

ASSOCIATION OF PROFESSIONAL ENGINEERS OF ONTARIO

PROFESSIONAL PRACTICE EXAMINATION – August 10, 2013

PART “A” – Professional Practice and Ethics

You will be given a total of **90 minutes** to complete this examination.

Use the correct colour-coded Answer Book for each part, place in the correct envelope and **seal after completed**.

White Answer Book for Part A white question paper.

Coloured Answer Book for Part B coloured question paper.

This is a “**CLOSED BOOK**” examination. **No** aids are permitted other than the excerpts from the 1990 Ontario Regulation 941 covering sections 72 (*Professional Misconduct*) and 77 (*Code of Ethics*) supplied at the examination. Dictionaries are **not** permitted.

The marking of questions will be based not only on academic content, but also on legibility and the ability to express yourself clearly and correctly in the English language. If you have any doubt about the meaning of a question, please state clearly how you have interpreted the question.

All **four** questions constitute a complete paper for Part “A”. Each of the four questions is worth 25 marks.

WHERE A QUESTION ASKS IF A CERTAIN ACTION BY AN ENGINEER WAS ETHICAL OR NOT, A SIMPLE “YES” OR “NO” ANSWER IS NOT SUFFICIENT. YOU ARE EXPECTED TO COMMENT ON AND DISCUSS THE ACTION OF THE DIFFERENT INDIVIDUALS AND/OR ORGANIZATIONS INVOLVED IN EACH SITUATION AS IF YOU WERE PERSONALLY INVOLVED.

You should identify where applicable the appropriate clauses in Regulation 941. **SIMPLE REFERENCE TO THE APPROPRIATE CLAUSES WITHOUT A DISCUSSION OF HOW THE CLAUSE APPLIES IN THE SITUATION DESCRIBED IS NOT SUFFICIENT.**

Question 1

- (5) (a) What is the “Complaints Committee”? Describe its function.
- (5) (b) PEO issues Temporary licences. In addition to paying the necessary fee, the applicant must meet one of three other requirements to obtain such a licence. Please briefly give two of those requirements for obtaining this license.
- (5) (c) Where a licence, certificate of authorization, temporary licence, provisional licence or limited licence is revoked or cancelled what should the holder do with the certificate and seal?
- (5) (d) Which licence holders can hold a Certificate of Authorization?
- (5) (e) What are the consequences, if any, to a professional engineer who does not keep his or her licence permanently displayed in his or her place of business?

Question 2

Sigma is a licensed professional engineer charged with enhancing the efficiency of a liquid detergent production line for his employer, SoftSoap, a soap manufacturer. During his work he has access to confidential company information and observes that the company is adding very small quantities of a well-known carcinogen (i.e. a substance suspected of causing cancer) to the detergent but is not listing it as an ingredient. This confidential information is irrelevant to Sigma’s work. However, Sigma is aware that the additive is a banned substance.

The production process is handled by Tau, a P.Eng. in another department of SoftSoap. Sigma is reluctant to bring the matter to Tau since they have had some recent disagreements. Sigma has been receiving e-mails forwarded from Tau with jokes of a racially insensitive nature. More often than not, the jokes are aimed at Sigma’s race and are also sent to other members of Sigma’s department. Sigma, had become offended by these e-mails and decided to speak with Tau one-on-one last week to explain how the e-mails are affecting him. Sigma told Tau that not only are the e-mails offensive to him, but they are not appropriate for the work environment in general. Tau shrugged off Sigma’s concerns telling him that no harm was intended and they were only for a good laugh. Tau also said that “everybody else in your department enjoys them and nobody else ever gets offended”. This week Sigma received another e-mail forwarded from Tau with a series of jokes about Sigma’s race.

Using PEO’s Code of Ethics and Code of Professional Misconduct as your guide:

- (15) (a) Discuss what action(s) Sigma is obligated to take as a professional engineer?
- (10) (b) Discuss Tau’s actions and what should Sigma consider doing about them?

Question 3

You are a professional engineer and have been hired recently as the chief operations and maintenance engineer of a paper mill near a remote village in northern Ontario. The mill is the largest industry in the area and employs (directly or indirectly) most of the workers in the region.

Upon starting your new job, you review the facilities at the mill and its operation and maintenance procedures. You discover that your predecessor (also a professional engineer) had been operating the mill for several years with inadequate environmental equipment. The mill has been discharging hazardous substances into a nearby river contrary to legal limits. You also learn that government authorities are not aware of the illegal discharges.

