

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

and

IN THE MATTER OF HANS HERINGA, P. Eng.
DECISION OF THE DISCIPLINE COMMITTEE

Hearing dates: June 26, 29-30, 2020

Discipline Committee Panel: Peter Bobrowsky, P.Geo, Chair
Paul Adams, P. Eng
Ed Bird, P.Eng

Counsel for the Panel Susan Precious

Counsel for the Association: Lindsay Waddell
Heather Hoiness

For the Member Charles Fenton, retired lawyer
Michael McCubbin
Hans Heringa, P.Eng. appearing on his own behalf

A. Introduction

1. This panel of the Discipline Committee (the "Panel") of the Association of Professional Engineers and Geoscientists of the Province of British Columbia doing business as Engineers and Geoscientists BC (the "Association") was appointed to conduct an inquiry to determine whether Hans Heringa demonstrated unprofessional conduct, incompetence, or negligence; breached the Bylaws of the Association; or acted contrary to the Association's Code of Ethics.

2. On March 25, 2020, Mr. Heringa was served with a Notice of Inquiry dated February 10, 2020. On April 14, 2020, Mr. Heringa was served with an Amended Notice of Inquiry dated April 8, 2020 which notified him that the inquiry would be held via Zoom video-conference, hosted by Charest Reporting. In both instances, the scheduled hearing dates were May 5 to 7, 2020.
3. On April 30, 2020, Mr. Heringa requested an adjournment of the inquiry hearing dates. After hearing from the parties, the Panel ordered that the inquiry be rescheduled to June 26, 29-30, 2020 and be held by video-conference. The Panel's reasons for its adjournment are set out in a separate decision. The Association arranged for a private boardroom in Nanaimo where Mr. Heringa and Mr. Fenton had access to two laptops and IT support.
4. The Association issued a further Amended Notice of Inquiry dated June 9, 2020 to reflect the new June 2020 hearing dates (the "Amended Notice of Inquiry").
5. A pre-hearing conference was held on May 29, 2020. The Panel made several directions including that witness lists, will say statements, and documents be exchanged by June 12, 2020.
6. A second pre-hearing conference was held on June 23, 2020. The Panel made further directions with respect to the Panel's discretion to admit late expert evidence from Mr. Heringa, the provision of a list of participants by the parties by June 25, 2020 and other procedural matters.
7. The particulars of the allegations against Mr. Heringa are set out in the Amended Notice of Inquiry as follows:
 1. You have demonstrated unprofessional conduct, incompetence, or negligence by:
 - a. Failing to comply with subsections 8 and 9 of the Sewerage System Regulations, B.C. Reg. 209/2010 (the "SSR") and the Sewerage System Standard Practice Manual (the "SPM"), in or around May 2017, when you filed two Record of Sewerage System ("ROSS") documents in relation to a property located at [REDACTED] [REDACTED], Qualicum Beach, British Columbia (the "Property"), that;
 - i. Failed to include GPS information, the location of Recreational Vehicle sites, or the location of the water lines;
 - ii. Identified the sewerage system as both an alteration and a repair, when it cannot be both;
 - iii. Failed to include, at the time of original submission, or subsequently, an adequate soils report;
 - iv. Failed to provide a report from a professional competent in hydrogeology in circumstances where one was required;
 - v. Failed to include a site plan to scale;

- vi. Failed to include a site plan that showed the location of all sewage generating structures;
- vii. Failed to include a site plan that showed the sewer lines from sewage generating structures to the tanks or water line locations; and,
- viii. Failed to provide adequate or any documentation to confirm the depths of the restrictive layer or the vertical separation between the base of the dispersal trench and the underlying restrictive layer.

b. Performing engineering work at the Property in or around May 2017 prior to submitting information to the Vancouver Island Health Authority as required by section 8(2) of the SSR.

c. Creating a risk to public health by failing to abide by the SPM and SSR in regards to the engineering work on the Property.

d. Failing to remedy the inadequacies of his engineering work on the Property when given the opportunity to do so on or about May 15, 2017, June 13, 2017, September 1, 2017, and November 10, 2017.

2. The conduct set out above at paragraph 1(a) and (d) is contrary to section 14(b)(1)-(2) of the Association's Bylaws which requires that members and licensees shall establish and maintain documented quality management processes for their practices, which shall include, as a minimum:

(1) Retention of complete project documentation which may include, but is not limited to, correspondence, investigations, surveys, reports, data, background information, assessments, designs, specifications, field reviews, testing information, quality assurance documentation, and other engineering and geoscience documents for a minimum period of 10 years; and,

(2) regular, documented checks of engineering and geoscience work using a written quality control process appropriate to the risk associated with the work.

3. The conduct set out above at paragraph 1(a) – (d) is contrary to Principle 1 of the Association's Code of Ethics which requires that members and licensees hold paramount the safety, health and welfare of the public, the protection of the environment and promote health and safety within the workplace.

4. The conduct set out above at paragraph 1(a) – (d) is contrary to Principle 2 of the Association's Code of Ethics which requires that members and licensees undertake and accept responsibility for professional assignments only when qualified by training or experience.

5. The conduct set out above at paragraph 1(a) – (d) is contrary to Principle 3 of the Association's Code of Ethics which requires that members and licensees provide an opinion on a professional subject only when it is founded upon adequate knowledge and honest conviction.

8. For the reasons set out below, the Panel finds that the allegations in paragraphs 1(a)(i),(iii),(iv),(vi),(vii),(viii), (c), (d), 3, 4 and 5 are proven to the requisite standard. The Association abandoned the allegation at paragraph 1 (a)(ii). The allegations at paragraphs 1(a)(v), (b) and 2 are dismissed.

B. Service

9. No issues were raised with respect to service of the Amended Notice of Inquiry. The Panel finds that Mr. Heringa was properly served.

C. Legal Framework

10. The Association bears the burden of proof and must prove its case on a “balance of probabilities” according to the Supreme Court of Canada’s decision of *F.H. v. McDougall*, 2008 SCC 53.
11. Section 33(1) of the *Engineers and Geoscientists Act*, R.S.B.C. 1996 c. 116 (the “Act” or the “EGA”) provides:

Disciplinary actions

33 (1)After an inquiry under section 32, the discipline committee may determine that the member, licensee or certificate holder

(a)has been convicted in Canada or elsewhere of an offence that, if committed in British Columbia, would be an offence under an enactment of the Province or of Canada, and that the nature or circumstances of the offence render the person unsuitable for registration or licensing,

(b)has contravened this Act or the bylaws or the code of ethics of the association, or

(c)has demonstrated incompetence, negligence or unprofessional conduct.

12. On February 5, 2021, *the Professional Governance Act*, SBC 2018 c. 47 (the “PGA”) came into force. Section 127(2) provides:

Transition – powers and duties in progress

127 (1) The officers and committees for a regulatory body may exercise any power and perform any duty under this Act that an officer holding the same title with, or a committee having the same mandate of, an affected body

(a) began to exercise or to perform, but did not complete, before the reference date, or

(b) could have exercised with respect to a discipline matter referred to in Division 3 [*Audits, Practice Reviews and Discipline*] of Part 6 [*Protection of the Public Interest With Respect to*

Professional Governance and Conduct] that is alleged to have existed or occurred, but was not investigated, before the reference date.

(2) If a discipline committee for an affected body, or a committee of the former body with similar duties and powers, commenced a hearing before the reference date, that committee is deemed to be a discipline committee for the regulatory body for the purpose of continuing the hearing on and after the reference date.

13. On February 18, 2021, the Panel provided the parties with an opportunity to make submissions with respect to this legislative change, and in particular, whether the Panel is still tasked to determine whether Mr. Heringa demonstrated unprofessional conduct, incompetence, or negligence, breached the Bylaws of the Association, or acted contrary to the Association's Code of Ethics pursuant to section 33 of the EGA, as set out in the Amended Notice of Inquiry. The Panel set a timetable for written submissions. Mr. Heringa sought an extension of his deadline on the basis that Mr. Fenton no longer represented him, he had retained Mr. McCubbin as legal counsel, and his legal counsel was expecting a child close to or during that period. The Panel granted the requested extension.
14. The Association delivered written submissions on March 1, 2021. The Association took the position that the PGA is in force, the Discipline Committee is continued under section 127 of the PGA, and that section 35 and 36 of the *Interpretation Act*, R.S.B.C. 1996 c.238 (the "*Interpretation Act*") provide that the repeal of the EGA does not affect the Panel's task to assess whether Mr. Heringa acted contrary to the EGA as alleged in the Notice of Inquiry. In sum, the PGA and the *Interpretation Act* require the Panel to continue to determine whether Mr. Heringa's conduct constitutes unprofessional conduct, incompetence, or negligence under the EGA.
15. On March 30, 2021, Mr. Heringa provided written submissions with respect to the PGA. Mr. Heringa's counsel indicated that they had reviewed the Association's position, that Mr. Heringa has nothing further to add, and he takes no position on the question of the retrospective application of the PGA.
16. The Panel agrees with the Association's position. It is continued under the PGA and its task remains as set out in the Amended Notice of Inquiry.
17. *Re Foreman* (EGBC Discipline Committee, August 25, 2015) defined the EGA's terms "unprofessional conduct", "incompetence" and "negligence" as follows:

Unprofessional Conduct

[93] The Association's Code of Ethics Guidelines addresses the standard of professional conduct as follows:

“The APEGBC Code of Ethics serves several purposes. It designates the standard of conduct expected of engineers and geoscientists in easily understandable terms. It distinguishes appropriate professional conduct from that which fails to meet a required standard. The Code also provides a basis on which allegations of unprofessional conduct are adjudicated by the Discipline Committee or other groups charged with responsibilities related to the conduct of members.”

[94] Hence, unprofessional conduct is that which does not meet the standard expected through application of the Code of Ethics. The Panel accepts the submission of the Association, based on *Law Society of British Columbia v. Martin*, 2005 LSBC 16, that professional misconduct is established when there is a marked departure from the standard to be expected of a competent professional, and that minor or inadvertent failure to comply with professional standards does not constitute unprofessional conduct.

Incompetence

[95] In considering whether a member’s conduct is incompetent, the Panel was referred to *Reddy v. Association of Professional Engineers and Geoscientists of British Columbia*, 2000 BCSC 88, in which the following definition of incompetence was accepted:

“We believe it is fair to say a person who habitually fails to perform his work with the degree of skill or accuracy usually displayed by other persons regularly employed in such work is incompetent. And the same is true of one who usually performs substantially less than others regularly so employed. ... The true significance of the term “incompetency” should not be overlooked. It embraces habitual carelessness.”

