

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

and

IN THE MATTER OF DOUGLAS VANHOOREN, P.Eng.

Engineers and Geoscientists BC File No. T19-020

CONSENT ORDER

Background

1. On November 10, 2020, the Association of Professional Engineers and Geoscientists of the Province of British Columbia (the "Association"), doing business as Engineers and Geoscientists BC, issued a Notice of Inquiry dated November 3, 2020 (the "Notice of Inquiry") to Douglas Vanhooren, P.Eng. ("Mr. Vanhooren") pursuant to s. 32 of the *Engineers and Geoscientists Act*, R.S.B.C. 1996, c. 116 (the "Act").
2. The Association and Mr. Vanhooren wish to resolve the matter by consent pursuant to section 32.1 of the Act in order to avoid the need for a disciplinary inquiry.
3. Mr. Vanhooren was cooperative, acknowledged wrongdoing and was forthcoming with admissions during the investigation.

Admissions

Mr. Vanhooren admits the allegations set out in the Notice of Inquiry, that:

4. He demonstrated unprofessional conduct or negligence in connection with his design of a welding shop ventilation upgrade at the ██████████ Welding Shop in Sparwood, BC (the "Welding Shop"). In particular, he prepared sealed drawings on or about March 18, 2014 (the "Design"), which were deficient and not consistent with industry standard practices, particulars of which include the following:
 - a. the Design's welding fume exhaust system in the Welding Shop's South Welding Bay (the "South Shop") fails to extract sufficient air volume due to:
 - i. exhaust fan EF-6 being undersized in relation to the static pressure it generates; and
 - ii. the presence of exhaust grilles on the same duct as the welding exhaust extraction arms;

- b. the Design's welding fume exhaust system in the South Shop fails to meet the minimum duct transport velocity of 2000 to 2500 feet per minute required by industry standard practice as set out in Chapter 33 of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) HVAC Application Handbook;
 - c. the Design's welding fume extraction system in the Welding Shop's North Welding Bay (the "North Shop") fails to extract sufficient air volume due to:
 - i. exhaust fans EF-5 and EF-7 being undersized in relation to the static pressure they generate; and
 - ii. the presence of exhaust grilles on the same duct as the welding exhaust extraction arms;
 - d. the Design's makeup air intake system in the North Shop fails to deliver sufficient air volume due to:
 - i. an undersized 36" diameter supply main duct for makeup air unit 2; and
 - ii. undersized drum type louvers installed on the air supply main duct;
 - e. the Design is missing necessary details including:
 - i. balancing dampers on either the supply or exhaust ducts, which are required to properly balance the systems; and
 - ii. the Equipment Schedules do not include External Static Pressure for fans.
5. The conduct set out above at paragraph 1 is contrary to Principle 1 of the Association's *Code of Ethics* which requires that all members and licensees shall hold paramount the safety, health and welfare of the public, the protection of the environment and promote health and safety within the workplace.
6. The conduct set out above at paragraph 1 is contrary to Principle 2 of the Association's Code of Ethics which requires that all members and licensees shall undertake and accept responsibility for professional assignments only when qualified by training or experience.

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

Disposition

The following conditions are imposed on Mr. Vanhooren's membership:

10. Mr. Vanhooren will pay a fine to the Association in the amount of \$1,000 within 30 days of the date of the execution of this Consent Order.
11. Within 12 months of the date of this Consent Order Mr. Vanhooren must provide written notice to the Association that he has completed and passed:
 - a. the Association's Professional Practice Examination, at his own expense;
 - b. the Professional Engineering and Geoscientists in BC Online Seminar, at his own expense; and
12. Mr. Vanhooren will complete the ASHRAE Learning Institute HVAC Design: Level I – Essentials, and the ASHRAE HVAC Design: Level II - Applications course, at his own expense, within 12 months of the date of this Consent Order, or at the first opportunity the courses are offered following the date of this Consent Order.
13. HVAC engineering work undertaken by Mr. Vanhooren must be peer reviewed pursuant to the Association's *Discipline Committee Order Peer Review Policy*, by a peer reviewer approved by the Association's Registrar (the "Peer Reviewer") as follows:
 - a. The peer review must continue for a minimum of one year from the date a peer reviewer is approved by the Association's Registrar (the "Peer Review Period");
 - b. The costs of the peer review, if any, shall be borne by Mr. Vanhooren;
 - c. The Peer Reviewer shall report in writing to the Association's Registrar every six months during the Peer Review Period on the performance of Mr. Vanhooren; and
 - d. Following the Peer Review Period, Mr. Vanhooren shall obtain an opinion from the Peer Reviewer that Mr. Vanhooren is competent to undertake HVAC engineering work and provide that opinion to the Association's Registrar. If the opinion of the Peer Reviewer is that Mr. Vanhooren requires further peer review, the Peer Review Period shall continue for

additional six month periods, until such time that the Peer Reviewer determines that Mr. Vanhooren is competent to undertake HVAC engineering work.

14. Within six months of the conclusion of the Peer Review Period, Mr. Vanhooren shall undergo a Practice Review with a focus on HVAC design, at his own cost, the precise timing of which will be determined by the Practice Review Committee.
15. Mr. Vanhooren shall pay \$4,000 toward the Association's legal costs within 30 days of the date of this Consent Order.
16. In the event that Mr. Vanhooren fails to comply with any of the terms of this Consent Order, his registration in the Association will be suspended until every default has been remedied in accordance with the terms of the Consent Order.

Consequences of the Consent Order

15. The full text or a summary of this Consent Order will be published by the Association in print and electronic publications including on the Association's website.
16. This Consent Order has the same force and effect as an Order made under section 33(2) of the Act and may be dealt with under section 34 of the Act if conditions in the Consent Order are not met.
17. Mr. Vanhooren agrees that the Association has advised him that he should receive independent legal advice regarding this Consent Order and that the Association has given him the time necessary to get said independent legal advice.

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18. The Association and Mr. Vanhooren agree that this Consent Order may be executed in counterparts and delivered as an electronic document.

This Consent Order is approved and accepted by Mr. Vanhooren and the members of the Discipline Committee Review Panel this 2nd day of February, 2021.

<Lesia Vanhooren>

Witness Name

<original signed by>

Witness Signature

<original signed by>

Douglas Vanhooren, P.Eng.

<original signed by>

Chris Newcomb, P.Eng., FEC
Member, Discipline Committee

<original signed by>

Bruce Nicholson, P.Eng. (Non-Practising)
Member, Discipline Committee

<original signed by>

Chris Arthur, P.Eng.
Member, Discipline Committee