



Minutes

PROFESSIONAL STANDARDS COMMITTEE MEETING

Tuesday, May 10, 2016

PEO Offices

Members:

Nicholas Pfeiffer, P. Eng. (Chair)

Jamie Catania, P. Eng.

Denis Dixon, P. Eng.

Dale Kerr, P. Eng.

Colin Moore, P. Eng.

Brian Ross, P. Eng.

Heather Swan, P. Eng.

Staff:

Bernie Ennis, P. Eng.

Sherin Khalil, P. Eng.

José Vera, P. Eng.

Regrets:

Roger Jones, P. Eng.

Fanny Wong, P. Eng. (Vice-Chair)

Neil Kennedy, P. Eng.

1. OPENING OF MEETING

The Chair called the meeting to order at 6:00 p.m., with 7 members of the Committee in attendance. Consequently, quorum was attained.

1.1 Approval of Agenda

A motion was made to approve the agenda as written.

Moved by: B. Ross Seconded by: D. Dixon CARRIED

2. MINUTES OF PREVIOUS MEETING

2.1 Approval of Minutes of April 12, 2016, 2016 Meeting

A motion was made to approve the Minutes of the April 12, 2016, meeting as written.

Moved by: D. Dixon Seconded by: C. Moore CARRIED

2.2 Action Items of April 12, 2016 Meeting

Staff reported on the status of the Action Items.

3. GUIDELINES

3.1 Guideline for Preparing As-Built and Record Documents

Follow-Up: Staff provided final edits on the guideline prior to sending for public consultation.

Staff reported the following:

- A motion was previously made to approve sending the Preparing As-Built and Record Documents Guideline for public consultation.
- The public consultation begins on May 16, 2016 and will close on July 15, 2016.
- There were some comments received by PSC members. These comments will be addressed after the public consultation, along with other comments.

3.2 Guideline for Structural Engineering Design in Buildings

A motion was previously made to approve the Structural Engineering Design in Buildings Guideline.

Follow-Up: Staff prepared a Briefing Note and added the Structural Engineering Design in Buildings Guideline to the June 2016 Council meeting agenda for final approval.

3.3 Condo Reserve Studies Guideline

A motion was previously made to approve the Condo Reserve Studies Guideline for public consultation.

The public consultation started on May 2, 2016 and will close on June 30, 2016.

There was a discussion regarding the proposed changes in the *Condominium Act, 1998*, Ontario Regulation 48/01.

It was previously suggested that the draft guideline could be sent to core stakeholders, such as law firms, to provide feedback on the guideline during the public consultation stage.

Action: Staff to follow up with the Ministry of Government and Consumer Services with regard to the proposed changes in the *Condominium Act, 1998*, Ontario Regulation 48/01.

3.4 Solid Waste Management Guideline

H. Swan reported that the public consultation ended on March 15, 2016.

The public consultation comments were received from:

- Ministry of Environment and Climate Change
- Ontario Chapter, Solid Waste Association of North America
- York Region
- Ontario Society of Professional Engineers
- Individual Engineers

The subcommittee Chair advised that a meeting or two will be required to address the public consultation comments.

Action: Staff to schedule a meeting sometime in June 2016 to address the public consultation comments.

3.5 Guideline for Structural Condition Assessments

Staff reported that the public consultation ended on April 29, 2016.

Staff will incorporate all comments into a table. Staff advised that the size of the attachments that includes the public consultation comments is too large to send via the e-mail. Consequently, a folder will be created on SharePoint to include all relevant documents.

The subcommittee members will have access to the SharePoint folder.

Action: Staff to schedule a meeting sometime in June 2016 to address the public consultation comments.

Action: Staff to provide access to the Chair of the subcommittee prior to the meeting.

3.6 Data Matrix Bulletin

Follow-Up: Staff sent a reminder to the subject matter experts to provide their feedback on the Data Matrix Bulletin.

PEO staff reported that the draft Data Matrix Bulletin has been reviewed by the subject matter experts. There were no major comments on the draft Matrix.

A final version of the bulletin will be sent to the PSC members for their comments and suggestions. However, the PSC members recommended discussing this item at the next meeting.

Action: PSC members to provide their feedback on the draft Data Matrix Bulletin.

3.7 Guideline for Design Evaluation of Demountable Event Structures

Staff reported that the first meeting will be held on May 26, 2016.

The subcommittee Chair and staff have proposed a welcome presentation to explain the following at the first meeting:

- Introductions for every member;
- Welcome presentation;
- Review the Terms of Reference;
- Review the guideline template;

- Discussion of approach to editing, and proposed change version control;
- Discussion of meeting frequency and preferred days;
- Questions and housekeeping, expenses, etc.; and
- Adjournment.