[96] The Panel accepts this definition of incompetence, and notes that it is consistent with previous decisions of the British Columbia courts and previous disciplinary panels of the Association.

Negligence

[97] For the purpose of considering whether a member’s conduct is negligent within the meaning of s. 33(1)(c) of the Act, the Panel was referred to *Davidson v. British Columbia*, [1995] B.C.J. No. 1806, in which the following definition of negligence has been relied upon:

“... the standard of skill and care which a professional man is required to exercise may be defined as follows: that degree of skill and care which is ordinarily exercised by reasonably competent members of the profession, who have the same rank and profess the same specialization (if any) as the defendant. If the standard is formulated in this way, it is fair to both parties. The professional man will not be held liable in the absence of personal fault on his part. The client is adequately protected, because it is normally actionable negligence if a professional man undertakes work beyond his competence.”

18. The Panel accepts and is guided by the above definitions.
19. Section 14(b) of the Association’s Bylaws that were in force at the relevant times state:

14 (b) Members and licensees shall establish and maintain documented quality management processes for their practices, which shall include, as a minimum:

- (1) retention of complete project documentation which may include, but is not limited to, correspondence, investigations, surveys, reports, data, background information, assessments, designs, specifications, field reviews, testing information, quality assurance documentation, and other engineering and geoscience documents for a minimum period of 10 years; and
- (2) regular, documented checks of engineering and geoscience work using a written quality control process appropriate to the risk associated with the work.

20. The Association's Code of Ethics that was in force at the relevant times provides:

14 (a) The purpose of the code of ethics is to give general statements of the principles of ethical conduct in order that members and licensees may fulfill their duty to the public, to the profession and their fellow members and licensees.

Members and licensees shall act at all times with fairness, courtesy and good faith to their associates, employers, employees and clients, and with fidelity to the public needs. They shall uphold the values of truth, honesty and trustworthiness and safeguard human life and welfare and the environment. In keeping with these basic tenets, members and licensees shall:

- 1) Hold paramount the safety, health and welfare of the public, the protection of the environment and promote health and safety within the workplace;
- 2) Undertake and accept responsibility for professional assignments only when qualified by training or experience;
- 3) Provide an opinion on a professional subject only when it is founded upon adequate knowledge and honest conviction;

....

21. The *Sewerage System Regulation* B.C. Reg. 191/2018 ("SSR") provides:

Definitions

1 In this regulation:

"**authorized person**" means a registered onsite wastewater practitioner or a professional;

"**construct**" includes

(a) to plan or conduct a site assessment in respect of a sewerage system,

(b) to install, repair or alter a sewerage system, and

(c) in the case of an authorized person, to supervise the doing of any matter listed in paragraphs (a) and (b);

...

Setback from wells

3.1 (1) In this section:

"professional" means a professional competent in the area of hydrogeology;

"well" means a well used to supply a domestic water system.

(2) Subject to subsections (3) and (4) (b), a person must not construct

(a) a holding tank less than 15 metres from a well, or

(b) a sewerage system less than 30 metres from a well.

...

Filing

8 (1) This section does not apply to the construction of a sewerage system in respect of which information and documents have been filed under subsection (2) on a previous occasion, unless

(a) a significant alteration or repair is being made on the sewerage system, or

(b) the construction of the sewerage system is in response to an order made under section 11 (b) or (c) [orders] of this regulation or section 31 (1) (b) [general powers respecting health hazards and contraventions] of the Act.

(2) Before construction of a sewerage system, an authorized person must file with the health authority, in a form acceptable to the health authority,

(a) information respecting

(i) the name, address and telephone number of the owner for whom the sewerage system is being constructed,

(ii) the type of structure the sewerage system will serve, and

(iii) the type, depth and porosity of the soil at the site of the sewerage system,

(b) plans and specifications of the sewerage system, or of alterations or repairs to the sewerage system, prepared by an authorized person and with the seal of the authorized person affixed,

(c) written assurance that the plans and specifications filed under paragraph (b) are consistent with standard practice, and

(d) if construction of the sewerage system is in response to an order made under section 11 (b) or (c) of this regulation or section 31 (1) (b) of the Act, a copy of the order.

(3) To determine whether the plans and specifications filed under subsection (2) (b) are consistent with standard practice, an authorized person may have regard to the minister's ministry publication "Sewerage System Standard Practice Manual", as amended from time to time.

(4) If there is a material change in the information filed under subsection (2) before the authorized person provides a letter of certification under section 9 (1) (b) [letter of certification], the authorized person must promptly file an amendment with the health authority.

Letter of certification

9 (1) Within 30 days of completing the construction of a sewerage system to which section 8 [filing] applies, an authorized person must

(a) provide the owner with

(i) a copy of the sewerage system plans and specifications as provided to the health authority under section 8 (2) (b),

(ii) a maintenance plan for the sewerage system that is consistent with standard practice, and

(iii) a copy of the letter of certification provided to the health authority under paragraph (b),

(b) file with the health authority a signed letter certifying that

(i) the authorized person has complied with the requirements of paragraph (a),

(ii) the sewerage system has been constructed in accordance with standard practice,

(iii) the sewerage system has been constructed substantially in accordance with the plans and specifications filed under section 8 (2) (b),

(iv) for a sewerage system described in section 2 (c) or (d) [application], the estimated daily domestic sewage flow through the sewerage system will be less than 22 700 litres, and

(v) if operated and maintained as set out in the maintenance plan, the sewerage system will not cause a health hazard, and

(c) append to the letter required under paragraph (b)

(i) a plan of the sewerage system as it was built, and

(ii) a copy of the maintenance plan for the sewerage system.

(2) To determine whether sewerage system construction and a maintenance plan in respect of the sewerage system are consistent with standard practice, an authorized person may have regard to the minister's ministry publication "Sewerage System Standard Practice Manual", as amended from time to time.

(3) If an authorized person does not file a letter of certification under subsection (1) (b) within 2 years from filing information about the sewerage system under section 8, the authorized person must not begin or continue construction of the sewerage system until the authorized person files new information under section 8.

...

Orders

11 In addition to any other order that may be made under the Act, a health officer may make an order to do one or more of the following:

- (a) connect a structure to a public sewer;
- (b) connect a structure to, in the health officer's discretion, a holding tank or sewerage system;
- (c) alter or repair a holding tank or sewerage system.

22. The SSR identifies the Ministry of Health's *Sewerage System Standard Practice Manual* as amended ("SPM") as a source of standard practice for site and soil evaluation, planning, installation, and maintenance for sewerage systems under the SSR.

D. Evidence

23. The Association called two witnesses:

- a. Joanne Wilson; and
- b. Darryl Brizan, P.Eng.

24. Mr. Heringa testified on his own behalf and called two other witnesses:

- a. Joseph Bonaventure Thorburn, P.Eng.; and
- b. Pauline Nelsen.

25. A number of exhibits from both parties were entered into evidence.

26. Joanne Wilson is an investigator with the Association. She testified as follows:

- a. She described the Association's complaint and investigation process and confirmed she was the investigator assigned to this matter.
- b. On June 1, 2017, the Association received a complaint by email from Glenn Gibson, Environmental Officer at Vancouver Island Health Authority ("VIHA" or "IHA") (the "Complaint"). The Complaint concerned two sewerage system filings by Mr. Heringa for [REDACTED], Qualicum Beach, British Columbia (the "Property").
- c. The Complaint enclosed the following documents:
 - i. Letter from Mr. Gibson to Mr. Heringa dated May 15, 2017;

- ii. Letter from Mr. Heringa to Mr. Gibson dated May 24, 2017;
- iii. Letter from Mr. Gibson to Pauline and Michael Nelsen dated October 31, 2016;
- iv. Record of Sewerage System ("ROSS") form dated May 9, 2017 signed by Mr. Heringa for [REDACTED], "Proposed (Lot A)" ("ROSS Form A");
- v. Sewerage System Letter of Certification signed by Mr. Heringa for [REDACTED], "Proposed (Lot A)" ("LOC A");
- vi. ROSS Form dated May 9, 2017 signed by Mr. Heringa for [REDACTED], "Proposed (Lot B)" ("ROSS Form B");
- vii. Sewerage System Letter of Certification dated May 9, 2017 signed by Mr. Heringa for [REDACTED], "Proposed (Lot B)" ("LOC B")
- viii. Letter dated May 9, 2017 from Mr. Heringa to Mr. Gibson, "Re Notes & Specifications on Upgrade & Repair of Septic Field Proposed Lot B – [REDACTED], Qualicum Beach (Log Cabin)";
- ix. Letter dated May 9, 2017 from Mr. Heringa to Mr. Gibson, "Re Notes & Specifications on Upgrade & Repair of Septic Field, Proposed Lot A – [REDACTED], Qualicum Beach (behind Antique Store);
- x. Letter dated May 10, 2017 from Mr. Heringa to Mr. Gibson, "Re Record of Sewerage System for proposed Lots A & B – [REDACTED], Qualicum Beach";
- xi. Letter dated May 10, 2017, from Mr. Heringa to Mr. Gibson, "Re Review & Summary of Usage of 2 Type 1 Septic Fields behind the Antique Store, and between the two Houses, Proposed Lot A - [REDACTED], Qualicum Beach";
- xii. Drawings, calculations, site plans and well details for Proposed Lot A;
- xiii. Letter dated May 10, 2017 from Mr. Heringa to Mr. Gibson, "Re Review & Summary of Type 1 Septic Field behind the Cabin. Proposed Lot B – [REDACTED], Qualicum Beach", enclosing drawings and calculations;
- xiv. Site plan for "Lot B";
- xv. A document titled "Maintenance for Sewerage System" on Mr. Heringa's letterhead;
- xvi. Septic Inspection dated February 7, 2015; and
- d. Also contained in the early investigation documents identified by Ms. Wilson is Mr. Heringa's email dated June 6, 2017 to Mr. Gibson.
- e. Ms. Wilson identified Mr. Heringa's response to the Complaint, dated July 4, 2017 ("Response"). The Response stated, in part:

The ROSS Forms recently submitted by myself for this property, were certainly submitted after the work was done, but are no different than the earlier ROSS forms that were submitted back on 12th December 2011, that were also submitted and accepted by the Ministry of the Environment after the work was done for the same

property. The ROSS forms are for the existing fields that admittedly may not meet today's design requirements – but these fields are still operating properly, and these are not new septic fields. If ROSS applications are now to be submitted and approved prior to the work being done, even for existing fields, then I was not aware of this, based on my past experience, this would be a new procedure.

