

**FOLLOW- UP DISCIPLINARY NOTICE
ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS OF
BRITISH COLUMBIA**

**Removal of Peer Review Requirement for
Richard (Dick) Bartel, P.Eng., Coldstream, BC**

Mr. Bartel entered into a Consent Order dated November 16, 2012, with the Discipline Committee Review Panel in lieu of proceeding to a disciplinary hearing. Paragraph (e) of the Consent Order required Mr. Bartel's services relating to wastewater treatment and disposal systems peer reviewed for a period of one year.

Subsequently, the Discipline Committee Review Panel received an acceptable final report from Mr. Bartel's peer reviewer. The Discipline Committee Review Panel then confirmed that Mr. Bartel was no longer required to have peer reviews and is relieved of this requirement on his license to practice engineering effective January 21, 2014.

The Discipline Committee Review Panel also confirmed that pursuant to paragraph (c) of the Consent Order, Mr. Bartel's practice remains restricted by the condition that he not undertake any hydrogeological services or provide any hydrogeological advice.

The full Consent Order is attached to this Notice. Paragraphs (b), (d), (e) and (f) are no longer in effect.

**IN THE MATTER OF THE ENGINEERS AND GEOSCIENTISTS ACT
R.S.B.C., 1996, c. 116, as amended**

- and -

IN THE MATTER OF RICHARD BARTEL, P.Eng.

CONSENT ORDER

Dated for reference November 16, 2012.

WHEREAS Richard Bartel, P.Eng. ("Mr. Bartel"), was served with a Notice of Inquiry dated July 26, 2012 that contained the following allegation:

AND TAKE NOTICE that the allegation against you is that contrary to the Act, you have demonstrated unprofessional conduct by your design of one or more of the following sewerage systems within the 30 metre setback required from a water supply well or a source of drinking water when you did not have the required competence in the field of hydrogeology (or geotechnical engineering pre June 29, 2010) to confirm that this encroachment would not likely cause a health hazard:

1. [REDACTED] Tulameen, B.C.;
2. [REDACTED] 70 Mile House, B.C.;
3. [REDACTED] Lumby, B.C.;
4. [REDACTED] Tulameen, B.C.;
5. [REDACTED] Malakwa, B.C.; and
6. [REDACTED] Lone Butte, B.C.

AND WHEREAS the Association of Professional Engineers and Geoscientists of British Columbia ("Association") and Mr. Bartel wish to resolve this matter by consent in order to avoid the need for a disciplinary inquiry.

AND WHEREAS Mr. Bartel admits the allegation in the Notice of Inquiry.

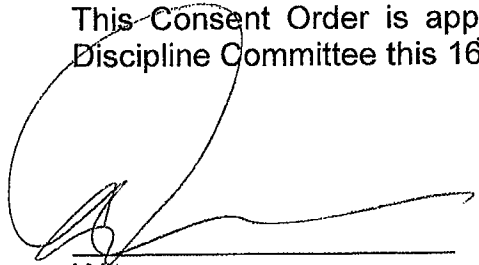
THEREFORE by consent, this Order is hereby made, pursuant to the *Act*, specifically s. 32.1.

