



# CANDIDATE'S VALIDATOR GUIDE

## 1. INTRO

Your contact information was provided by an individual applying for licensure with Professional Engineers Ontario (PEO) under the competency based assessment (CBA) framework. You have been identified as someone who can act as a validator and attest to the competencies the candidate has performed.

This guide contains specific information required by the validator in order for the candidate to complete a PEO licence application. The candidate has outlined a specific situation, action and outcome per competence that you are requested to review.

As a validator, PEO requests that you initially review all the information in this guide; and, as you rate each of the competencies assigned to you, please:

- Confirm the competency has been met
- Verify the candidate's technical ability, understanding and application of engineering principles, and theories within the situation outlined by the candidate
- Confirm if the candidate's experience was in a Canadian environment
- Rate the competence level of the skill, 0-5; (please see [Appendix C – Rating table/scoring rubric](#))
- Provide additional comments about the candidate's competency performance

PEO adheres to the PEO Privacy Policy regarding collection, use, disclosure and retention of personal information. PEO may use your data for internal statistical analyses and the information collected will be used for application purposes.

## 2. WHAT IS COMPETENCY-BASED ASSESSMENT (CBA)?

CBA is a methodology used to assess readiness for engineering licensure that examines 34 engineering competencies across seven competency categories in which all professional engineers must be competent to support effective practice and public safety. Examples from the candidate's engineering work experience are required to demonstrate each competency. The candidate's responses to all 34 competencies will be assessed by the candidate, validator(s) and PEO's qualifications assessment officers. Both the self-assessment and validator assessment will be considered by the qualifications assessment officer to conduct a final assessment and ultimately issue a licensure decision. Each key competency has a minimum required level of competence, and each competency category has a minimum average score required for licensure. See the [appendix](#) section for a full list of competencies, definitions and other useful information.

## 3. COMPETENCY RATING SCALE (RUBRIC)

The competency rating scale is used to assign a level of competence to the experience through examples provided by the candidate. All levels (0-5) with respect to each of the seven competency categories are described in the rating scale table in [Appendix C](#).

## 4. VALIDATION PROCESS (SEQUENTIAL STEPS)

- a. Receive an email including a link to the PEO portal. **Note: If the e-mail has not been received, please check your email's spam filter.**
- b. While in the PEO portal, review and confirm the candidate's employment history related to the competencies assigned for you to validate.
- c. Validators will then have an opportunity to:
  - i. Confirm that the candidate worked on the stated projects for the company(ies) and time periods claimed.
  - ii. Decline to complete the process if you are not willing or able to verify the candidate's experience. A reason must be provided if the validation is declined. The reason, along with all validator feedback, is confidential and is not visible to the candidate.
- d. Review the candidate's competency responses and rate the level of competency for each of the assigned key competencies, using the (0-5) rating scale. Validator comments on the examples are encouraged and help to provide valuable additional feedback and information to the assessors.
- e. Validators will then be asked to provide overall feedback on the candidate's readiness for professional licensure.
- f. Finally, submit validator ratings and feedback. (Please note: All assigned competencies must be rated before the application can move forward.)

## APPENDIX A—DEFINITIONS

### COMPETENCY

Competency is a measure of ability to perform a task. Examples from actual work experience are required to demonstrate competency.

### COMPETENCY

Competencies are defined as an identified skill-set or knowledge-base which the candidate must have attained to achieve professional licensure. PEO's competency framework is composed of 34 key competencies. See [Appendix C](#) for more information.

### COMPETENCY CATEGORIES

PEO's 34 key competencies are grouped into seven different categories. The seven categories represent the essential areas in which professional engineers of all disciplines must have expertise in order to ensure effective practice and public safety. See [Appendix C](#) for more information.

### CANADIAN ENVIRONMENT COMPETENCIES

The Canadian environment competencies are a subset of six competencies within the competency framework's 34 competencies that demonstrate knowledge and experience of regulations, codes and standards used in Canada, or the international standard equivalence, plus quality control, safety awareness, professional accountability and communication.

### LEVEL OF COMPETENCE

Achievement of each competency category is measured through a competency rating scale that outlines six different competence levels (0-5). A successful candidate must meet each key competency at a minimum level 1 on the competency rating scale (a training level) while achieving the required average level for each category.