The Daily Design Flows, that we submitted, were notes to myself, for these existing septic systems, and were average annual flows. And I fully agree that they did not come from the SPM. I believe that Glen Gibson may have wrongly assumed that I was trying to flout the statutory requirements, when I am not.

....

- f. The Association forwarded Mr. Heringa's response to VIHA and on September 21, 2017, received further information from VIHA.
- g. On October 20, 2017, Mr. Anderson forwarded a series of emails and further documents pertaining to Mr. Heringa's work on the Property. The Association received further documents in November 2017 in response to a Freedom of Information ("FOI") request it had made to VIHA.
- h. The documents contained in the FOI disclosure included an Order dated October 6, 2017 by Mr. Anderson to Pauline Nelsen, the Property's owner. The Order was made pursuant to the *Public Health Act*, S.B.C. 2008. The Order confirms that Mr. Heringa was the "authorized person", as that term is defined in the SSR. The Order states that it is a requirement of the SSR that the authorized person provides written assurance that the plans and specifications of the sewerage system are consistent with standard practice. In the Order, Mr. Anderson concluded that the sewerage system plans and specifications were not consistent with standard practice. Mr. Anderson identified ten inconsistencies in Mr. Heringa's design choices.
- i. The Investigation Subcommittee requested Mr. Heringa's complete project file as part of the investigation process. Several requests were made and the Association pursued a separate disciplinary proceeding in relation to Mr. Heringa's failure to provide a copy of his complete file to the Subcommittee. Mr. Heringa ultimately provided his file on or about May 30, 2019.
- j. The file Mr. Heringa produced on or about May 30, 2019 included an October 24, 2017 letter from Mr. Heringa to Mr. Anderson in response to the October 6, 2017 Order. In that letter, Mr. Heringa states in part at pages 2-3:

The Filings PK17-067 and PK17-068 of May 9, 2017 were made to show the emergency repairs that were made to two of the existing sewage systems. These filings were made to respond to Glenn Gibson's letter of October 31, 2016 addressed to Pauline Nelsen and Michael Nelsen. These "after the repair" filings were part of a conventional 2-Lot subdivision application to MOTI.

...

VIHA already knew that the owners made emergency repairs on these two existing septic fields, to better comply with the sewage standards at the time. These repairs were to ensure there was a high level of operating safety prior to the subdivision even being contemplated here.

....

You base your condemnation of the existing septic systems as health hazards on the existing vertical separations for these septic systems. Yet the vertical separation was never discussed, drawn or produced. The existing separations were set by others in the past... I assumed that existing septic fields are exempt.

It is not clear whether existing septic fields have to meet the BCSPM Version 3. Please advise if this is a requirement.

The sewage flows, that we guesstimated, are less than stated in the BCSPM. ... Further sanitary sewerage field improvements may still be needed. However, it is the owner's express desire to postpone this improvement expense until after subdivision has occurred. That way, financing is available for the improvement costs.

- k. By letter dated November 10, 2017, Mr. Anderson responded to Mr. Heringa's October 24, 2017 letter indicating that in his view, the repairs were neither temporary nor emergency repairs. He reiterated that there were no records of previous filings for the septic fields. Mr. Anderson also responded to a number of technical issues relating to the sewerage system on the Property.
- l. Mr. Heringa's letter to Mr. Anderson dated November 27, 2017 states in part:

It was on October 31, 2016 that Glenn Gibson laid out what should have been all of VIHA's requirements in regard to this proposed subdivision. See the attached letter of October 31, 2016. There was no advance notice given to the Owner or the Agent that further Filings would be required, especially if the Permits were found by VIHA nor even any notice provided that SSPM Version 3 was to apply to this proposed subdivision, or to these lands and its septic fields as of, or after January 1, 2017. Had the Owner been made fully aware, the subdivision fee may never have been paid. VIHA was perhaps somewhat negligent here.

...

We have done previous sewer system upgrades in the past, without filing documents with the Health Authority. Furthermore, we did in fact check with Glenn Gibson as to what else was required. See our letter of May 15, 2017, and his response on June 13, 2017. Also, see again our previous response to your Section 8 of the SSR III on August 9, 2017 (copy attached). The requirements of Section 8 are unclear. All your requirements should have been in VIHA's October 31, 2016 letter.

Upgrades and repairs certainly make septic fields work better than before, but upgrades don't necessarily meet the standards of today and cannot apply to existing septic fields. We weren't aware that such a requirement exists, nor do we agree where

a field is not a health hazard. We don't get involved in new septic fields, and the last new one we did get involved with was in November 2007....

...

In paragraph 2, the requirements that you mention are requirements for new fields and with filings after January 1, 2017, and just don't apply to existing fields with repairs or modifications, that we are aware of.

Furthermore, in our two Filings we made it clear that these were not new fields, and also the appropriate box was not checked off, and both Glenn Gibson and ourselves knew that they didn't meet the standards of today, and Glenn Gibson never asked, or even suggested that these septic fields be replaced, or further repaired, or anything; he only asked that a Filing be submitted for our recent work or upgrades that had been made to them, along with the exact locations of the existing fields.

Item 1(e) is not correct. We never determined the vertical separation, because we were never asked to. We just replaced and upgraded what was there already...

Also, the advice that the Sewerage System Standard Practice Manual Version 3 was now in effect could/should have been incorporated in the VIHA letter of October 31, 2016, before the fee was paid by the Owner, so the Owner and the Engineer were both fully aware of this upcoming new requirement...

m. Mr. Heringa's letter to Ms. Wilson dated May 30, 2019 concludes with the following:

When I responded to the verbal reminder of Glenn Gibson to file (approximately May 1, 2017), I was not aware that Version 3 was in effect, nor aware that Filings for an Alteration now had to occur prior to doing the work, when I was promised the \$100.00 discount for Filing ASAP by Glenn Gibson, as per the October 31, 2016 VIHA letter.

- n. Ms. Wilson testified to further steps taken by the Investigation Committee and further communications with Mr. Heringa.
- o. On cross-examination, Ms. Wilson was asked about the May 9, 2017 Sewerage System Letter of Certification (LOC) for proposed Lot B. She was asked whether the stamp at the bottom right of the document stating "received by" "VIHA Staff Signature" indicated that the sewage and septic work had been completed, done and filed to VIHA's satisfaction. Ms. Wilson answered that she could not speak to VIHA's processes but that it appears VIHA was merely acknowledging receipt of the document on June 28, 2019. Mr. Fenton confirmed with Mr. Wilson that the complaint to the Association had been made after the May 9, 2017 date and prior the VIHA's June 28, 2019 stamp on the filing.

27. The Association called Darryl Brizan, P.Eng. The Panel qualified Mr. Brizan as an expert in on-site sewerage systems. Mr. Brizan testified as follows:

- a. Mr. Brizan graduated from the University of British Columbia in 1981 and became a professional engineer in 1984.
- b. Mr. Brizan's areas of specialization are water systems, sewer systems, drainage systems and general municipal engineering.
- c. Mr. Brizan was a member of the Technical Review Committee involved in the preparation of the SPM Version 2. He also provided input on SPM Version 3, which was released in 2014.
- d. Mr. Brizan prepared an expert report dated April 5, 2020. Mr. Brizan testified that his report referred to SPM Version 2 however, that was an error as the SPM Version 3 was in force during the material times. He noted the relevant sections of the two versions of the SPM were substantially similar and his opinion remained as outlined in his report.
- e. Mr. Brizan described that in approximately 2004, the sewerage system process in British Columbia changed from a permitted process to a self-regulating process involving authorized persons.
- f. Mr. Brizan testified about the approach and sequence of the septic field permitting process. If a professional intends to alter or repair an existing sewerage system, the first step is to locate the original filing or permit that authorized the construction and operation of the original sewerage system. If no original filings can be located, the professional cannot proceed with alterations or repairs and must perform a full on-site evaluation of the site and produce a new design for the sewerage system.
- g. After performing a full on-site evaluation and producing a new sewerage system design, the professional must then file a ROSS form with the relevant health authority. The ROSS filing indicates the legal description of the property, and the key soil information on the property. Mr. Brizan testified in his direct examination that the ROSS filing also attaches further detailed information:

39. Q. Okay. Anything else that needs to accompany those records -- the record of sewerage system form that you just talked about?

A. You -- you would need the design report, the soils report, the -- you need plans actually drawn to scale with all the relevant information that shows the facilities that are being served, pipes from the facilities to the -- to the proposed treatment system, and piping from the treatment system to the disposal system. The plan should also show any key relevant offsets, horizontal distances to water well, for example, to any streams or sources of potential drinking water. Distances to -- to waterlines. If there's waterlines on the property, you want to be far enough away so there's no chance of contaminating existing waterlines. So all waterlines should be shown on the drawings.

- h. The ROSS form must be filed with the relevant health authority prior to the work being done.
- i. The health authorities have stamps indicating "received" or "accepted", which, in Mr. Brizan's experience, indicates a clerical acceptance of the ROSS filing. In Mr.

Brizan's opinion, the acceptance of a filing by a health authority is not acceptance of responsibility of the design.

- j. Even if a previous filing exists, if the alteration or repair being proposed is significant, the professional is still be required to take all the filing steps described above.
- k. In Mr. Brizan's opinion, the work performed in or around May 2017 constituted "a significant alteration or repair". His report states:

The correspondence reviewed in the binder pages 21,23,24,39, indicated that there was significant repair and alteration works made to the sewerage systems on the property on or around May 2017. The BC SPM says that a significant alteration includes the repair or replacement of any major system items such as adding to or replacing septic tanks, pump tanks, and dispersal trenches. Specifically, but not exclusively, the works included filings PK17-068 and PK17-068 which included 22m of 3" dia. perforated drainpipe, interceptor drainpipe, interceptor drain, d-box and septic tank updates,

- l. Mr. Brizan elaborated in his oral testimony on direct examination that the works constituted a significant alteration or repair primarily because of "the increase in the size of the field" and "there may have been additional flows being generated from the facility by adding, I think, an additional RV site, if I recall correctly. So perhaps that change in the flow and then an increase in the size of the field."
- m. Mr. Brizan's report identified the following deficiencies with Mr. Heringa's May 2017 filings:

The plans and specifications filed by Mr. Heringa with the VIHA in regard to the sewerage system were not consistent with standard practice. The BC SPM Ver2 section 1.3.2 indicates that the Authorized Person (AP) should present documentation in a clear format, and files plans and specifications of the sewerage system in a manner acceptable to the health Authority....