Finally, staff requested access to the reports of the Ottawa Bluesfest collapse to glean information as part of an evidence-based approach.

3.8 Use of Seal Guideline

Follow-Up: Staff sent a reminder to the PSC members to provide their comments on the proposed Terms of Reference.

Staff received comments from the PSC members, which will be addressed in the Terms of Reference.

Staff will bring the final version of the Terms of Reference on the Use of Seal Guideline to the next meeting in June 2016 for approval.

3.9 Professional Engineers Providing Reports on Mineral Properties Guideline

Follow-Up: Staff obtained more information from W. Roscoe and verified if there is evidence of a problem in this area of practice.

Staff previously contacted William E. Roscoe to verify if the guideline requires update.

Below are the questions that were provided by staff, and the answers that were provided by Mr. Roscoe:

Question: Do you and your colleagues use the Professional Engineers Providing Reports on Mineral Properties Guideline in your industry?

Answer: I and my colleagues do not use the guideline - we use NI 43-101, for the most part, for our professional reports, which incorporates the CIM Resource and Reserve Definition Standards by reference.

Question: In your view, is the PEO guideline still relevant?

Answer: I do not believe it is relevant in its present form since most or all of the Standards and Guidelines it refers to are out of date.

Question: Should the PEO guideline be updated? If so, what specific areas need updating?

Answer: It is worth updating, but it should place more reliance by reference to other documents, such as NI 43-101 and CIM Definition Standards, which have both been updated about three times since 2002. I think it could still play a useful role in providing guidelines for economic studies such as Preliminary Economic Analysis (a.k.a. scoping studies), Prefeasibility Studies, and Feasibility Studies. These studies are summarized in NI 43-101 reports, but could use some guidance for the more comprehensive PFS and FS level studies.

Question: Can reports on mineral properties be done by other professionals, i.e. geologists?

Answer: Yes.

Question: Can the economic studies that you mentioned be done by other professionals? If so, which professionals?

Answer: Feasibility Studies, Prefeasibility Studies, and Scoping Studies (Preliminary Economic Assessment under NI 43-101) are usually done by a team of professionals, mostly engineers, who take responsibility for various aspects of the studies. The more advanced and detailed the study, the larger the team. The team may include geologists, mining engineers, metallurgical and engineers, design engineers (civil, mechanical, electrical), geotechnical engineers, hydrologists, technicians and technologists, technical draftspersons, environmental and permitting specialists, mineral economics specialists, socioeconomic specialists, etc.

Question: Approximately how many professional engineers in Ontario work in this area of practice, i.e. provide reports on mineral properties?

Answer: I am not sure, but I would guess several hundreds. Many geologists, including myself, are registered as professional engineers, which would add hundreds more.

Question: Is there evidence of a problem in this area of engineering practice, i.e. demonstration through the existence of legal cases indicating common misconceptions of engineers' responsibilities

that a coherent, consistent standard of practice in a particular area is currently required?

Answer: Over the last couple of decades, a number of practice standards for the exploration and mining industry have appeared or have been revised, including National Instrument 43-101 and its Companion Policy and Report Form, Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Mineral Resource and Mineral Reserve Definition Standards, CIM Reserve and Resource Estimation Best Practice Guidelines, and CIMVal Standards and Guidelines for Valuation of Mineral Properties. When there are issues, which rarely result in legal cases or disciplinary actions, the aforementioned standards and guidelines are used to represent industry practice.

The PSC members agreed to update the current guideline based on the above information.

A motion was made to approve updating the Professional Engineers Providing Reports on Mineral Properties Guideline.

Moved by: H. Swan

Seconded by: B. Ross

CARRIED

Action: Staff to collaborate with M. Roscoe to write the Terms of Reference.

4. STANDARDS

4.1 MOECC - Performance Standard for the Environmental Site Dispersion Model (ESDM)

Follow-Up: Staff prepared a memo to the Ministry of the Environment and Climate Change requesting more information on how many unacceptable reports has been prepared by engineers.

Staff reported that a response was received from L. MacCumber, P. Eng. from the Ministry of the Environment and Climate Change providing more information on how many unacceptable reports were prepared by engineers and how many were prepared by non-engineers.

Based on the information that was provided by the Ministry of the Environment and Climate Change, members decided to develop a practice guideline. Furthermore, a performance standard will be developed once legislation is

passed that mandates engineers as qualified persons for preparing ESDM reports.