### INDICATORS

Indicators are specific examples of activities, actions, skills or behaviours that an candidate could use to demonstrate their level of exposure to a competency.

They help candidates understand what types of examples are required to meet the minimum level of competency for each key competency.

### COMPETENCY RATING SYSTEM

Used to determine whether a candidate has achieved the required level of competence to gain licensure as a professional engineer. Outlines six different levels of competence (0-5 scale).

### COMPETENCY ASSESSMENT SYSTEM

The competency based assessment system operates through a web interface that allows candidates to document their work experience online.

### CANDIDATE

Provide a complete competency based assessment application for PEO to assess the experience requirement toward licensure.

### VALIDATOR

Validate the candidate's level of competence for each assigned key competency. Provide overall feedback on the candidate's readiness for licensure.

### ASSESSOR

Review the candidate's self-assessment, validator's assessment and candidate's responses for each of the 34 key competencies. Provide final competency rating and determine licensure decision.

## APPENDIX B—COMPETENCIES

	CATEGORY 1—TECHNICAL COMPETENCE	INDICATORS (guidance on example content that will demonstrate the competency)
1.1	Demonstrate your knowledge and awareness of regulations, codes and standards used in Canada, or the international standard equivalence. This includes local engineering procedures and practices as applicable.	<ol style="list-style-type: none"> <li>1. Identify and comply with legal and regulatory requirements for project activities</li> <li>2. Incorporate knowledge of codes and regulations in design materials</li> <li>3. Prepare reports assessing project compliance with regulations, codes and standards used in Canada, or the international standard equivalence</li> <li>4. Recognize the need to design for code compliance while achieving constructability</li> <li>5. Identify provincial/territorial, regional, indigenous codes, standards and/or practice guidelines that are applicable to your example. Briefly discuss how the codes, standards and/or guidelines would be applied in your example if it had taken place in Canada</li> <li>6. Incorporate knowledge of provincial, regional, indigenous codes, standards, regulations and/or practice guidelines in design materials</li> <li>7. Recognize the importance of respecting the regional traditions and indigenous regulations towards a project</li> </ol>
1.2	Demonstrate knowledge of materials, or operations as appropriate, project and design constraints, designed to best fit the purpose or service intended and address interdisciplinary impacts.	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of materials, operations, project and design constraints, e.g. cost, design, materials, labour, time, budget, production</li> <li>2. Demonstrate understanding of, and coordination with, other engineering and professional disciplines</li> </ol>
1.3	Analyze technical risks and offer solutions to mitigate the risks.	<ol style="list-style-type: none"> <li>1. Demonstrate familiarity with system protection and/or damage/hazard mitigation objectives, philosophies, practices, procedures, and functions</li> <li>2. Identify risk areas including causes of risks and their impacts</li> <li>3. Develop risk management/mitigation plans</li> <li>4. Demonstrate an understanding of the difference between technical risk and public safety issues</li> </ol>
1.4	Apply engineering knowledge to design solutions.	<ol style="list-style-type: none"> <li>1. Prepare technical specifications</li> <li>2. Demonstrate use of theory and calculations to arrive at solutions</li> <li>3. Demonstrate the development of a unique design solution which could not be accomplished with a standard design solution</li> </ol>
1.5	Be able to understand solution techniques and independently verify the results.	<ol style="list-style-type: none"> <li>1. Demonstrate an understanding of the engineering principles used in the application of computer design programs and show/describe how the results were verified as correct</li> <li>2. Participate in an independent review and verification of solution techniques or analysis methods</li> </ol>