....The plans were not to a professional standard, some were very hard to read, very messy, were missing key information such as title blocks, client names, engineers names, professional seal, north arrows, scale bars, GPS coordinates, location of all buildings and trailer sites serviced, location of all septic system components including all disposal field laterals, septic tanks, pump tanks, location of all water lines, and land slope. The drawings appeared to be marked up by hand on a legal survey base plan drawing with not all items to scale...

...The SPM and EGBC guide suggest a much higher standard of design report submission and drawing quality is required of the BC Sewerage System Standard Practice Manual and of a professional engineer. There was no design report provided to VIHA including all sources of sewage and the estimated daily design flows in the initial filings. Estimates of daily design flows were later provided to VIHA but only after specifically requested by VIHA. Design flows provided did not agree with flows shown in the SPM tables and no alternate recognized source of standard practice or documentation of measured flows from similar facilities was provided. The flows

provide [sic] were less than conventional flows from the standard practice manual therefor [sic] the septic tanks and disposal fields most likely need to be increased in size to handle higher expected flows from the development. There was very little information provided on the specifications of the existing or proposed pipe, tanks, pumps, d-boxes, drain rock, effluent filters, and electrical with the initial filings. There was also no soils investigation information included with the initial filings and later soils and permeability information provided at the request of VIHA was not presented in a professional manner.

- n. Mr. Brizan testified that the ROSS Form A and Ross Form B were missing required information. The LOC A and LOC B are to be submitted after the necessary design work has been completed and the ROSS filings have been submitted and accepted by the health authority. The function of the LOCs is to certify that the work has been done in accordance with the ROSS filings. In this case, the LOC A and LOC B were filed at the same time as the ROSS forms.
- o. In his report, Mr. Brizan's opinion, the work completed by Mr. Heringa "has the potential to create a risk or perpetuate an existing risk to public health." Mr. Brizan noted that "Mr. Heringa did attempt to get copies of old permits from the property owners, VIHA, and MOTI for the design and construction and authorization to operate the existing old sewage system but was not able to find any copies." Mr. Brizan's report goes on to state that as Mr. Heringa was not able to obtain any copies of existing permits, he should have informed the owner that "this sewage system was not in compliance with the SSR and it would need to be upgraded or totally redesigned to meet the current SPM standards of the day". In Mr. Brizan's report, he also states that , the "existing sewage system located on this property prior to any work done by Mr. Heringa also had a potential to create a risk to public health. The existing sewage disposal field is located less than 30m from the potable water well on this property." Mr. Brizan stated in his report that Mr. Heringa was under the impression that the previous septic system works and offsets from the septic field to the well on this property were somehow "grand-fathered" but this is not the case." Accordingly, he opines in his report:

...When Mr. Heringa initially visited the site he should have realized that this system was not in compliance to the SSR he should have told the property owner that because the potable water well was closer than 30m from the septic field that either the well would need to be moved or the septic field would need to be moved so that the required 30m minimum required horizontal separation could be attained. Alternately, the current sewerage system regulation "BC Public Health Act Sewerage System Regulations Reg. 326/2004" and "Sewerage System Standard Practice Manual Version 2, 21 September 2007" which was effective at the time of the site investigation on or around 2017-May-09 allows the horizontal separation distance between a water well and a sewerage field to be reduced if the site is evaluated by a professional hydrogeologist with training and experience in evaluating onsite septic system setback distances and this hydrogeologist determines that a setback of less than 30m will not cause or contribute to a public health risk....

- p. In addition, Mr. Brizan's report notes that "the soils investigation performed on or around the time of the submission of the record of sewage system filing to VIHA on 2017-May-09 indicated that the water table could potentially rise to within 2 feet of the ground surface." Mr. Brizan noted in this report that the "lack of vertical separation creates a very real risk of pathogens getting into the groundwater and potentially contaminating the potable water well source or the nearby surface water should the effluent breakout to the surface or to the surface via the new interceptor drain installed." Mr. Brizan's report states that "[e]ven if the water table was not present the depth of permeable gravel native soil on this property of 1m does not provide the required vertical separation for the installation of a type1 gravity sewage disposal system which Mr. Heringa proposed in his filing."
- q. Mr. Brizan agreed on cross-examination that professional engineers are not required to design and construct sewerage systems in accordance with the SPM so long as an alternate practice standard is followed, but they have to identify the standard which they are following.
- r. Mr. Brizan was asked in cross-examination whether the stamp noting "accepted" on the LOCs indicated that matters between VIHA and Mr. Heringa were resolved to VIHA's satisfaction. Mr. Brizan indicated that he would consider that VIHA had accepted Mr. Heringa's final submission:

Q. Okay. With the -- yeah, I will get back to the final filings, the sewerage letter of certifications with VIHA. After some discussion with VIHA, there was -- what -- they were accepted. What does that mean to you, in your opinion?

A. If there was an accepted filing, it means that they have relied on the professional engineer that submitted that filing, that the system is designed as per a standard practice and is not going to cause a health hazard. That would be to accept that filing. And the letter certification is not really accepted from a Health Authority; it's just received by them. And it's -- it would -- when you sign the letter of -- sewerage system letter of certification, you are certifying that that system meets all the requirements of the standard practice and not going to cause a health hazard.

- s. In cross-examination, it was suggested to Mr. Brizan that there is no definition of "construction" in the SPM, the ROSS forms refer exclusively to new construction, and there is no definition of "filings" in the SSR. Mr. Brizan agreed there is no definition of "filings" in the SSR but noted that the whole of section 8 refers to "filings".
- t. In re-direct, Mr. Brizan was taken to the definition of "construct" in the SPM and gave his opinion that the definition of "construct" in section 8(2) does not only apply to new systems, but "construct includes: To plan or conduct a site assessment in respect of a sewerage system; to install, repair, or alter a sewerage system; and in the case of an authorized person, to supervise the doing of any matter listed in paragraphs (a) and (b)".

28. Mr. Heringa called Joseph Bonaventure Thorburn, P. Eng. The Panel heard from the parties with respect to qualification and admissibility issues.
29. At the second pre-hearing conference on June 23, 2020, Mr. Heringa had indicated that he may call Mr. Thorburn as an expert witness but had not yet provided any expert report or notice of anticipated evidence to the Association. The Panel informed Mr. Heringa at that time that if he intended to lead such evidence, he would need to seek leave of the Panel and should be prepared to make full arguments as to notice and fairness. Mr. Heringa was reminded of this again on June 24, 2020. On June 25, 2020, Mr. Heringa delivered documents to the Association and the Panel, but no expert report was included amongst those materials.
30. At the end of the first day of hearing on June 26, 2020, the parties made submissions as to whether Mr. Heringa should be permitted to adduce an expert report from Mr. Thorburn. Mr. Thorburn's expert report had still not been delivered by that point. On June 28, 2020, Mr. Heringa emailed the Association an expert report by Mr. Thorburn dated June 28, 2020.
31. Mr. Thorburn obtained a civil engineering degree at the University of British Columbia. He is the Managing Director of ThorConsult Ltd. which is a water and land development and civil engineering consultant company. Mr. Thorburn has been involved in a number of international development projects.
32. The Association opposed the qualification of Mr. Thorburn on the basis that he was not impartial, objective, and unbiased regarding the proceeding and on the basis that he had consented to his own discipline with the Association for failing to follow the SPM.
33. The Association took Mr. Thorburn to email correspondence in which he indicated that the Discipline Hearing was a "kangaroo court". Mr. Thorburn agreed he sent the email and made those references but explained he was referring to his own professional discipline case and not to this panel even though the emails were exchanged regarding this hearing.
34. The Panel decided to allow Mr. Thorburn to testify and admit his expert report. Mr. Thorburn was qualified as an expert in onsite sewerage systems in British Columbia. Mr. Thorburn testified as follows:
 - a. He identified his report dated June 28, 2020.
 - b. Mr. Thorburn's opinion was that the site's filings, including Mr. Heringa's hand drawn sketches and drawings were not entirely up to Mr. Thorburn's personal standards of computer-generated AutoCAD drawings, however, he "considered them to be quite adequate and clear." It was Mr. Thorburn's opinion that the May 2019 documentation indicates that VIHA accepted the initial VIHA filings as final

after Mr. Heringa had made some amendments. It appeared to Mr. Thorburn that VIHA then confirmed that its earlier complaint to the Association and its septic system concerns had all been satisfactorily resolved.

- c. Mr. Thorburn's report indicates that he performed a site visit in December 2018 and concluded that "all three existing septic fields on the site were in good working order and without any health hazard issues."
- d. Mr. Thorburn was of the opinion that VIHA did not conduct a detailed or complete investigation in order to determine whether there was a health hazard. In expert report he wrote:

From all the documentation that I reviewed back in 2018-9, it appears that again VIHA EHOs were negligent with their site review with regards to branding the site as being a health hazard. In order to declare a site as a health hazard, an EHO or others should be able to see visible sewage seeping onto or out of the ground at a site. Or, there are bad results of well tests.

- e. Mr. Thorburn noted there were some negative well test results, however, in his view, those were minor and unrelated to the septic systems. Mr. Thorburn stated that he has "not seen any documentation from VIHA proving there was a health hazard onsite due to the proximity of the well, the soils structure, or the noted vertical separation issues." Nevertheless, Mr. Thorburn noted that he cannot assess whether there was a health hazard on the site due to vertical separation. A detailed soils investigation would be needed to do such an assessment.

35. On cross-examination, Mr. Thorburn could not recall whether or when he had reviewed the documents filed by Mr. Heringa in May 2017. He thought he had seen many of those documents in 2018 but indicated that he had not reviewed most of them recently, while preparing his expert report. Mr. Thorburn stated that his report was based upon his site visit and assessment of the septic system, which he found to be adequate and healthy. When it was proposed that his report was not based upon the filings themselves, Mr. Thorburn testified, "Oh no, it's not based on all the ticks and un-ticks or incorrect/ missing information, such as GPS and stuff like that. I find that information to be trivial."