You discuss the situation with the company's vice president in charge of Canadian operations. You report to the vice president that a number of environmental measures would be necessary in order to stop the illegal discharge. In your estimation, the measures would require a substantial capital investment in the plant. The vice president informs you that the mill has been earning very small profits in the last decade and that the capital expenditure could not be justified at this time. According to the vice president, the company's head office would likely close the mill rather than spend the money.

Using PEO's Code of Ethics and Code of Professional Misconduct as your guide:

- (10) (a) Discuss your obligations with respect to the public. What is the public interest in this case? How is the public interest impacted by your actions?
- (10) (b) Discuss your obligations with respect to the company.
- (5) (c) Discuss your obligations with respect to your predecessor.

Question 4

ProTestCo is a products testing company. Typically, ProTestCo is hired by various manufacturers to perform tests on their products in order to verify that the products are manufactured according to published standards.

You are a professional engineer and have been employed for several years on a full-time basis as an employee of ProTestCo. In your job, you are responsible for supervising the application of tests on various products. During your years of employment with ProTestCo you have acquired a great deal of expertise regarding the design and manufacture of small household appliances and have earned an excellent reputation.

Given your reputation and expertise, manufacturers of such appliances are often interested in hiring you on a private basis (i.e. outside of your employment with ProTestCo) to provide input on their product designs. You are able to supplement your income by occasionally undertaking such work for them. You perform this work on weekends and during evenings.

One day, while at work at ProTestCo, you are assigned the job of supervising the tests and issuing a report on a new product that has been submitted to ProTestCo. You realize that the product was submitted by one of your own manufacturing clients and that you provided design input on the product.

- (10) (a) Comment on the appropriateness of how you have set up your working arrangement.
- (10) (b) How should you deal with the testing of the new product?
- (5) (c) Is a P.Eng. licence sufficient to permit you to provide such design input to your own manufacturing clients? Explain.

Use PEO's Code of Ethics and Code of Professional Misconduct as your guide in your answer and identify any consequences to you.

ASSOCIATION OF PROFESSIONAL ENGINEERS OF ONTARIO

PROFESSIONAL PRACTICE EXAMINATION – August 10, 2013

PART “B” - Engineering Law and Professional Liability

This examination comes in two parts (**Part “A” and Part “B”**). Both parts must be completed in this sitting. You will be given a total of **180 minutes** to complete the examination. Use the correct colour-coded Answer Book for each part, place in the correct envelope and **seal after completed**.

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Front Page

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Front Page

- (25) 1. Briefly define, explain or answer any five of the following:
- i. Fraudulent misrepresentation
 - ii. The difference in dispute resolution through arbitration and through mediation
 - iii. Five examples of employment rights to which individuals are entitled under Ontario's Human Rights Code (list only)
 - iv. The discoverability concept as it relates to limitation periods
 - v. The New York Convention
 - vi. Dispute resolution board
 - vii. Secret Commission
 - viii. Common law

(25) 2.A long-established manufacturing company, XYZ Ltd., contemplating the possibility of a sale of some of its properties, retained an environmental consulting firm, E Inc., to prepare an environmental compliance audit.

The Vice-President of E Inc., a professional engineer, responsible for the performance of the environmental compliance audit, turned the matter over to one of E Inc.'s employees who had only recently become licensed as a professional engineer. However, on the basis of previous assignments, the Vice-President had been very impressed by the young engineer's abilities. The Vice-President was also aware that an extremely busy schedule would likely limit the amount of time he himself could spend on the environmental compliance audit and, accordingly, selected the younger employee engineer in the hope that the young engineer's involvement would decrease the Vice-President's supervisory time in connection with the audit.

The employee engineer carried out an environmental compliance audit with respect to each of the properties identified and E Inc. submitted its reports on each property. Included at the beginning of each report was the following qualifying statement:

"This report was prepared by E Inc. for the account of XYZ Ltd. The material in it reflects E Inc.'s best judgement in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on decisions to be made based on it, are the responsibility of such third parties. E Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report."