1.6	Demonstrate your knowledge and awareness of regulations, codes and standards pertaining to safety used in Canada, or the international standard equivalence.	<ol style="list-style-type: none"> <li>1. Identify, incorporate, and/or participate in review of safety considerations, safety procedures and safety equipment as they apply to system operations and/or maintenance programs</li> <li>2. Review and incorporate safety or system operating procedures</li> <li>3. Demonstrate specific knowledge of safety regulations</li> <li>4. Incorporate explicit human and public safety considerations in design and all other professional activities.</li> <li>5. Understand and account for safety risks associated with processes</li> <li>6. Identify relevant protection equipment and process modifications to mitigate safety risks</li> </ol>
1.7	Demonstrate understanding of systems as well as of components of systems.	<ol style="list-style-type: none"> <li>7. Demonstrate an understanding of each element in a process</li> <li>8. Demonstrate an understanding of the interactions and constraints in the behaviour of the overall system</li> <li>9. Manage processes within the overall system (monitor and, where needed, modify processes to achieve optimum outcomes)</li> </ol>
1.8	Exposure to all stages of the process/project life cycle from concept and feasibility analysis through implementation.	<ol style="list-style-type: none"> <li>1. Demonstrate awareness of project concerns and roles of other stakeholders in the project stages: <ul style="list-style-type: none"> <li>• Identification: generation of the initial project idea and preliminary design</li> <li>• Preparation: detailed design of the project addressing technical and operational aspects</li> <li>• Appraisal: analysis of the project from technical, financial, economic, social, institutional and environmental perspectives</li> <li>• Preparation of specifications and tender documents: preparation of tender document, inviting and opening of tenders, pre-qualification, evaluation of bids and award of work</li> <li>• Implementation and monitoring: implementation of project activities, with ongoing checks on progress and feedback</li> <li>• Evaluation: periodic review of project with feedback for next project cycle</li> </ul> </li> </ol>
1.9	Demonstrate your understanding of the role of peer review and quality management that is essential to engineering practice in Canada.	<ol style="list-style-type: none"> <li>1. Conduct checks, including field checks, to verify the validity of design</li> <li>2. Follow Quality Management principles in practice, which may include Quality Management Guidelines, Guidelines on Authentication of Documents, Use of the Seal, Reviewing Work Prepared by Others and other related practice guidelines provided by their provincial/territorial regulator</li> <li>3. Prepare quality control plans, including frequency and test parameters, for specific processes or products</li> <li>4. Evaluate test results, determine adequacy, and develop recommended action</li> <li>5. Demonstrate peer review</li> <li>6. Demonstrate that completed project, systems or sub-systems meet project objectives in terms of functionality and operational performance</li> </ol>

## APPENDIX B—COMPETENCIES, CONTINUED

1.10	Transfer design intentions to drawings and sketches; Understand transmittal of design information to design documents.	<ol style="list-style-type: none"> <li>1. Review designs of others and communicate findings and issues, including suggested alternatives</li> <li>2. Demonstrate communication of ideas and concepts to project team members</li> <li>3. Demonstrate understanding of the value of project completion reports and lessons learned reports to application in future projects by self or others</li> <li>4. Produce sketches, notes, documentation and design documents to prepare proposals; and preliminary, and final design drawings for acceptance by the client and approval by regulatory authorities</li> </ol>
<b>CATEGORY 2—COMMUNICATION</b>		<b>INDICATORS</b>
2.1	Demonstrate effective verbal communication with team members, clients, contractors and members of the public.	<ol style="list-style-type: none"> <li>1. Communicate in a simple and concise manner</li> <li>2. Communicate official project data with team members, clients and contractors</li> <li>3. Ability to express both technical and non-technical issues and ideas clearly to both technical and non-technical personnel</li> <li>4. Conduct presentations to technical and non-technical groups; presentations to superiors and subordinates; internal (colleagues) and external (clients) presentations</li> <li>5. Present project parameters to the public</li> <li>6. Demonstrate active participation in and contribution to meetings</li> </ol>
2.2	Demonstrate your ability to communicate effectively in writing with team members, clients, contractors and members of the public.	<ol style="list-style-type: none"> <li>1. Tailor communications to the intended audience</li> <li>2. Ability to write and review technical documents</li> <li>3. Ability to write clear memos and reports to both technical and non-technical personnel</li> <li>4. Utilize drawings and sketches to demonstrate key points and concepts</li> <li>5. Demonstrate a written report on a technical subject</li> <li>6. Demonstrate a written report on field observations</li> <li>7. Take training in technical report writing</li> <li>8. Work with common office programs (e.g., Excel, Word, Outlook, internet browsers)</li> </ol>
2.3	Demonstrate your ability to effectively review key documents	<ol style="list-style-type: none"> <li>1. The ability to review technical documents, to understand the implications and to summarize key points.</li> </ol>