- (a) Mr. Bartel is hereby reprimanded;
- (b) ~~Mr. Bartel shall pay the Association's legal costs, including disbursements and taxes, in this matter up to the reference date of this Consent Order, in the amount of \$5,000.00. Such costs will be payable within 60 days of the reference date of this Consent Order;~~
- (c) Mr. Bartel's practice will be restricted by the condition that Mr. Bartel will not undertake any hydrogeological services, nor provide any hydrogeological advice;
- (d) ~~Mr. Bartel will be the subject of a general practice review by the Practice Review Committee, at his own expense. The estimated cost of the practice review is \$2,250.00 plus taxes and expenses. Mr. Bartel may also be the subject of a technical practice review if so required by the Practice Review Committee. The practice reviews must be completed by November 30, 2013 unless additional time is required by the Practice Review Committee, in which case the deadline for the completion of the practice reviews may be extended, at the discretion of the Practice Review Committee, to March 30, 2014;~~
- (e) ~~Mr. Bartel shall have his services relating to wastewater treatment and disposal systems, started after the reference date of this Order, peer reviewed by a professional engineer approved in writing and in advance by the Registrar of the Association in accordance with the Council Policy on Discipline Committee Ordered Peer Reviews (the "Peer Reviewer"). The requirement for peer reviews shall continue for at least a period of twelve months from the date of approval of the Peer Reviewer. The cost of the Peer Reviewer shall be borne by Mr. Bartel. The Peer Reviewer shall report in writing to the Registrar of the Association on the reviews every three months and shall report in writing to the Association's Discipline Committee at the conclusion of the twelve month period providing an opinion on whether Mr. Bartel requires continuing peer reviews and for how long. The cost for all Peer Reviewer reports shall be borne by Mr. Bartel. Mr. Bartel shall provide to the Peer Reviewer regular updates to his wastewater treatment and disposal systems project list during the peer review period;~~
- (f) ~~If a peer reviewer is not appointed in accordance with paragraph (e) by December 17, 2012, or if the services of the Peer Reviewer cease for any reason, Mr. Bartel shall transfer all his existing wastewater treatment and disposal projects to another professional engineer approved in writing and in advance by the Registrar;~~
- (g) Mr. Bartel shall at any time be at liberty to apply to the Association to lift the practice restrictions set out in paragraphs (c) and (e) of this Consent Order upon his providing to the Association's Discipline Committee proof that he has successfully completed further training and education in hydrogeology and wastewater treatment and disposal systems that is acceptable to the Association's Discipline Committee, who may grant the application with or without further conditions or reject the application; and
- (h) If Mr. Bartel fails to comply with any of conditions (b),(c) (d) (e) or (f) of this

Consent Order, his membership in the Association shall be suspended until every default has been remedied in accordance with the terms of this Consent Order.

This Consent Order has the same force and effect as an Order made under section 33(2) of the *Act* and may be dealt with under section 34 of the *Act* if conditions in the Consent Order are not met.

This Consent Order is approved and accepted by Mr. Bartel and a member of the Discipline Committee this 16th day of November, 2012.




Witness

DAVID WHITELAW
MEDIATOR



Richard Bartel, P.Eng.



Roy Wares, P.Eng.
Chair, Discipline Committee

IN THE MATTER OF
THE ENGINEERS AND GEOSCIENTISTS ACT
R.S.B.C. 1996 CHAPTER 116 AS AMENDED

And
IN THE MATTER OF RICHARD BARTEL, P.ENG.

DISCIPLINE COMMITTEE PANEL	Paul Adams, P.Eng., Chair Neil Cumming, P.Eng. Upul Atukorala, P.Eng.
COUNSEL FOR THE ASSOCIATION	Robert W. Hunter
COUNSEL FOR THE MEMBER	None
SUBMISSION FROM THE MEMBER	April 20, 2013 by email
SUBMISSION FROM THE ASSOCIATION	April 25, 2013
REPLY SUBMISSION FROM THE MEMBER	April 29, 2013 by email
REPLY SUBMISSION FROM THE ASSOCIATION	April 30, 2013
REPLY SUBMISSION FROM THE MEMBER	May 1, 2013

INTRODUCTION

[1] A Discipline Committee Panel (the Panel) of the Association of Professional Engineers and Geoscientists of British Columbia (the Association) under authority of the Engineers and Geoscientists Act, R.S.B.C. 1996, C. 116, (the Act), received submissions to consider the application by Mr. Richard Bartel, P.Eng. to have his Consent Order amended to remove the requirement for his services relating to wastewater treatment and disposal systems being peer reviewed.

[2] Richard Bartel was a member of the Association under the Professional Engineer (P.Eng.) designation at all times relevant to the matters herein in question.

[3] The allegation of unprofessional conduct against the member, Richard Bartel, P.Eng. is found in the second paragraph of the Notice of Inquiry of July 26, 2012.

“... contrary to the Act, you have demonstrated unprofessional conduct by your design of one or more of the following sewerage systems within 30 metre setback required from a water supply well or a source of drinking water when you did not have the required competence in the field of hydrogeology (or geotechnical engineering pre June 29, 2010) to confirm that this encroachment would not likely cause a health hazard:

1. Tulameen, B.C.;
2. 70 Mile House, B.C.;
3. Lumby, B.C.;
4. Tulameen, B.C.;
5. Malakwa, B.C.; and
6. Lone Butte, B.C.”

[4] On November 16, 2012, following an alternative complaint resolution process, Mr. Bartel with the assistance of legal counsel admitted the charges in the Notice of Inquiry and agreed to the penalty and oversight prescribed in the Consent Order.

[5] On March 18, 2013, Mr. Bartel wrote to the Association as follows:

“By way of this letter we are applying to have the requirement for peer review of projects we are doing removed, as per the subject order.