36. On cross-examination, Mr. Thorburn acknowledged that:

- a. If there is less than 30 metres from a septic system to a well, a professional must provide a hydrogeologist's report with the ROSS filing confirming there is no health hazard;
- b. The work described by Mr. Heringa in his letters of May 9, 2017 for the two lots constitutes significant alterations and repairs:

Q. Okay. So, taking those two letters together, do you agree with me that they describe significant alterations and repairs?

A. Yes. I commend Mr. Heringa on these details. Usually you don't get these details presented to VIHA. It's very detailed on what he did to do the repairs to the pipe, yeah.

Q. So I just want to make sure I got that right. So you agree that the work set out in these two letters constitutes significant alterations and repairs?

A. Correct.

Q. . Okay. Thank you.

And, therefore, you agree that Mr. Heringa was required to do a ROSS filing or file a record of sewerage systems with VIHA for this work; correct?

A. Correct.

- c. When a ROSS filing is made under section 8(2) of the SSR prior to the completion of work, the professional should submit site and soil reports as part of the ROSS filings, as well as a site plan;
- d. The soil report submitted with the ROSS filing should show that percolation tests have been performed, the location of the holes where the tests were taken, and the results of those tests should be included; and
- e. The site plan should show all of the sewage-generating structures, the water lines, the sewage lines and the plan should be to scale.

37. Mr. Heringa called Pauline Nelsen as his next witness. As previously noted, Ms. Nelsen is the owner of the Property. She testified:

- a. She contacted Mr. Heringa about the septic problem on her property six months after she purchased the property. Mr. Gibson had given her an order to remove some of the houses off of her property following a zoning change in the Regional District of Nanaimo. Ms. Nelsen had worked for Mr. Heringa for 20 years and thought he would be the best person to help because she did not understand the issues.
- b. Ms. Nelsen had an argument with Mr. Gibson. Mr. Gibson had indicated that the problems she was encountering were Mr. Heringa's fault. She did not understand the paperwork so hired a lawyer to assist her.
- c. The septic field is operating perfectly.

38. Mr. Heringa testified on his own behalf as follows:

- a. He was first contacted about the septic system in or about 2010 or 2011. The Department of Health raised issues with Ms. Nelsen about the number of houses on the Property, which she had recently purchased. Mr. Heringa was able to resolve that issue for her.
- b. Mr. Heringa had a meeting with Mr. Gibson in or about 2011 relating to a septic field for the two houses. He stated "We fixed the field for the two primary houses

- where Pauline lived and the other house was rented and we replaced the septic field. Glenn was happy that we replaced the septic field, happy we got a letter filing.”
- c. From 2011 until 2015, Mr. Heringa improved Ms. Nelsen’s RV park.
 - d. Mr. Heringa described the domestic water source on the Property as consistently meeting all the standards. He noted that there were a few test results that were abnormal but those were explained by the events that had preceded the tests. For example, a water connection had changed, or a plumbing repair had been done on the sinks or the hot water tank.
 - e. Mr. Heringa helped Mr. Nelsen apply for a two lot subdivision on the Property.
 - f. Mr. Heringa testified that the original May 2017 filings were in response to Mr. Gibson’s letter dated October 31, 2016. Mr. Heringa said Mr. Gibson knew about the septic upgrades. Mr. Heringa selected the box for “repairs and alterations” and not “new construction”. Mr. Heringa stated that “I wasn’t going to go there because – Pauline wasn’t going to go there, either, because she didn’t have the money to put in new septic fields.”
 - g. Mr. Heringa requested a meeting about the filings. Mr. Anderson had taken over the matter from Mr. Gibson by that time. Ms. Nelsen and Mr. Heringa met with Mr. Anderson and others in or about October 2017. It was at that time that Mr. Anderson gave Ms. Nelsen the health order requiring that she replace all three septic fields.
 - h. Mr. Heringa described the “final” sewerage system LOC B, which was stamped received on June 28, 2019. Mr. Heringa testified that the impact of that document is that the case file is closed, and the file has been recorded in VIHA’s records. No further work is required. Mr. Heringa testified that both Lot A and Lot B were accepted as final by VIHA. He maintained these filings were accepted as repairs and alterations and amendments for the two septic fields.
 - i. Mr. Heringa testified that he “ticked off the boxes” relating to the SPM in ROSS forms in order to indicate that he was doing his best to meet the SPM for the repairs and alterations. Mr. Heringa testified that he wanted to convey that he was not guaranteeing the septic fields met the SPM but that the work he performed was proper.

39. On cross-examination, Mr. Heringa testified as follows:

- a. He was questioned about his assertion that the repair was an emergency repair. He could not point to any documents supporting that assertion. Mr. Heringa accepted that some of the work was non-emergency and that for non-emergency work, he ought to have filed under section 8(2) prior to the work having been undertaken.
- b. Mr. Heringa expressed the position that section 8(2) of the SSR only applies to new construction and does not apply to alterations or repairs. Mr. Heringa stated that he believed the site plans conformed with the SPM requirements for

alterations and repairs but not for new construction. Mr. Heringa agreed that he thought he was complying with the SPM and was not complying with the standard practice from another jurisdiction.

- c. Mr. Heringa did not accept the proposition that the work performed constituted significant alteration or repair.
- d. Mr. Heringa agreed that he did not include a detailed soils report with the May 2017 filings.
- e. Mr. Heringa agreed he did not include GPS coordinates with the May 2017 filings.
- f. Mr. Heringa acknowledged the requirement that if there is less than a 30 metre setoff, he must provide a hydrogeologist's report with the filing confirming that there is no health hazard posed.
- g. Mr. Heringa agreed that the site plans do not show all of the sewerage-generating structures, all of the sewer lines, all of the water lines, or all of the RV sites.

40. The Panel asked Mr. Heringa about the emergency that triggered the repairs. He responded:

With the first field in 2015, there was effluent showing up on the top of the septic field and Pauline phoned in a panic, we brought a backhoe in, we dug it out. It turned out to be a pressure pump from one of the other houses, the pump station; the pipe had burst and we were not aware of it. The pipe was right across -- was crossing the septic field, which is a poor practice, so because we were there, we had a backhoe, I believe it was Kevin Kivela, though I'm not sure, we thought at the same time we would locate the septic lines, because we had field people there, so we lowered -- we reduced the amount of fill on the piping, because it was buried too deep, and we levelled off an area, and we thought at the same time we would extend three runs and hook them up together to get more life out of the field, knowing, you know, just as an interim measure, to have it working better. That was the one. The other one was in February, in my absence in Mexico, after the filing, the sewage -- we knew where this tank was at that time, we had no idea where the field was, but, anyway, the tenant complained his sewage was backing up, they brought a backhoe in -- the tenant was going to move out if it wasn't going to be fixed -- they brought the backhoe in, they located -- because my other long-term employee, Gil Larocque, lives there; he's taken the ROSS course -- he dug out the field, after they pumped out the septic tank found there was 50 feet of Big-O, collapsed, full of roots, was the only outlet from the septic tank. He made an executive decision in the pouring rain let's put a new field in so this tenant stays, so Pauline doesn't freak out losing revenue, so the tenant is happy. And they fixed that in February. Right? It had to be done. It wasn't like it was preplanned. Er, there was no time to plan. Nobody even knew where the septic field was. Now at least we know where the septic field is. It's updated. The elevation of the field matched the outlet from the septic tank. That's all we can do. And that was done, in my absence, but because of Glenn Gibson's letter, I took responsibility for it, did the basic filing.

E. Findings and Analysis

41. On November 30, 2017, Mr. Anderson of VIHA prepared a chronology of documentation in response to the Association's November 24, 2017 FOI request to VIHA.

42. Mr. Heringa has been involved with the Property at [REDACTED], Coombs BC since 2010 or 2011.
43. The original sewage system filings for the Property have not been located.
44. Mr. Heringa supervised repairs to the septic systems in June 2011 as described in his letter to VIHA dated December 12, 2011.
45. In the spring of 2015, a failure of the existing septic field in the proposed Lot A resulted in “effluent showing up on the top of the septic field”. At this time, the septic field was expanded by adding 6 metres to each of the three septic runs and by connecting them together. This resulted in the field being extended toward an existing well, thereby reducing the separation to 15 metres. To protect the well from any effluent that might escape, an 18 metre French drain was installed. No documents were filed with the VIHA either before construction or immediately afterward.
46. In or about January and February 2017, the septic field on the proposed Lot B failed due to collapsed big-O piping so a new septic field was constructed. The new field comprised 140 feet (43 metres) of perforated PVC pipe in 3 runs. No documents were filed with the VIHA either before construction or immediately afterward.
47. In 2016, the owners wanted to subdivide the property into two lots; proposed Lot A ([REDACTED]) and proposed Lot B (proposed address [REDACTED]). The owners submitted an application to the Ministry of Transportation and Infrastructure dated September 30, 2016.
48. On October 31, 2016, Mr. Gibson, Land Development Environmental Health Officer, wrote to the owners asking for further information to assess the proposed subdivision, including: “5) For the existing on-site sewage systems, copies of the filings or permits for the upgrades written on the plan provided.”
49. To meet this request for information, Mr. Heringa submitted ROSS filings and LOCs for the two repairs and alterations described above. These filings are dated May 9, 2017. The allegations in the Notice of Inquiry arise from these filings.
50. Responding to requests for additional information for the May 9, 2017 filings, Mr. Heringa provided additional information as follows:
 - a. May 24, 2017 letter responding to VIHA request dated May 15, 2017.
 - b. June 8, 2017 information package including subdivision site plan and soils report.
 - c. June 13, 2017 email responding to VIHA email of the same day, with attached drawings.
 - d. June 21, 2017 email with additional information on test holes dug the previous day.

e. July 4, 2017 another soil/site submission.

51. On October 6, 2017, VIHA inspected the site and issued a violation ticket to Mr. Heringa under section 12 (d) of the SSR, and an Order to the owners under the SSR and *Public Health Act* to construct a sewerage system that met the SSR.
52. On June 10, 2019, VIHA stamped the two May 9, 2017 LOCs as “accepted”, and on June 28, 2019, VIHA stamped the two May 9, 2017 ROSS filings as “received”.