	<b>CATEGORY 3–PROJECT AND FINANCIAL MANAGEMENT (5 competencies)</b>	<b>INDICATORS</b>
<b>3.1</b>	Awareness of project management principles.	<ol style="list-style-type: none"> <li>1. Awareness of resource planning, budgeting, change management, scope management, schedule and unforeseen issues in managing a project from start to end</li> <li>2. Understand the impacts, benefits and risks that various design solutions have on a project</li> <li>3. Understand the needs and expectations of internal and external clients</li> </ol>
<b>3.2</b>	Demonstrate increasing levels of responsibility for project planning and implementation.	<ol style="list-style-type: none"> <li>1. Follow and contribute to development of project management plans</li> <li>2. Be aware of future improvements and demands as well as other ongoing projects</li> <li>3. Demonstrate increasing responsibility for client contact and management</li> <li>4. Demonstrate how project planning activities and interaction with others has increased over the training period</li> <li>5. Participate in managing and adapting a schedule</li> <li>6. Demonstrate awareness of issues related to other disciplines that might affect the project, maintaining contact and communication to discuss and resolve issues</li> </ol>
<b>3.3</b>	Manage expectations in light of available resources.	<ol style="list-style-type: none"> <li>1. Update schedule and budget on regular basis and communicate status</li> <li>2. Provide market assessment and availability of materials for a project</li> <li>3. Meet deadlines</li> </ol>
<b>3.4</b>	Understand the financial aspects of their work.	<ol style="list-style-type: none"> <li>1. Demonstrate cognizance of project budget during design and construction</li> <li>2. Provide technical/financial report and compare the options</li> <li>3. Demonstrate an understanding of the place of finance in business decisions</li> <li>4. Understand principles of budgeting and financing</li> <li>5. Understand the relevant business processes</li> <li>6. Demonstrate an understanding of working with and developing contracts</li> </ol>
<b>3.5</b>	Ask for and demonstrate response to feedback.	<ol style="list-style-type: none"> <li>1. Demonstrate implementation of lessons learned, and performance reviewed, in meetings</li> <li>2. Show willingness to accept comments and criticism</li> <li>3. Identify situations where you received feedback and how you responded to that feedback</li> <li>4. Demonstrate appreciation of the scope of a project and an appropriate response when a project varies beyond the scope</li> </ol>



## APPENDIX B—COMPETENCIES, CONTINUED

	<b>CATEGORY 4—TEAM EFFECTIVENESS (2 competencies)</b>	<b>INDICATORS</b>
<b>4.1</b>	Work respectfully and with other disciplines/people.	<ol style="list-style-type: none"> <li>1. Demonstrate respect for others' responsibilities and expertise</li> <li>2. Integrate engineering with other professional input</li> <li>3. Participate actively in team discussions</li> </ol>
<b>4.2</b>	Work to resolve differences.	<ol style="list-style-type: none"> <li>1. Demonstrate leadership in achieving team goals and resolving conflict</li> <li>2. Work to facilitate beneficial conflict resolution</li> <li>3. Exposure to training in conflict resolution</li> </ol>
	<b>CATEGORY 5—COMMUNICATION (3 professional accountability, 6 competencies)</b>	<b>INDICATORS</b>
<b>5.1</b>	Demonstrate your ability to apply principles of the Code of Ethics, or the equivalent international standard equivalence, within the engineering environment.	<ol style="list-style-type: none"> <li>1. Comply with the Code of Ethics in your jurisdiction of practice</li> <li>2. Fulfill professional obligations to employers, clients, peers and the profession while applying professional ethics in meeting corporate directives</li> <li>3. Understand the concept of self-governance, and the privileges granted to professional engineers and their obligations</li> <li>4. Work within the engineering legislation in the jurisdiction of practice</li> <li>5. Demonstrate the use of practice guidelines in relation to self-regulation and professional practice</li> </ol>
<b>5.2</b>	Demonstrate an awareness of your own scope of practice and limitations.	<ol style="list-style-type: none"> <li>1. Ask for help and incorporate input</li> <li>2. Demonstrate interaction with your supervisor</li> <li>3. Ask questions when needed</li> </ol>
<b>5.3</b>	Understand how conflict of interest affects your practice.	<ol style="list-style-type: none"> <li>1. Understand how conflict of interest affects your practice</li> </ol>
<b>5.4</b>	Demonstrate awareness of professional accountability.	<ol style="list-style-type: none"> <li>1. Awareness of the potential professional liability involved in all aspects of the design, construction and inspection process</li> </ol>
<b>5.5</b>	Demonstrate an understanding of appropriate use of the stamp and seal.	<ol style="list-style-type: none"> <li>1. Please note that understanding and awareness is what is required for this key competency</li> </ol>
<b>5.6</b>	Understand own strengths/weaknesses and know how they apply to one's position.	<ol style="list-style-type: none"> <li>1. Prepare a self criticism list and the ways to mitigate or eliminate weaknesses</li> </ol>