Enclosed find copies of certificates of a 2 day Onsite Wastewater Systems design put on by Orenco Systems Inc in Oregon. This satisfies the requirement for additional training.

Also, [REDACTED] has reviewed and approved 5 different new Onsite Wastewater Treatment Systems.

Additionally we have substantial experience in the design and construction of Onsite Wastewater Treatment Systems.”

[6] On April 19, 2013, Mr. Kerry Short, counsel for the Discipline Panel, wrote to Mr. Bartel setting out a schedule for written submission regarding his application to have the peer review requirement removed from the Consent Order. As part of this letter Mr. Short pointed out:

“...However, you should appreciate that the Panel will need to be satisfied that the education component in the Consent Order has been fulfilled and that you are capable of carrying out your design responsibilities on your own.”

[7] On April 20, 2013 Mr. Bartel e-mailed Mr. Short in response to his letter indicating that he had already provided sufficient information.

[8] On April 25, 2013 Mr. Bartel provided a short description of the content of the courses he took at Orenco Systems.

[9] On April 25, 2013 Mr. Hunter, counsel for the Association, provided a submission on behalf of the Association.

[10] On April 29, 2013 Mr. Bartel made an email submission in reply to the Association’s submission. This reply raised issues that were not included in Mr. Bartel’s previous submissions and the Panel agreed that Mr. Hunter should be provided with the opportunity to make a submission in response to Mr. Bartel’s reply.

[11] On April 30, 2013 Mr. Hunter made a reply submission.

[12] On May 1, 2013 Mr. Bartel made a further submission by email.

[13] On May 6, 2013 the Panel met by telephone conference call to consider Mr. Bartel’s application for the removal of the peer review requirement in the Consent Order taking due consideration of the submissions made by Mr. Bartel in support of his application and the submissions of the Association.

CONSENT ORDER

[14] Section 32.1 of the Act provides for the resolution of notices of inquiry through a voluntary admission on the part of the member and a Consent Order. Section 32.1 (1) states:

“(1) After serving notice of an inquiry under section 32 (2) to the person who is the subject of the inquiry, and before the commencement of the inquiry, the discipline committee, in writing, may propose to that person the making of a consent order under subsection (2) (a) of this section for the voluntary resolution of one or more matters to be dealt with at the inquiry.

[15] Section 32.2 of the Act provides for an alternate dispute resolution process to assist the Discipline Committee and the member in agreeing on a Consent Order. The process is described in subsections (1) and (2):

“(1) At any time before the commencement of an inquiry under section 32 (2), the person who is the subject of the inquiry, the registrar and the discipline committee may agree that alternative complaint resolution, as provided in the bylaws, will commence between the person who is the subject of the inquiry and the discipline committee respecting one or more matters to be dealt with at the inquiry.

(2) If the discipline committee and the person who is the subject of the inquiry reach an agreement respecting one or more of the matters to be dealt with at the inquiry, a

consent order may be made under section 32.1 (2) (b) on the terms set out in the agreement.”

[16] On November 16, 2012, a mediation session was held with the Discipline Committee, the Association and Mr. Bartel with the assistance of a Mediator, Mr. David Whitelaw. As a result of the mediation Mr. Bartel admitted the charges and accepted certain penalties as well as certain restrictions and oversight of his practice. With respect to the peer review provisions of the Consent Order, clause (e) states:

“(e) Mr. Bartel shall have his services relating to wastewater treatment and disposal systems, started after the reference date of this Order, peer reviewed by a professional engineer approved in writing and in advance by the Registrar of the Association in accordance with the Council Policy on Discipline Committee Ordered Peer Reviews (the “Peer Reviewer”). The requirement for peer reviews shall continue for at least a period of twelve months from the date of approval of the Peer Reviewer. The cost of the Peer Reviewer shall be borne by Mr. Bartel. The Peer Reviewer shall report in writing to the Registrar of the Association on the reviews every three months and shall report in writing to the Association’s Discipline Committee at the conclusion of the twelve month period providing an opinion on whether Mr. Bartel requires continuing peer reviews and for how long. The cost for all Peer Reviewer reports shall be borne by Mr. Bartel. Mr. Bartel shall provide to the Peer Reviewer regular updates to his wastewater treatment and disposal systems project list during the peer review period;”

[17] Clause (g) of the Consent Order allows Mr. Bartel to apply to the Discipline Committee to have the peer review provisions lifted. Clause (g) states:

“(g) Mr. Bartel shall at any time be at liberty to apply to the Association to lift the practice restrictions set out in paragraphs (c) and (e) of this Consent Order upon his providing to the Association’s Discipline Committee proof that he has successfully completed further training and education in hydrogeology and wastewater treatment and disposal systems that is acceptable to the Association’s Discipline Committee, who may grant the application with or without further conditions or reject the application;”

[18] The Consent Order allows Mr. Bartel to apply to the Discipline Committee to have his peer review restriction lifted, but requires that he provide “...proof that he has successfully completed further training and education in hydrogeology and wastewater treatment and disposal systems that is acceptable to the Association’s Discipline Committee...”.

MEMBER’S SUBMISSIONS

[19] Mr. Bartel has provided proof that on January 28 and 29, 2013 he took two 8 hour courses put on by Orenco Systems Inc. and provided the following course descriptions:

“Effluent Sewer Design

A course in the design of effluent sewers for small communities. Includes factors for choosing effluent sewers in the appropriate applications. Hands on design exercises are

provided (bring your calculator). Cost comparison exercises between various collector systems are made by using actual bid tabulations and life cycle costs. Weather permitting, a field trip is included, lead [sic] by Terry Bounds, P.E., to a community served by an effluent sewer for the past 30 years.

“Commercial/Municipal AdvanTex® Design

A hands-on course in the design of AdvanTex® wastewater treatment systems, featuring the technology that won the Waste Environment Federation’s Innovative Technology Award for 2011. Includes process description, sizing calculations, suggested system layouts with drawings, and a hands-on design exercise for an example application. Also includes design and process considerations for advanced treatment applications. Weather permitting, a field trip is included, to a AdvanTex® system that serves the wastewater collection, treatment, and subsurface dispersal needs of a community or subdivision.”

[20] Mr. Bartel argues that Orenco Systems has a strong reputation in sewerage systems and states:

“Engineers experienced in the industry, first, will be aware of the reputation Orenco Systems has - the systems the[sic] have installed in the wastewater industry and the course and educational sessions they have sponsored. The 2 day course I attended had 62 participants and there were people for [sic] Australia, New Zealand, from most of the provinces in Canada.”

[21] Mr. Bartel contends that his experience in “...designing, supervising construction of onsite systems, namely now 400 or better system designs...” is sufficient.

[22] [REDACTED] P.Eng. is the designated peer reviewer for Mr. Bartel’s engineering work relating to wastewater treatment and disposal systems and has provided one quarterly report which addressed five of Mr. Bartel’s designs. The following excerpts from [REDACTED] letter are pertinent to this review:

1. *“Jan.15/13: Bartel letter to Interior Health Authority re: Certification of existing system for a restaurant marina in [REDACTED] to be expanded. After my discussion with Mr. Bartel by phone, he agreed that he should withdraw the letter. The system is under designed for the typical design flow.*
2. *Jan.25/13: Bartel design of work camp lagoon in northern B.C. The system would be under designed based on the standard practice. He agreed to size it accordingly.*
3. *Feb.17/13: Bartel design for 2 separate Type 1, basic systems near Princeton B.C. The systems were designed in accordance with the BC standard practice for on-site sewerage system design. We shared information on areas of improvement for these basic systems...”*
4. *“...Mar.4/13: Bartel Design for a Type 1, basic septic systems near Heffley, B.C. The system design meets the BC Standard Practice for on-site sewerage design.*

In summary, I found Mr. Bartel's designs and supporting documentation to be very well organized and complete in meeting the expectations of established standard practise as well as the Discipline Committee Ordered Peer Review Guideline. It is my opinion however, that Mr. Bartel should consider, more closely, the importance of sewerage design flow and the expectation of long term sustainability of the sewerage system. He was very cooperative and agreed with my recommendations for change in this regard."

[23] Mr. Bartel argues that he does not need training in hydrogeology as required by the Consent Order since he is not designing Type 3 Systems. He supports this contention in his April 29, 2013 email, which reads, in part:

"After review the documentation I believe there is need for clarification with regard to B. Consent Order 7. (g) where it says "complete further training and education in hydrogeology and wastewater treatment and disposal systems". This implies that these two (2) technologies are linked which is absolutely not the case.