Allegation 1(a) May 2017 filings failed to comply with SSR and SPM

a. Failing to comply with subsections 8 and 9 of the Sewerage System Regulations, B.C. Reg. 209/2010 (the “SSR”) and the Sewerage System Standard Practice Manual (the “SPM”), in or around May 2017, when you filed two Record of Sewerage System (“ROSS”) documents in relation to a property located at [REDACTED] Qualicum Beach, British Columbia (the “Property”), that

53. The requirements for filing information with a health authority are found in sections 8 and 9 of the SSR. Section 8 deals with information to be filed before construction (the ROSS filing) and section 9 with Letters of Certification to be filed within 30 days of completing construction (the LOCs).
54. Section 8 of the SSR states:

Filing

8 (1) This section does not apply to the construction of a sewerage system in respect of which information and documents have been filed under subsection (2) on a previous occasion, unless

- (a) a significant alteration or repair is being made on the sewerage system, or
- (b) the construction of the sewerage system is in response to an order made under section 11 (b) or (c) [orders] of this regulation or section 31 (1) (b) [general powers respecting health hazards and contraventions] of the Act.

(2) Before construction of a sewerage system, an authorized person must file with the health authority, in a form acceptable to the health authority,

- (a) information respecting
 - (i) the name, address and telephone number of the owner for whom the sewerage system is being constructed,
 - (ii) the type of structure the sewerage system will serve, and
 - (iii) the type, depth and porosity of the soil at the site of the sewerage system,
- (b) plans and specifications of the sewerage system, or of alterations or repairs to the sewerage system, prepared by an authorized person and with the seal of the authorized person affixed,
- (c) written assurance that the plans and specifications filed under paragraph (b) are consistent with standard practice, and

(d)if construction of the sewerage system is in response to an order made under section 11 (b) or (c) of this regulation or section 31 (1) (b) of the Act, a copy of the order.

(3)To determine whether the plans and specifications filed under subsection (2) (b) are consistent with standard practice, an authorized person may have regard to the minister's ministry publication "Sewerage System Standard Practice Manual", as amended from time to time.

(4)If there is a material change in the information filed under subsection (2) before the authorized person provides a letter of certification under section 9 (1) (b) [*letter of certification*], the authorized person must promptly file an amendment with the health authority.

55. The Panel considers that section 8(2) of the SSR applies to the May 2017 filings because:
 - a. There is no record of any filings related to the original construction; and
 - b. The alteration or repair work made on the sewerage system was significant.
56. The Panel accepts Mr. Brizan's opinion that the alteration or repair work was significant. Mr. Thorburn also conceded on cross-examination that the work described by Mr. Heringa in his letters of May 9, 2017 for the two lots constituted significant alterations and repairs.
57. The Panel does not accept Mr. Heringa's position that section 8(2) of the SSR only applies to new septic systems, that the work he performed was emergency repairs to which section 8(2) does not apply, and that the septic systems were legally non-confirming because they were existing fields.
58. The reference to a "significant alteration or repair *on the sewerage system*" clearly contemplates the inclusion of septic systems that are already in existence. The definition of "construct" in section 1 of the SSR is not limited to new construction but includes alterations or repairs.
59. The Panel does not accept that all of the alterations or repairs performed in 2015 were in their entirety representative of a response to an emergency. In January or February 2017, the replacement of the septic field was more than a response to an emergency, and Mr. Heringa should have immediately filed ROSS forms and should have filed a LOC within 30 days. The ROSS forms and LOC were not filed until May 2017.
60. The Panel also does not accept that Mr. Heringa was relieved of the obligation to follow the requirements in section 8(2) because he was simply responding to requests for information in VIHA's October 2016 correspondence, or that VIHA's June 2019 stamps dispose of the issue.
61. The Panel agrees with Mr. Brizan that where section 8(2) applies, the SPM is the presumptive standard. An authorized person may have regard to another standard practice, however, Mr. Heringa acknowledged he was not following any other such

standard of practice. Indeed, he checked off the “SPM” in the ROSS forms as being the “source of standard practice”. The applicable standard practice in this case is the SPM.

62. SSR Section 9 requires:

Letter of certification

9 (1) Within 30 days of completing the construction of a sewerage system to which section 8 [filing] applies, an authorized person must

(a) provide the owner with

(i) a copy of the sewerage system plans and specifications as provided to the health authority under section 8 (2) (b),

(ii) a maintenance plan for the sewerage system that is consistent with standard practice, and

(iii) a copy of the letter of certification provided to the health authority under paragraph (b),

(b) file with the health authority a signed letter certifying that

(i) the authorized person has complied with the requirements of paragraph (a),

(ii) the sewerage system has been constructed in accordance with standard practice,

(iii) the sewerage system has been constructed substantially in accordance with the plans and specifications filed under section 8 (2) (b),

(iv) for a sewerage system described in section 2 (c) or (d) [application], the estimated daily domestic sewage flow through the sewerage system will be less than 22 700 litres, and

(v) if operated and maintained as set out in the maintenance plan, the sewerage system will not cause a health hazard, and

(c) append to the letter required under paragraph (b)

(i) a plan of the sewerage system as it was built, and

(ii) a copy of the maintenance plan for the sewerage system.

(2) To determine whether sewerage system construction and a maintenance plan in respect of the sewerage system are consistent with standard practice, an authorized person may have regard to the minister's ministry publication "Sewerage System Standard Practice Manual", as amended from time to time.

(3) If an authorized person does not file a letter of certification under subsection (1) (b) within 2 years from filing information about the sewerage system under section 8, the authorized person must not begin or continue construction of the sewerage system until the authorized person files new information under section 8.

63. If sewerage system construction falls under the requirements for Section 8(2), then Section 9 also must be followed. Section 9 requires, amongst other things, that a LOC is filed within 30 days of completing the construction of a sewerage system to which section 8 applies. It was not disputed that Mr. Heringa did not file LOCs with the health authority within 30 days of completing the work described in the May 2017 filings. The Panel finds that Mr. Heringa failed to comply with section 9 of the SSR.

i. Failed to include GPS information, the location of Recreational Vehicle sites, or the location of the water lines;

64. Section 8(2) of the SSR requires that certain information be filed with the health authority in a form acceptable to the health authority. Section 5 of VIHA's ROSS forms deals with "Site Information" and requests the "GPS Location of System".
65. The May 2017 filing documents indicate no GPS information was provided.
66. Mr. Heringa admitted in his testimony that GPS information was not included with the May 2017 filings. Mr. Heringa also admitted that the site plans do not show all of the recreational vehicle sites and do not show all of the water lines.
67. The Panel finds that Mr. Heringa failed to comply with section 8 of the SSR and the SPM in or around May 2017 when he filed two ROSS documents and two LOCs relating to the Property that failed to include GPS information, the location of recreational vehicle sites, or the location of the water lines. Accordingly, the Association has proven this allegation to the requisite standard.

ii. Identified the sewerage system as both an alteration and a repair, when it cannot be both

68. The Association conceded that based upon the evidence presented at the hearing of this matter, it had not made out this charge and therefore abandoned this allegation.

iii. Failed to include, at the time of original submission, or subsequently, an adequate soils report

69. Section 8(2) (iii) of the SSR requires that information regarding the type, depth and porosity of the soil at the site of the sewerage system be filed with the relevant health authority prior to construction.
70. Section 3.5.1 of the SPM Version 3 requires that a "site and soil evaluation report and attachments" be filed with the health authority prior to construction of a sewerage system. That section expressly notes that this requirement applies to repairs.
71. Section 3.3.3. of the SPM Version 3 sets out what must be included in a site and soil evaluation report:

II- 3.3.3 SITE AND SOIL EVALUATION REPORT

The site and soil evaluation report is to include, at a minimum:

- A site plan (to scale or showing all relevant dimensions from an identified point) showing all site information needed to plan the system, including:
 - Property lines, easements and covenants
 - The location of test pits and permeability tests
 - The location of all existing and proposed features relevant to dispersal area siting and horizontal separations (on the lot and on neighbouring properties)
 - Horizontal separation distances
 - Indication of slopes

- Text or tables, that include the following:
 - A description of the soil profile (test pit logs)
 - Results of soil permeability or percolation testing
 - An estimation of the depth to water table on the date of the evaluation and the estimated Seasonal High Water Table (SHWT)
 - Depth to an observed limiting layer in the soils
 - Site vegetation
 - Any special climate or soils factors
 - A summary or list of easements, covenants, rights of way, relevant zoning or development permit(s) information, Riparian Area information, health orders etc. that may affect the system

72. The above requirements are consistent with Mr. Brizan’s testimony of the soil information which is required to be filed. Mr. Brizan’s opinion in his expert report that “there was also no soils investigation information included with the initial filings and later soils and permeability information provided at the request of VIHA was not presented in a professional manner.”
73. Mr. Thorburn admitted on cross-examination that section 8(2) of the SSR requires site and soil information to be filed. He also acknowledged that the soil report submitted with the ROSS filing should show that percolation tests have been performed, the location of the holes where the tests were taken, and the results of those tests should be included.
74. Mr. Heringa admitted that he did not include a detailed soils report with the May 2017 filings. Mr. Heringa did not subsequently file a soils report.
75. The Panel finds that Mr. Heringa failed to comply with section 8 of the SSR and the SPM in or around May 2017 when he filed two ROSS documents relating to the Property that failed to include, at the time of original submission, or subsequently, an adequate soils report. Accordingly, the Association has proven this allegation to the requisite standard.

iv. Failed to provide a report from a professional competent in hydrogeology in circumstances where one was required

76. Section 3.1(2) of the SSR requires that a person must not construct a sewerage system less than 30 metres from a well. As preciously noted, the term “construct” is defined in the SSR to include “install, repair or alter a sewerage system.”
77. Section 3.1(3) of the SSR provides an exception to 3.1(2). Section 3.1(2) does not apply if a person receives, before construction, written advice from a professional that it would not likely cause a health hazard to construct a holding tank or sewerage system at a distance of less than set out in section 3.1 (2). A professional is defined as a “professional competent in the area of hydrogeology.” In other words, person may construct a sewerage system within 30 metres from a well if, before construction, they receive written advice from a professional that it would likely not cause a health hazard. A copy of that written advice must be provided to a health officer.
78. Section 3.5.1 of the SPM specifies that for purposes of section 3.1 of the SSR, a supporting hydrogeology report must be filed if the horizontal separation to a drinking water well is being reduced.
79. Both Mr. Brizan and Mr. Thorburn agreed that a hydrogeologist’s report is required to be filed if there is less than 30 metres from a septic system to a well. Mr. Heringa admitted that he did not obtain a hydrogeologist’s advice and no such report was filed with the health authority.
80. The Panel finds that Mr. Heringa failed to comply with section 8 of the SSR and the SPM in or around May 2017 when he filed two ROSS documents relating to the Property that failed to provide a report from a professional competent in hydrogeology in circumstances where one was required. Accordingly, the Association has proven this allegation to the requisite standard.