	<b>CATEGORY 6–SOCIAL, ECONOMIC, ENVIRONMENTAL AND SUSTAINABILITY (5 competencies)</b>	<b>INDICATORS</b>
<b>6.1</b>	Demonstrate an understanding of the safeguards required to protect the public and the methods of mitigating adverse impacts.	<ol style="list-style-type: none"> <li>1. Prepare public safety regulations and advice during design and implementation of a project</li> <li>2. Understand potential effects of climate change</li> </ol>
<b>6.2</b>	Demonstrate your understanding of the relationship between the engineering activity and the public.	<ol style="list-style-type: none"> <li>1. Recognize the value and benefits of the engineering work to the public</li> <li>2. Prepare a report regarding the impact of a project to public</li> </ol>
<b>6.3</b>	Understand the role of regulatory bodies on the practice of engineering.	<ol style="list-style-type: none"> <li>1. Recognize the importance of respecting the regional traditions and native regulations towards a project</li> <li>2. Understand the role and regulations of other professions whose practices overlap or interface with the practice of professional engineering</li> </ol>
<b>6.4</b>	Be aware of any specific sustainability clauses that have been added to practice guidelines that apply to their area.	<ol style="list-style-type: none"> <li>1. Be aware of any specific sustainability clauses that have been added to practice guidelines that apply to their area</li> </ol>
<b>6.5</b>	To the extent possible, recognizing the candidate's position of influence, consider how sustainability principles could be applied and promoted in their specific work.	<ol style="list-style-type: none"> <li>1. Include sustainability analysis in project descriptions</li> <li>2. Provide a list of revisions made during design and implementation period of the project</li> </ol>
	<b>CATEGORY 7–PERSONAL CONTINUING PROFESSIONAL DEVELOPMENT (3 competencies)</b>	<b>INDICATORS</b>
<b>7.1</b>	Demonstrate completion of professional development activities.	<ol style="list-style-type: none"> <li>1. Participation in community, technical, industry and/or professional association committees and task forces</li> <li>2. Engagement in a variety of self-directed and formal professional development activities to learn and maintain currency in field of practice and report progress to applicable parties</li> </ol>
<b>7.2</b>	Demonstrate awareness of gaps in knowledge and areas requiring future development.	<ol style="list-style-type: none"> <li>1. Gap analysis of knowledge and skills; highlight the gaps that exist</li> <li>2. Identification of areas of weakness where additional training is needed</li> </ol>
<b>7.3</b>	Develop a professional development plan to address gaps in knowledge and maintain currency in field of practice.	<ol style="list-style-type: none"> <li>1. Plan to pursue training in areas of weakness and remedy gaps in knowledge</li> <li>2. Planned activities may include a variety of self-directed and formal professional development activities to learn and maintain currency in field of practice</li> </ol>

## APPENDIX C—COMPETENCY RATING SCALE

COMPETENCE LEVEL	CANADIAN ENVIRONMENT COMPETENCIES (1.1, 1.6, 1.9, 2.3, 5.1, 6.2)	COMPETENCE CATEGORY		
		1	2 - 6	7
<b>0</b>	Has no experience with the competency	Has little or no exposure to the competency		<ul style="list-style-type: none"> <li>• Has completed no continuing professional development</li> <li>• Has not completed a gap analysis to determine areas of weakness</li> <li>• Has demonstrated no plan for future professional development</li> </ul>
<b>1</b>	Demonstrates some awareness of the competency through work experience	<ul style="list-style-type: none"> <li>• Receives training in the various phases of office, plant, field or laboratory engineering</li> <li>• Tasks assigned may include preparation of simple plans, designs, plots, calculations, costs or bills of material in accordance with established codes, standards, drawings, etc.</li> <li>• May carry out routine technical surveys or inspections and prepare reports</li> <li>• Has no supervisory role</li> </ul>	<ul style="list-style-type: none"> <li>• Receives training in on-the-job assignments</li> <li>• Is at an early/beginner level</li> <li>• Carries out activities of low complexity</li> <li>• Has no supervisory role</li> <li>• Is at a basic level in this area; competency needs substantial development</li> </ul>	<ul style="list-style-type: none"> <li>• Has completed little continuing professional development activities</li> <li>• Gap analysis and assessment of areas of weakness incomplete</li> <li>• Has developed an inadequate or no professional development plan; many gaps in knowledge are not sufficiently addressed</li> </ul>
	Direct supervision required = Significant	Direct supervision required = Significant Responsibility and Risk = Minimal Complexity of Candidate's own work = Minimal		