Action: Staff to edit/modify the Terms of Reference and send it to the PSC members at the June 2016 meeting for the approval.

4.2 Supervising and Delegating Standard

Staff previously advised that the Legislative Counsel indicated that the *Professional Engineers Act* does not provide PEO with authority to create regulations regarding many of the items in the standard, nor mention anything regarding supervision, except in the context of supervising the services provided by a Certificate of Authorization.

Staff reported the following:

- At the Council Workshop in June 2007, there was discussion regarding the Certificate of Authorization and the role of supervising engineers. The workshop suggested that the PSC should prepare a standard for supervision.
- A PSC subcommittee, with input from Enforcement Committee, prepared a draft standard which was approved by Council on February 8, 2013. In its approval motion, Council requested the PSC to submit the draft to several committees for peer review. Following these peer reviews, a review of comments, revisions, and final PSC review, the draft standard was sent to the Ministry of the Attorney General on December 3, 2013.
- The draft standard was reviewed by the office of the Registrar of Regulations and was returned to PEO with substantial concerns. In effect, the Legislative Counsel stated that PEO did not have authority under the *Professional Engineers Act* to create the proposed standard.
- Since the Act would need to be changed in order to implement this standard, the issue was sent to the Legislation Committee for consideration. The Legislation Committee decided that it would not recommend changing the Act and that an alternative solution should be found by the PSC.

Question: Do we need a subcommittee to develop a guideline?

Answer: No, the guideline will be based on the proposed performance standard.

The PSC members agreed on developing a guideline describing the best practices associated with the requirement for a professional engineer to assume responsibility stipulated in Section 12(3) (b) of the *Professional Engineers Act*.

A motion was made to approve sending the Briefing Note for Council approval at June 2016 meeting to rescind the proposed performance standard and develop a practice guideline.

Moved by: B. Ross

Seconded by: H. Swan

CARRIED

4.3 Projects without Permit

Staff provided a presentation describing the background, and outlined all public consultation comments that were received on the Performance Standard for the Projects without Permit. The total number of comments received was 14, and approximately 8 of them did not support the Performance Standard.

Furthermore, staff provided some information for the following questions to evaluate if there is a need for Performance Standard as follow:

Question: What evidence is there - any Discipline cases, legal cases?

Answer: There are no legal cases against engineers for causing a building to be built without a permit.

There are many cases against owners who caused a building to be built without a permit, but those actually involved in the work do not seem to be charged by Chief Building Officials, despite their concerns regarding the involvement of engineers.

Staff asked Regulatory Compliance for information on any complaints based on engineers providing services for construction or alteration of a building where a permit had not been issued. Staff are still waiting to hear from Regulatory Compliance.

Question: What is the impact on the public by this area of practice?

Answer: Some building officials claim that the participation of engineers leads to the construction of buildings that have not been appropriately vetted by authorities. Some engineers argue that the buildings would be built anyway so, in order to protect the public, engineers must be involved to ensure that the buildings are safe.

Question: Number of inquiries made to PEO regarding practice?

Answer: There was only one inquiry from a PEO member made to PEO specifically regarding this issue. The letter was a general mailing to all engineers in the area warning them not to provide services to any construction project that did not have a building permit. The issue was raised at various meetings with building officials and architects, specifically at EABO meetings.

Question: What exactly was the problem that the proposed performance standard was supposed to solve?

Answer: The problem, as identified by architects and building officials, was that professional engineers were attending at sites where buildings under construction did not have building permits.

The OAA has taken the position that architects should not provide general review of the construction of a building in the absence of a building permit (OAA Practice Bulletin A.11).

The position of the architects and building officials is that engineers doing so are in violation of the Ontario Building Code, and that this practice is detrimental to the public interest.

Action: Staff to forward the original problem definition to the EABO members to discuss this issue.

4.4 Professional Design Coordination

A motion was previously made to approve developing a practice guideline and performance standard on Professional Design Coordination.

Follow-Up: Staff wrote the Terms of Reference for a new subcommittee to develop a practice guideline and performance standard on Professional Design Coordination.

The PSC members advised that the proposed Terms of Reference should be reviewed by the Ontario Association of Architects and the Ministry of Municipal Affairs and Housing as the subcommittee will be a joint subcommittee between the Ontario Association of Architects and Professional Engineers Ontario.

It was noted that the performance standard will be under both the *Professional Engineers Act* and *Architects Act*.

Action: Staff to send the proposed Terms of Reference to the Ontario Association of Architects and the Ministry of Municipal Affairs and Housing for their feedback and comments.