v. Failed to include a site plan to scale

81. Section 8(2)(b) of the SSR requires that before construction of a sewerage system, an authorized person must file with the health authority, information respecting “plans and specifications of the sewerage system, or of alterations or repairs to the sewerage system, prepared by an authorized person and with the seal of the authorized person affixed”.
82. As noted above, the SPM Version 3 identifies the following standards regarding site plans:

II- 3.3.3 SITE AND SOIL EVALUATION REPORT

The site and soil evaluation report is to include, at a minimum:

- A site plan (to scale or showing all relevant dimensions from an identified point) showing all site information needed to plan the system, including:
 - Property lines, easements and covenants
 - The location of test pits and permeability tests
 - The location of all existing and proposed features relevant to dispersal area siting and horizontal separations (on the lot and on neighbouring properties)
 - Horizontal separation distances
 - Indication

83. Mr. Heringa testified that his view was that the site plans conform with the SPM standards for alteration and repairs, but not for new construction.
84. Both Mr. Brizan and Mr. Thorburn testified that site plans accompanying ROSS filings should be drawn to scale.
85. The Panel finds the site plans submitted in or around May 2017 with the two ROSS filings were not drawn to scale.
86. The Panel notes that this does not dispose of whether Mr. Heringa complied with the site plan requirements in the SPM. The SPM contemplates that a site plan can be “to scale or showing all relevant dimensions from an identified point.” It is possible that a site plan could conform with the SPM even if it is not drawn to scale.
87. Mr. Brizan’s testimony was that while Mr. Heringa’s drawings were not to scale, most of the dimensions were shown. The Panel agrees that the site plans show dimensions, however, Mr. Heringa has omitted relevant features from the site plans altogether which are needed to plan the system. Mr. Heringa’s site plans do not conform with the SPM requirements as they are neither drawn to scale nor show all relevant dimensions from an identified point, showing all site information needed to plan the system.
88. While the Panel finds that Mr. Heringa failed to comply with section 8 of the SSR and the SPM in or around May 2017 when he filed two ROSS documents relating to the Property that failed to include a site plan to scale or showing all relevant dimensions from an identified point, that is not the allegation in this part. The allegation only deals with failing to comply with the SSR and SPM by failing to include a site plan drawn to scale. The Panel cannot conclude that Mr. Heringa failed to comply with the SSR and SPM solely on the basis of a failure to have provided a site plan to scale as that is not what the SPM provides. Mr. Heringa’s failure to include relevant structures is dealt with in the two following allegations. For these reasons, the Panel dismisses this allegation.

vi. Failed to include a site plan that showed the location of all sewage generating structures

89. Additional detailed requirements for documentation are provided in Part II, section 3.5 of the SPM:

II- 3.5.1 FILING DOCUMENTS

Before construction (including repair) of a sewerage system, the AP must submit filing documents to the Health Authority with, at least the following:

- Health Authority filing form and fee (see s. 8(2) of the SSR)
- Site and soil evaluation report and attachments
- Record of design
- Drawings for construction
- Specifications
- Daily Design Flow and type and quality of influent
- Hydraulic loading rates
- Supporting hydrogeology report if reducing a horizontal separation to a drinking water well (see s. 3.1 of the SSR)
- Any other information specifically required by the Health Authority

II- 3.5.2 MINIMUM STANDARDS FOR CONSTRUCTION DRAWINGS

Show system features with a level of detail adequate to construct the system, including:

- A title, with identification of the property, reference to any specifications, date and revision number
- Plan drawing with all relevant features shown accurately with respect to the parcel boundaries. Draw to scale, with a scale bar and true north meridian, or if not to scale show all relevant dimensions.
- The location of all components, with horizontal separations shown on the drawing or as measurements
- One or more permanent "survey control points" (e.g. property pin)
- Detail drawings of the system that show the key features to the installer.
- A cross section showing the planned elevations of the trenches and the sand media depth, if any, and showing the vertical separation, restrictive layer, and water table.

For simple systems the construction drawing can be combined with the site evaluation drawing.

90. Sewage generating structures are relevant features and should be shown on the construction drawings.
91. Mr. Heringa admitted that the site plan drawings he submitted to the health authority do not show all sewage generating structures.
92. Mr. Thorburn acknowledged that the site plan should show all of the sewage-generating structures, the water lines, the sewage lines and the plan should be to scale.
93. The Panel finds that Mr. Heringa failed to comply with section 8 of the SSR and the SPM in or around May 2017 when he filed two ROSS documents relating to the Property that failed to include a site plan that showed the location of all sewage generating structures. Accordingly, the Association has proven this allegation to the requisite standard.

vii. Failed to include a site plan that showed the sewer lines from sewage generating structures to the tanks or water line locations

94. As noted above, the SPM provides additional detailed requirements for information to be provided with the filing. Sewer lines from sewage generation structures and water lines are relevant features and should be shown on the construction drawings.
95. Mr. Heringa admitted that the site plans he submitted do not show all the water lines, all the sewage generating structures, or all the sewer lines.
96. Mr. Brizan testified the drawings lacked information pertaining to the waterlines.
97. The Panel finds that Mr. Heringa failed to comply with section 8 of the SSR and the SPM in or around May 2017 when he filed two ROSS documents relating to the Property that failed to include a site plan that showed the sewer lines from sewage generating structures to the tanks or water lines locations. Accordingly, the Association has proven this allegation to the requisite standard.

viii. Failed to provide adequate or any documentation to confirm the depths of the restrictive layer or the vertical separation between the base of the dispersal trench and the underlying restrictive layer

98. The SPM defines vertical separation as “the vertical distance, or height, of unsaturated soil, measured from the sand or soil infiltration surface to the limiting layer.”
99. The Association submitted in its closing submissions:

Vertical separation refers to the height of unsaturated soil between the infiltration surface to the limiting (or restrictive) layer beneath. In a type 1 gravity system, like the sewerage system at issue in this proceeding, vertical separation provides the distance and space over which treatment (the removal of pathogens) can occur. Insufficient distance (insufficient vertical separation) means insufficient removal of pathogens before an underlying restrictive layer. The appropriate amount of vertical separation depends upon a number of factors including distribution, type of dosing, type of effluent and type of soil.

100. As noted above, the SPM provides additional detailed requirements for information to be provided with the filing, which includes “A cross section showing the planned elevations of the trenches and the sand media depth, if any, and showing the vertical separation, restrictive layer, and water table.”
101. Mr. Brizan testified that a significant amount of detailed information should be provided with the filings, such as the hydraulic loading rate, the linear loading rate of the soil, and the location of the water table. A professional should comment on how the sewerage system would have to be designed and built to treat the effluent before it reaches the water table.

102. Mr. Brizan's opinion was that the ROSS filings were missing information about the vertical separation, in particular information about the depth of the water table was missing.
103. The ROSS filings for Lot A and Lot B indicate that the "depth of native soil to seasonal high water table or restrictive layer" was 1.0 metre.
104. Mr. Heringa testified that the older standards about vertical separation were stricter, therefore, in the case of repairs and alterations, there is "no real need for all those tests" and there "is nothing to do". This is consistent with Mr. Heringa's letter dated October 24, 2017 in which he stated:

You base your condemnation of the existing septic systems as health hazards on the existing vertical separations for these septic systems. Yet the vertical separation was never discussed, drawn or produced. The existing separations were set by others in the past....I assumed that existing septic fields are exempt.

105. While Mr. Heringa did provide information that the restrictive layer was 1.0 metre, the Panel finds that Mr. Heringa did not provide adequate documentation. The Panel finds that Mr. Heringa failed to comply with section 8 of the SSR and the SPM in or around May 2017 when he filed two ROSS documents relating to the Property that failed to provide adequate or any documentation to confirm the depths of the restrictive layer or the vertical separation between the base of the dispersal trench and the underlying restrictive layer. Accordingly, the Association has proven this allegation to the requisite standard.

Allegation 1(b) Performing engineering work at the Property in or around May 2017 prior to submitting information to the VIHA as required by section 8(2) of the SSR

106. Section 8(2) of the SSR provides that an authorized person must file certain information with the health authority before construction of a sewerage system:

8 (2)Before construction of a sewerage system, an authorized person must file with the health authority, in a form acceptable to the health authority,

(a) information respecting

(i) the name, address and telephone number of the owner for whom the sewerage system is being constructed,

(ii) the type of structure the sewerage system will serve, and

(iii) the type, depth and porosity of the soil at the site of the sewerage system,

(b) plans and specifications of the sewerage system, or of alterations or repairs to the sewerage system, prepared by an authorized person and with the seal of the authorized person affixed,

(c) written assurance that the plans and specifications filed under paragraph (b) are consistent with standard practice, and

(d) if construction of the sewerage system is in response to an order made under section 11 (b) or (c) of this regulation or section 31 (1) (b) of the Act, a copy of the order.

[emphasis added]

107. As set out above, the Panel found that section 8(2) of the SSR applies to the sewerage system work performed on the Property because none of the exceptions in section 8(1) apply. Previous filings for the Property were not located and a significant alteration or repair was being made to the sewerage system.

108. In his Response dated July 4, 2017, Mr. Heringa stated:

The ROSS Forms recently submitted by myself for this property, were certainly submitted after the work was done, but are no different than the earlier ROSS forms that were submitted back on 12th December 2011, that were also submitted and accepted by the Ministry of the Environment after the work was done for the same property.

109. Mr. Heringa also wrote in his May 30, 2019 letter to Ms. Wilson:

When I responded to the verbal reminder of Glenn Gibson to file (approximately May 1, 2017), I was not aware that Version 3 was in effect, nor aware that Filings for an Alteration now had to occur prior to doing the work, when I was promised the \$100,000 for Filing ASAP by Glenn Gibson, as per the October 31, 2016 VIHA letter.

110. The Panel finds that Mr. Heringa performed engineering work at the Property prior to submitting the information to VIHA which was required by section 8(2) of the SSR. However, the allegation in this part is that the engineering work in question was performed in or around May 2017. The evidence led in this case, and the Panel's findings are not that the Mr. Heringa's engineering work was performed in or around May 2017, therefore, the Panel finds that the Association has not proven this allegation to the requisite standard.