<p><b>2</b></p>	<p>Demonstrates awareness of the competency and has minimal practical experience with the competency (either in Canada or another jurisdiction)</p>	<ul style="list-style-type: none"> <li>• Receives tasks of limited scope and complexity; minor phases of broader projects</li> <li>• Uses standard engineering methods and techniques in solving problems</li> <li>• Assists senior engineers with technical tasks requiring accuracy in calculations, completeness of data, and adherence to prescribed testing, analysis and or design</li> <li>• May assign and check work of approximately one to five non-engineering staff</li> <li>• Normally regarded as a continuing portion of an engineer's training and development</li> </ul>	<ul style="list-style-type: none"> <li>• Carries out activities of limited scope and complexity</li> <li>• Usually relies on predetermined standards and techniques in solving problems.</li> <li>• Assists more senior engineers in carrying out tasks</li> <li>• Normally regarded as a continuing portion of an engineer's training and development</li> <li>• Marginal skills; requires training to bring skills to a professional level</li> </ul>	<ul style="list-style-type: none"> <li>• Has completed some continuing professional development activities</li> <li>• Gap analysis is marginal; insufficient assessment of areas of weakness</li> <li>• Has developed a marginal professional development plan; not all key gaps in knowledge are addressed</li> </ul>
<p>Direct supervision required = Considerable</p>		<p>Direct supervision required = Considerable Responsibility and Risk = Some Complexity of Candidate's own work = Some</p>		
<p><b>3</b></p>	<p>Has moderate experience with the competency while working under supervision (either in Canada or another jurisdiction)</p>	<ul style="list-style-type: none"> <li>• Receives tasks of moderate scope and complexity; standalone phases of major projects</li> <li>• Usually solves problems by using combinations of standard procedures, modifications of standard procedures, or methods developed in previous assignments.</li> <li>• May assign and check work of approximately one to five non-engineering staff</li> <li>• Is typically seen to be ready to assume professional engineering responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>• Carries out activities of moderate scope and complexity</li> <li>• Provides significant assistance to more senior engineers in carrying out tasks</li> <li>• Usually solves problems by using combinations of standard procedures, modifications of standard procedures, or methods developed in previous assignments.</li> <li>• Possesses adequate skills in this competency</li> <li>• Is typically seen to be ready to assume professional engineering responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>• Has completed sufficient continuing professional development activities</li> <li>• Gap analysis is adequate; areas of weakness are adequately assessed</li> <li>• Has developed an adequate professional development plan; gaps in knowledge are addressed</li> </ul>
<p>Direct supervision required = Some</p>		<p>Direct supervision required = Some Responsibility and Risk = Considerable Complexity of Candidate's own work = Moderate</p>		

COMPETENCE LEVEL	CANADIAN ENVIRONMENT COMPETENCIES (1.1, 1.6, 1.9, 2.3, 5.1, 6.2)	COMPETENCE CATEGORY		
		1	2 - 6	7
4	Has advanced knowledge of the competency and can carry out complex activities with minimal supervision	<ul style="list-style-type: none"> <li>Carries out responsible and varied assignments requiring general familiarity with a broad field of engineering and knowledge of reciprocal effects of the work upon other fields.</li> <li>Solves problems by using a combination of standard procedures and devising new approaches</li> <li>Deals with assigned problems by devising new approaches, applying existing criteria in new ways, and drawing conclusions from comparative situations</li> <li>Participates in planning to achieve prescribed objectives</li> <li>May give technical guidance to junior engineers, technologists and technicians</li> <li>Is typically seen to be working at a fully qualified professional engineering level</li> </ul>	<ul style="list-style-type: none"> <li>Carries out responsible and varied activities</li> <li>Deals with assigned problems by devising new approaches, applying existing criteria in new ways, and drawing conclusions from comparative situations</li> <li>Participates in planning to achieve prescribed objectives</li> <li>May provide guidance to junior engineers, technologists and technicians</li> <li>Possesses strong skills in this competency; above-average ability is apparent</li> <li>Is typically seen to be working at a fully qualified professional engineering level</li> </ul>	<ul style="list-style-type: none"> <li>Has completed a good amount of continuing professional development activities</li> <li>Gap analysis is strong; areas of weakness are correctly assessed</li> <li>Has developed a strong professional development plan; gaps in knowledge are well addressed</li> </ul>
	Direct supervision required = Minimal	Direct supervision required = Minimal Responsibility and Risk = Significant Complexity of Candidate's own work = Considerable		