There is only one condition, when a Type 3 Onsite Wastewater Treatment and Disposal System (Type 3 Systems) is being designed which is less than 30.48 meters from any source of drinking water, that a report is from a Hydrogeologist. Type 3 Systems represent approximately 2 to 3 % of all the systems designed and installed in BC and are of the special nature as described earlier.

Specifically this whole order alleges that during design of Type 3 Systems prior to June 28, 2010 - that is 4 to 6 years ago I made design decisions which were of a hydrogeological nature and I was not qualified to do. Also, that I claim to be knowledgeable in hydrogeology - which is absolutely not the case - no where orally or in writing is that documented. My claim is and stays that I was knowledgeable in the 'hydrogeology' of Wastewater Systems because of the number of systems designed, supervised and inspected construction of, and that as per item # 2 of the code of ethics I could make these decisions. Also, during that time I consulted with other engineers doing design of Type 3 Systems to established [sic] what their design procedure was and informed that they followed the same procedure. Additionally, hydrogeology describes saturated soil conditions, the design of these particular showed there was no potential for saturation due to the low low hydraulic loading of the soil. I verified this by actual observation as the systems all have observation stand pipes.

This information has been submitted to APEGBC on several occasions and "never" has there been acknowledgement, nor absolutely no effort made to determine what other wastewater system design engineers were following when designing Type 3 Systems. As I have indicated, since the issuing of the order I have been contacted by several of my peers, so I am specifically aware that I was not the only engineer in BC following these design procedures and using item # 2 of the code of ethics as a basis to proceed.

Early in 2012 while the investigation was going on (which lasted 2 years) I provided APEGBC, in writing, a commitment that when designing Type 3 Systems I would always use a qualified P.Geo or P.Eng who specialized in Hydrogeology. Again, as before this was never acknowledged or considered.

Since that time I have designed a Type 3 System, using a P.Geo who specializes in Hydrogeology and the system has been approved by the Interior Health Authority for construction. “

[24] Mr. Bartel contends that of the 6 systems that were the subject of the Notice of Inquiry, 3 were constructed and are operating satisfactorily. His April 29, 2013 emails states:

“An important aspect to all these proceedings is that of the six (6) systems designed, 3 were actually constructed and now have at [least] 3 to 4 years of operating time and history. I visited all three (3) during 2012 to be informed and have a visual impression. All are operating as designed, there is absolutely no potential health hazard nor any impact on the environment. With the maintenance procedures being followed on each of the systems, as provided each owner in writing, these systems will continue to operate in the same manner for many many years.”

[25] Mr. Bartel responded to , comments in the peer report that he should give more consideration to long term sustainability as follows:

“Reference was made to sustainability of a particular system. Of course this is a very important and factor and I consider for each system design. Typically, in the design flow tables there is a peak loading factor involved. Usual manner for qualified professionals is to use the recommended flows listed in the Standard Practice Manual and this is what is used 90 % of the time without deviation. Also, the EPA manual indicates that the average daily flow of a residential treatment system is 60 to 65 % of the design flow. So sustainability is built in to these systems. Similarly, in the non-residential applications shown in Table 2-3 of the Standard Practice Manual there is an attempt to do the same. However, as usual, there are additional design conditions which a qualified professional must, and is allowed, to consider. The referenced work camp has/had the following: First - the effluent going to the Lagoon is High Quality Effluent sizing the lagoon to contain 6 months volume. Second, the duration of the camp, and time the system will be used, at the site is 10 to 11 months. Experience shows that Flow is 75 to 80 % of design flow. Sustainability considerations for this system were made during the design.”

[26] Mr. Bartel's submission challenges the basis for a peer review in the original Consent Order. His April 29, 2013 email states, in part:

“After considerable time had elapsed since submitting the complete files for the six (6) systems which are part of the order, I requested of APEGBC what the results were of the review and were there any questions that related to the System Design Reviews.

The response was that the design reviewer was busy with his/her own practise and it had not been done.

The only conclusion I can come to is that the design review was never was done.

This then begs the question on what basis was the requirement for the peer review established ?

In fact, one of the APEGBC retained reviewer's (the only one with experience in design of Type 3 Systems) commented on the design method in a very positive way.

So, again the question is, on what basis was the requirement for peer review established ?”

[27] In his May 1, 2013 submission, Mr. Bartel reiterates his contention that there is no basis for the peer review that is part of the Consent Order and he states that the Association’s reply submission “...contains engineering errors...”, but he does not indicate what the errors are.