Allegation 1(c) Creating a risk to public health by failing to abide by the SPM and SSR in regards to the engineering work on the Property

111. Section 2.1(1) of the SSR prescribes certain activities to constitute health hazards. Section 2.1(1)(d) prescribes that the proposed construction or maintenance of a sewerage system which in the opinion of a health officer may cause a health hazard:

Prescribed health hazards and regulated activities

2.1 (1)The following are prescribed as health hazards:

(a)the discharge of domestic sewage or effluent into

(i)a source of drinking water, as defined by the Drinking Water Protection Act,

(ii)surface water, or

(iii)tidal waters;

(b)the discharge of domestic sewage or effluent onto land;

(c)the discharge of domestic sewage or effluent into a sewerage system that, in the opinion of a health officer, is not capable of containing or treating domestic sewage;

(d)the proposed construction or maintenance of a sewerage system that, if constructed or maintained in accordance with the plans and specifications filed under section 8 or the maintenance plan filed under section 9, may in the opinion of a health officer cause a health hazard.

(2)The construction and maintenance of a holding tank or sewerage system described in section 2 are prescribed as regulated activities.

112. Mr. Anderson's health order of October 6, 2017 states, "It is my opinion that the sewerage system as constructed is a health hazard. My opinion, in part, is based on the lack of adequate vertical separation which will result in sewage effluent being discharged into the winter water table without first being adequately treated."
113. Mr. Anderson's Order of October 6, 2017 indicates that he was an environmental health officer at the time he issued that Order. The SSR is a regulation pursuant to the *Public Health Act* SBC 2008 c.28. The *Public Health Act* defines "health officer" to include an environmental health officer.
114. The Association also relies upon the expert opinion of Mr. Brizan to establish that Mr. Heringa created a risk to the public by failing to abide by the SSR and SPM. The Association submits:

Mr. Brizan specifically gave evidence in direct that the location of the potable water well being less than 30 metres from the sewerage system presented a serious health risk. Mr. Brizan testified about the inadequacies of the vertical separation from the water table to the infiltrative surface and the "very real risk of pathogens getting into the groundwater and potentially contaminating the potable water well source or the nearby surface water should the effluent breakout to the surface or to the surface via the new interceptor drain installed."

115. As noted above, Mr. Thorburn's report indicated that he performed a site visit and concluded that "all three existing septic fields on the site were in good working order and without any health hazard issues."
116. The Panel finds that Mr. Heringa created a risk to public health by failing to abide by the SPM and SSR in regard to the engineering work on the Property. The Panel agrees with the Association that section 2.1(1)(d) of the SSR has been established due to Mr. Anderson's October 6, 2017 Order and that this creates a risk to public health.
117. The Panel preferred the evidence of Mr. Brizan over Mr. Thorburn on the risk to public health. The Panel accepts Mr. Brizan's opinion that the location of the potable water well as being less than 30 metres from the sewerage system and the inadequacies of the vertical separation from the water table present a potential risk to public health. Mr. Thorburn's evidence focussed on the operational status of the septic fields at the time he did a site visit and not whether Mr. Heringa's failure to abide by the SSR and SPM created a risk to public health.
118. The Panel finds that the Association has proven this allegation to the requisite standard.

Allegation 1 (d) Failing to remedy the inadequacies of his engineering work on the Property when given the opportunity to do so on or about May 15, 2017, June 13, 2017, September 1, 2017, and November 10, 2017

119. The Association submits that Mr. Gibson and Mr. Anderson corresponded extensively with Mr. Heringa regarding his May 2017 filings and their issues with the Property's sewerage system. In particular, the Association relies on the correspondence of May 15, June 13, September 1, and November 10, 2017. The Association argues that Mr. Heringa did not address their concerns adequately or at all, but instead was positional and argumentative. The Association submits that Mr. Heringa's professional responsibility to ensure he understood the requirements of the SSR and SPM prior to agreeing to act as authorized person or design the alterations or repairs and before overseeing the work and submitting the May 2017 filings. The Association submits that Mr. Heringa clearly did not know the applicable requirements before submitting the May 2017 filings. The Association submits that after Mr. Gibson and Mr. Anderson informed Mr. Heringa of the relevant requirements, Mr. Heringa deflected the blame to VIHA and others for not apprising him of the relevant standards that were in force.
120. Mr. Heringa argued that he responded promptly to correspondence and nothing in his replies was positional or argumentative. Mr. Heringa argued that the SPM is "a guide and is not the law". Mr. Heringa submits that the acceptance of his May 2017 filings by VIHA represents a complete answer to any deficiencies. He submits that had the filings been deficient, VIHA would have rejected them. Mr. Heringa maintains that he followed the standards, he did not obfuscate responsibility, but in any event, VIHA's June 28, 2019 acceptance of the filings defeats this allegation.

121. The Panel notes the following statements by Mr. Heringa's statements in his November 27, 2017 correspondence to Mr. Anderson:

We never determined the vertical separation because we were never asked to. We just replaced and upgraded what was there already.

Also, the advice that the Sewerage System Practice Manual Version 3 was now in effect could/should have been incorporated in the VIHA letter of October 31, 2016, before the fee was paid by the Owner, so the Owner and the Engineer were both fully aware of this upcoming new requirement.

122. The Panel has reviewed and considered the letters of certification and ROSS forms for Lot A and Lot B and agrees with Mr. Heringa that the May 10, 2019 letters of certification ROSS forms are stamped "Filing Accepted" and are dated June 10, 2019. The letters of certification dated May 9, 2017 are stamped "Date Received" on June 28, 2019.
123. The Panel accepts Mr. Heringa's proposition, with which Mr. Brizan agreed on cross-examination, that there may be circumstances in which filings are rejected by the health authority. Mr. Gibson and Mr. Anderson were not called by either party to provide evidence as to the meaning of the health authority stamp "Filing Accepted".
124. The Panel also notes that the "Filing Accepted" stamp must be viewed in light of the fact that the sewerage system process in British Columbia changed from a permitted process to a self-regulating process involving authorized persons. Moreover, the Panel does not consider that a health authority's filing stamp could relieve an engineer of their professional obligations and standards.
125. Responding to requests for additional information for May 9, 2017 filings, Mr. Heringa provided additional information as follows:
- a. May 24, 2017 letter responding to VIHA request dated May, 15, 2017.
 - b. June 8, 2017 information package including subdivision site plan and soils report.
 - c. June 13, 2017 email responding to VIHA email of the same day, with attached drawings.
 - d. June 21, 2017 email with additional information on test holes dug the previous day.
 - e. July 4, 2017 another soil/site submission.
126. The Panel agrees with the Association's submission that the correspondence between VIHA and Mr. Heringa demonstrates VIHA made ongoing attempts over many months to inform Mr. Heringa that his May 2017 filings did not meet the SSR or SPM, and that Mr. Heringa "attempted to blame VIHA and others for not informing him what the standards were and how they could be met."

127. The Panel considers that Mr. Heringa failed to remedy the inadequacies in his engineering work on the Property even after they were brought to his attention by VIHA. The Panel finds that the Association has proven his allegation to the requisite standard.

Allegation 2 The conduct in paragraph 1(a) and (d) is contrary to section 14 of the Bylaws

128. The Association submits that Mr. Heringa's failure to follow sections 8 and 9 of the SSR, and failure to promptly remedy the inadequacies of his initial filing, breaches section 14(b)(1) – (2) of the Association's Bylaws which requires that members retain complete documentation relating to projects and undertake regular and documented quality control checks of their engineering work.
129. Mr. Heringa argues that he complied with both the requirements to provide documents and to retain documentation for a project. He submits that there is no evidence before the Panel that insufficient documentation appeared. He further notes that he was the subject of a professional review in or about 2000 and that there were no issues. Mr. Heringa passed the review.
130. The Panel agrees with Mr. Heringa, there is insufficient evidence to prove this allegation on a balance of probabilities. This allegation is dismissed.

Unprofessional Conduct

131. The Panel finds that the conduct at paragraphs 1(a)(i),(iii),(iv),(vi),(vii),(viii), (c), (d) of the Amended Notice of Inquiry amounts to unprofessional conduct as it represents a marked departure from the standard expected of a professional engineer.

Allegations 3, 4, and 5: The conduct in paragraphs 1 (a) to (d) is contrary to the Code of Ethics

132. The Panel finds that the conduct set out in paragraphs 1(a)(i),(iii),(iv),(vi),(vii),(viii), (c), (d) of the Amended Notice of Inquiry have been proven on a balance of probabilities. The Panel finds that this conduct is contrary to principles 1, 2 and 3 of the Association's Code of Ethics which require members to hold paramount the safety, health and welfare of the public, undertake and accept professional assignments only when qualified by training or experience, and to provide an opinion on a professional subject only when it is founded on adequate knowledge and honest conviction. Accordingly, the Panel finds that the allegations at paragraphs 3, 4 and 5 of the Amended Notice of Inquiry are proven to the requisite standard.

133. Given that the Panel has made the determination of unprofessional conduct in paragraphs 1(a)(i),(iii),(iv),(vi),(vii),(viii), (c), (d) of the Amended Notice of Inquiry, the Panel declines to make an additional finding with respect to paragraphs 3, 4, and 5 of the Amended Notice of Inquiry.

F. Summary

134. In summary, the Panel finds that Mr. Heringa demonstrated unprofessional conduct.

135. The Panel will determine whether sanctions should be imposed upon Mr. Heringa and whether to impose costs. The Panel requests that the parties provide written submissions in accordance with the following schedule:

- a. Submissions must be delivered by counsel for the Association ("Association Submissions") to Mr. Heringa and to the Panel by April 21, 2021.
- b. Submissions must be delivered by Mr. Heringa to counsel for the Association and to the Panel by May 12, 2021.
- c. Reply submissions may be delivered by counsel for the Association to Mr. Heringa and to the Panel by May 19, 2021.

136. Submissions for the Panel shall be delivered to Susan Precious, counsel for the Panel and may be delivered electronically.

137. The Association or Mr. Heringa may request an oral hearing on penalty and costs by no later than May 12, 2021.

Dated: April 7, 2021

<original signed by>

Peter Bobrowsky, P.Geo, Chair

<original signed by>

Paul Adams, P.Eng.

<original signed by>

Ed Bird, P.Eng.