5. OTHER BUSINESS

5.1 Status of PSC Projects

Action: Staff to provide additional information on the proposed Guideline Interpreting PEA for Regulators.

Follow-Up: Staff updated the PSC projects to include the status of the Nuclear Pressure Retained Structures.

5.2 Elliot Lake Recommendations

Follow-Up: Staff provided an update on all Elliot Lake Recommendations items.

5.3 Site Remediation

Staff provided a presentation on the evaluation process that was undertaken on the Professional Engineers Providing Services in Environmental Site Assessment, Remediation and Management Guideline to determine if the guideline needs update based on the information that was received by subject matter experts.

Question: Is the PEO guideline still relevant?

Answer: The most widely-used reference standard in the industry in Ontario is O. Reg. 153/04: Records of Site Condition - Part XV.1 of the *Environmental Protection Act*. This standard has been updated numerous times since 1996.

This standard is often used for property transfer, but sets general expectations that are adopted as standard practice for other projects within the realm of phased environmental site assessments and remediation. This is a law that applies to a certain type of site; it is prescriptive and has strict requirements.

Other commonly-used standards include:

- Government of Canada: A Federal Approach to Contaminated Sites, 1999;

- CSA Z768-01 (R2012) - Phase I Environmental Site Assessment;
- CSA Z769-00 (R2013) - Phase II Environmental Site Assessment;
- ASTM E1527 - 13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process;
- ASTM E1903 - 11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process.

Question: Should the PEO guideline be updated? If so, what specific areas need updating?

Answer: The current guideline presents information that is best captured by the above references. These references are more comprehensive, set with more practical considerations, and are more continuously monitored and updated. Professionals that are qualified to undertake the type of work outlined in this document are likely to be aware of the more current practices.

An updated version of this document would certainly be valuable, but this standard would best serve as guidance for engineers from an ethical and legal standpoint. A revised document should consider a discussion of the engineer's professional obligations as they relate to the Code of Ethics. It should address how projects of this type relate to the engineer's duty to society, employers, clients, colleagues, the profession, and himself/herself.

Another point that would be of particular interest is a discussion regarding when an engineer has the duty to report environmental contamination. This might discuss the legal and ethical considerations, as well as discuss how duties change, depending on the engineer's role.

Another discussion point that would be valuable would be a list of stakeholders that might need notification in the event of an adverse environmental incident.

It may be a good idea to issue separate guidance briefs for both phased environmental site assessments and spills, and remediation as they deal with different phases in a project.

Question: Is there content in the Engineers Canada model guide that is valuable and needs to be considered in our PEO guideline?

Answer: The Engineers Canada document includes several valuable sections and references that could be incorporated into the PEO guideline. The six sections presented in this guide are all relevant to a rounded discussion of the engineer's duty. The PEO might consider using abbreviated content from this document.

Experts' Recommendations:

PEO should consider a revised document related to Environmental Site Assessment (ESA) and Remediation. However, our recommendation would be to minimize guidance on the ESA (Phase I & IIs) components and to focus more on environmental risk management (e.g. sub-slab vapour mitigation), remediation and/or spill response.

This should include more discussion on the Engineer's role in the investigation and design of remediation programs (including bench top and pilot studies), the design of risk management components, and the response and design of spill response (for a new release).

It would also be useful to provide guidance on the need to report the identification of off-site contaminants that have migrated from the subject property.

A section or discussion on the ethics in reporting and interpolation of results would also be appropriate, documenting a reasonable standard of care on which owners can be more confident in their reports.

Finally, staff reported that all the references that are in the current guideline outdated.

The PSC members requested staff to contact A. Jones and other subject matter experts to help in writing the Terms of Reference.

Action: Staff to contact subject matter experts to help in writing the Terms of Reference.

5.5 Council Update

There was nothing new to report.

5.6 CPD Task Force (Focus Groups)

Staff reported that the Continuing Professional Development (CPD) Task Force developed a program to implement an on-line assessment tool. Staff reported that a Focus Group will be required to assist in evaluating the process and answer some questions. The initial group will consist of PSC members and subcommittee members.

All PSC members agreed to participate in the Focus Group.

Action: Staff to send a doodle poll to schedule a teleconference or meeting for the Focus Group.

Action: Staff to contact the subcommittee members requesting their approval to participate in the Focus Group.

6. ADJOURNMENT AND NEXT MEETING

The meeting adjourned at 8:00 p.m.

Below are the meeting dates for the 2016:

- June 14, 2016
- September 13, 2016
- October 18, 2016
- November 8, 2016
- December 13, 2016