ASSOCIATION’S SUBMISSIONS

[28] The Association concludes in paragraph 18 of the April 25, 2013 submission that:

“The Association submits that Mr. Bartel’s Application and supporting materials are insufficient to permit the Discipline Committee to consider whether Mr. Bartel has successfully completed further training and education in hydrogeology and wastewater treatment and disposal systems.”

[29] The Association also concludes in paragraph 19 of the April 25, 2013 submission that:

“The peer reviewer’s first quarterly report shows that the peer reviewer is having a positive impact upon Mr. Bartel’s practice and the protection of the public, as was the intent of the peer review requirement. In the Association’s submission, it is far too early in the peer review process to consider discontinuing the peer reviews. The Association notes that Mr. Bartel has not suggested that his application to dispense with the peer review requirement is supported by his peer reviewer,

[30] The Association states in their April 30, 2013 reply submission that the Sewerage System Regulation, section 3.1 states that “...a person must not construct a sewerage system less than 30 metres from a well...” which includes Type 1, 2 and 3 systems.

PANEL’S REVIEW AND DETERMINATON

[31] In order to accept Mr. Bartel’s application for relaxation of the Consent Order requirement for peer review, section (e) of the Consent Order, the Panel needs to be satisfied that Mr. Bartel has the knowledge and experience to competently design sewerage systems without supervision or peer review.

[32] The Panel understands that Type 1, 2 and 3 Systems require a setback distance of 30 metres from a well or drinking water source. Any reduction of the setback distance to a well should be approved by a professional competent in the area of hydrogeology. The Panel does not accept Mr. Bartel's contention that an approval from a Hydrogeologist to have a reduced setback distance is applicable to Type 3 Systems only.

[33] In the Consent Order Mr. Bartel admits the allegations of unprofessional conduct with respect to the design of six sewerage systems when he did not have the necessary competence in hydrogeology and geotechnical engineering.

[34] Notwithstanding this admission, in his submissions of April 29 and May 1, 2013, Mr. Bartel asserts his opinion that the allegations lack merit and that the designs in question "...are th(o)rough and complete, meeting all requirements...". These statements appear to contradict the admission made in the Consent Order and convey the impression that he does not believe the designs in question were deficient.

[35] In his letter of March 18, 2013, reports that he has reviewed five of Mr. Bartel's designs and found that two were undersized and two were acceptable, but would benefit from improvements. The fifth design was satisfactory.

[36] Mr. Bartel has completed two one-day courses in sewer design offered by a manufacturer of proprietary treatment systems. Details of the course content provided to the Panel are limited, however, it appears that there is little or no content regarding hydrogeology, nor of design procedures for systems located within 30 metres of a water supply well or source of drinking water, which was the key issue in the Notice of Inquiry.

[37] Mr. Bartel asserts that he has visited the sites of three of the systems he designed and that all are operating satisfactorily. He presents no evidence to support this conclusion, and appears to rely only on his visual assessment. The Panel finds this level of review to be inadequate and that it demonstrates Mr. Bartel's need for peer review at this time.

[38] The Panel concludes that Mr. Bartel has not met the requirements for additional education in hydrogeology and wastewater treatment and disposal systems, nor has he demonstrated sufficient competence in his sewerage system designs to remove the requirement for peer review. The Panel therefore dismisses Mr. Bartel's application.

[39] The Panel notes that Mr. Bartel, in his submissions, has challenged the requirement for a peer review and reiterates his contention that he is competent as proved by his years of experience. These questions are not under consideration by the Panel at this time as Mr. Bartel, with the assistance of counsel, admitted the charges in the Notice of Inquiry and voluntarily accepted the Consent Order.

[40] The Panel makes the following observations on what it might expect to be provided in any future application from Mr. Bartel under section (g) of the Consent Order or at the conclusion of 12 months of peer review, as provided under section (e) of the Consent Order. To support a future application the Panel suggests the following be provided:

1. an evaluation and report from the peer reviewer with an opinion on whether Mr. Bartel requires continuing peer reviews and, if so, for how long, as per paragraph (e) of the Consent Order;
2. supporting evaluation of any additional training in hydrogeology and wastewater treatment and disposal systems, including an opinion from the peer reviewer as to its relevance and adequacy; and

3. completion of the general practice review and, if required, technical review in accordance with section (d) of the Consent Order.


Respectfully submitted

Vancouver, British Columbia

May 24, 2013



Paul Adams, P.Eng. Chair



Neil Cumming, P.Eng.



Upul Atukorala, P.Eng.