<p><b>5</b></p>	<p>Demonstrates ability to carry out activities of the competency with advanced skills and complexity, with no supervision</p>	<ul style="list-style-type: none"> <li>• Applies mature engineering knowledge in planning and conducting projects having scope for independent accomplishment, and coordination of difficult and responsible assignments.</li> <li>• Deals with assigned problems in a mature, creative and experienced manner by modifying established guides, devising new approaches, applying existing criteria in new ways, and drawing conclusions from comparative situations</li> <li>• Participates in short- and long-range planning</li> <li>• Makes independent decisions for devising practical and economical solutions</li> <li>• Assigns and outlines work; advises on more difficult problems and methods of approach</li> </ul>	<ul style="list-style-type: none"> <li>• Carries out activities of advanced scope and complexity</li> <li>• Independently coordinates difficult and responsible assignments and activities.</li> <li>• Deals with problems or issues in a mature, creative and experienced manner by modifying established guides, devising new approaches, applying existing criteria in new ways, and/or drawing conclusions from comparative situations</li> <li>• Participates in short- and long-range planning</li> <li>• Makes independent decisions for devising practical and economical solutions to problems</li> <li>• Possesses superior skills in this competency; provides mentorship or supervision</li> </ul>	<ul style="list-style-type: none"> <li>• Provides and demonstrates leadership in continuing professional development activities</li> <li>• Gap analysis is excellent; areas of weakness are very well assessed</li> <li>• Has developed a superior professional development plan to address all gaps in knowledge and maintain currency in field of practice</li> <li>• Develops professional development plans with others and may instruct courses as appropriate</li> </ul>
<p>Direct supervision required = Autonomous</p>		<p>Direct supervision required = Autonomous Responsibility and Risk = Total Complexity of Candidate's own work = Significant</p>		

## APPENDIX D–CANADIAN ENVIRONMENT COMPETENCIES

CANADIAN ENVIRONMENT COMPETENCY	INDICATOR	MIN. RATING LEVEL PER CANADIAN COMPETENCY
<b>CATEGORY 1–TECHNICAL COMPETENCIES (MINIMUM CATEGORY LEVEL REQUIRED = 3)</b>		
<b>COMPETENCY 1.1</b>	Demonstrate knowledge of regulations, codes, standards, and safety - this includes local engineering procedures and practices as applicable	3
<b>COMPETENCY 1.6</b>	Safety awareness: be aware of safety risks inherent in the design; demonstrate safety awareness – on-site and possible safety authorization/certificate as appropriate	3
<b>COMPETENCY 1.9</b>	Understand the concept of quality control during design and construction including independent design check and independent reviews of design, field checks and reviews	3
<b>CATEGORY 2–COMMUNICATION COMPETENCIES (MINIMUM CATEGORY LEVEL REQUIRED = 3)</b>		
<b>COMPETENCY 2.3</b>	Reading and Comprehension	3
<b>CATEGORY 5–PROFESSIONAL ACCOUNTABILITY (MINIMUM CATEGORY LEVEL REQUIRED = 3)</b>		
<b>COMPETENCY 5.1</b>	Work with integrity, ethically and within professional standards	3
<b>CATEGORY 6–SOCIAL, ECONOMIC, ENVIRONMENTAL AND SUSTAINABILITY (MINIMUM CATEGORY LEVEL REQUIRED = 2)</b>		
<b>COMPETENCY 6.2</b>	Demonstrate an understanding of the relationship between the engineering activity and the public	2