it appropriate to include the industrial landfill as a possible source of contaminants into the infiltration gallery.

#### [126] Therefore, the first issue the Board will consider is:

- "1. Does the conversion from the well capture system to the infiltration gallery increase the level of risk of contamination to the Town's water supply system? The potential sources of contamination include:
  - a. the industrial landfill located across the Sheep River;
  - b. the residential subdivision (Calkins Place) septic tank and field system located near the infiltration gallery site;
  - c. agricultural activities upstream of the infiltration gallery site;
  - d. historical oil and gas activities upstream of the infiltration gallery site; and
  - e. current and historical oil and gas activities and infrastructure (wells and pipelines) around the infiltration gallery site."

[127] If the Appellants are successful in demonstrating to the Board there is an increased risk or different risks regarding contaminants entering the infiltration gallery as compared to the well capture system and the water quality entering the infiltration gallery is affected, then the Board must hear evidence on whether the terms and conditions of the Amending Approval and *Water Act* Approval adequately mitigate any concerns. Therefore, the second issue the Board will hear is:

"2. If the answer to Issue 1 is "Yes", do the terms and conditions of the EPEA Amending Approval 1242-02-02 and the *Water Act* Approval 00334295-00-00 adequately address the increased level of risk of contamination?"

[128] The Appellants also raised questions as to the testing frequency and the types of substances tested. The issue of testing frequency was also raised in the appeal filed by the Town. As stated above, in response to the Approval Holder's appeal to amend the Amending Approval, and as agreed upon by the Participants, the Board will hear the following issue:

"3. Should the minimum monitoring frequency, detailed in Table 1, for PCBs, NORMs, and Petroleum Hydrocarbon Fractions F3 and F4 be: twice per year, one time prior to water from the infiltration gallery entering the raw water storage reservoir or water treatment plant, or some other frequency?"

[129] The Appellants' concerns regarding testing can be considered under this issue. Concerns regarding additional testing or the parameters tested for can be considered when the Board determines if the terms and conditions of the Approvals adequately address any increased risk of contamination.

## C. General Summary

[130] Therefore, the issues the Board will hear at the hearing are:

- 1. Does the conversion from the well capture system to the infiltration gallery increase the level of risk of contamination to the Town's water supply system? The potential sources of contamination include:
  - a. the industrial landfill located across the Sheep River;
  - b. the residential subdivision (Calkins Place) septic tank and field system located near the infiltration gallery site;
  - c. agricultural activities upstream of the infiltration gallery site;

- d. historical oil and gas activities upstream of the infiltration gallery site; and
- e. current and historical oil and gas activities and infrastructure (wells and pipelines) around the infiltration gallery site.
- 2. If the answer to Issue 1 is "Yes", do the terms and conditions in EPEA Amending Approval 1242-02-02 and *Water Act* Approval 00334295-00-00 adequately address the increased level of risk of contamination?
- 3. Should the minimum monitoring frequency, detailed in Table 1(found in section 8 of EPEA Amending Approval 1242-02-02) for PCBs, NORMs, and Petroleum Hydrocarbon Fractions F3 and F4 be: twice per year; one time prior to water from the infiltration gallery entering the raw water storage reservoir or water treatment plant; or some other frequency?
- [131] The Participants are reminded that, pursuant to section 95(4) of EPEA, the Board will not consider any other issue.<sup>11</sup>

### VII. CONCLUSION

[132] The Approval Holder and AESRD agreed that Ms. Walker is directly affected by the Amending Approval. Accordingly, the Board did not have to rule on the question of whether she was directly affected by the *Water Act* Approval.

[133] The issues for the hearing will be:

- 1. Does the conversion from the well capture system to the infiltration gallery increase the level of risk of contamination to the Town's water supply system? The potential sources of contamination include:
  - a. the industrial landfill located across the Sheep River;
  - b. the residential subdivision (Calkins Place) septic tank and field system located near the infiltration gallery site;
  - c. agricultural activities upstream of the infiltration gallery site;
  - d. historical oil and gas activities upstream of the infiltration gallery site; and
  - e. current and historical oil and gas activities and infrastructure (wells

11

Section 95(4) of EPEA provides:

<sup>&</sup>quot;Where the Board determines that a matter will not be included in the hearing of an appeal, no representations may be made on the matter at the hearing."

and pipelines) around the infiltration gallery site.

- 2. If the answer to Issue 1 is "Yes", do the terms and conditions in EPEA Amending Approval 1242-02-02 and *Water Act* Approval 00334295-00-00 adequately address the increased level of risk of contamination?
- 3. Should the minimum monitoring frequency, detailed in Table 1(found in section 8 of EPEA Amending Approval 1242-02-02) for PCBs, NORMs, and Petroleum Hydrocarbon Fractions F3 and F4 be: twice per year; one time prior to water from the infiltration gallery entering the raw water storage reservoir or water treatment plant; or some other frequency?

[134] The Town withdrew its appeal when the Board included the third issue as stated above, and the Appellants and AESRD accepted the issue as a valid issue to be heard at the hearing.

Dated on September 9, 2014, at Edmonton, Alberta.

"original signed by"
Alex MacWilliam
Panel Chair
"original signed by"
D.W. Perras
Board Chair
"original signed by"
Alan Kennedy
Board Member