Some time later, XYZ Ltd. sold two of its properties to Acquisitions Inc. In negotiating the sale with Acquisitions Inc., E Inc.'s reports were shown to Acquisitions Inc., but Acquisitions Inc. had no dealings with E Inc. E Inc. had no knowledge of the sale to

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Acquisitions Inc. until approximately four years later when Acquisitions Inc. commenced a lawsuit against E Inc. Acquisitions Inc. claimed it had commenced the lawsuit in tort against E Inc. because it had encountered hazardous substances on one of the properties and had subsequently obtained the opinion of another environmental consulting firm who confirmed that the report in question by E Inc. contained negligent misstatements which, in the opinion of the second consulting firm, had resulted from E Inc.'s representatives having spent too little time investigating the property for hazardous substances. Acquisitions Inc. claimed in its lawsuit that E Inc. was aware that the report might be shown to prospective purchasers and, accordingly, E Inc. should be responsible for damages arising as a result of reliance by Acquisitions Inc. on the negligent misstatements in E Inc.'s report.

What potential liabilities in tort law arise in this case? In your answer, explain what principles of tort law are relevant and how each applies to the case. Indicate a likely outcome to the matter. In your answer indicate if your conclusion would differ if the reports by E Inc. had not contained the qualifying statement identified above and, if your conclusion would differ, explain why.

(25) 3. An Ontario municipality (the "Owner") decided to update and expand its water treatment facilities. To do so, the Owner invited competitive tenders from contractors for the construction of the new water treatment facility.

The Owner's consultant on the project, a professional engineer, designed the facility and prepared the Tender Documents to be given to contractors interested in bidding on the project. Each of the bidders was required to be prequalified and approved by the Owner for participation in the bidding. The Tender Documents included the Plans and Specifications, the Tendering Instructions which described the tendering procedure and other requirements to be followed by the bidders, the Tender Form to be completed by the bidders, the form of written Contract that the successful contractor would be required to sign after being awarded the contract, and a number of other documents.

According to the Tendering Instructions, each tender bid as submitted was to remain "firm and irrevocable and open for acceptance by the Owner for a period of 60 days following the last day for submitting tenders". The Tendering Instructions also provided that all bids were to be submitted in accordance with the instructions in the Owner's Tender Documents and that the Owner was not obligated to accept the lowest or any tender.

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Tenders were submitted by five bidders. All bids were submitted in accordance with the Owner's Tender Documents. The lowest bid was well within the Owner's budget.

Within the 60 days specified and before the Owner's consultant had made a recommendation to the Owner as to whom the contract should be awarded, the consultant was called to a meeting with a prominent member of the Municipal Council who noted that the lowest bidder was not one of the bidders who were "local bidders" from within the Municipality. The Councillor expressed a very strong view that the contract should in fact be awarded to a local bidder. The Councillor also noted that if one item that had been included in the specifications was deleted from the bids the result would be that the bid of the lowest "local contractor" would become the lowest bid overall and the Councillor's preference for awarding the contract to a "local contractor" could be satisfied.

There had been no reference in the Tendering Instructions to any preference being shown to local contractors.

How should the consultant deal with the political pressure being applied by the Council member?

If the contract is awarded to the lowest local bidder what potential liabilities in contract law may arise? If the consultant engineer recommends to the Owner that the contract be awarded as the Councillor suggests what liabilities may arise for the engineer? Please provide your reasons and analysis.

(25) 4. An information technology firm submitted a bid to design software and hardware for an electronic technology process to control the operation of a large scale baggage handling and related security facility for a major airline.

The firm's fixed guaranteed maximum price was the lowest bid and the contract was awarded to it. The contract conditions entitled the information technology firm to terminate the contract if the airline did not pay monthly progress payments within 15 days following certification that a progress payment was due. Pursuant to the contract, an independent engineering firm engaged as contract administrator carried out the certification. The work under the contract was to be performed over an 8 month period. After commencing work on the project, the information technology firm determined that it had made significant judgment errors in arriving at its bid price and that it would face a major loss on the project. Its concern about the anticipated loss increased further when it also learned that, in comparison with the other bidders, its bid price was extremely low and that, in winning the bid, by comparison with the other bidders, it had left more than two million dollars "on the table".

Three monthly progress payments were certified as due by the independent engineering firm and paid by the airline in accordance with the terms of the contract.

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However, after the fourth monthly progress payment was certified as due by the independent engineering firm, the airline's finance department asked the information technology firm's representative on the project for additional information relating to an invoice from a subcontractor to the information technology firm. The subcontractor's invoice comprised a portion of the fourth progress payment amount. The airline's finance department requested that the additional information be provided prior to payment of the fourth progress payment.

There was nothing in the signed contract between the information technology firm and the airline that obligated the information technology firm to provide the additional information on the invoice from its subcontractor. However, the information technology firm's representative did verbally indicate to the airline's finance department that the additional information would be provided.

The information technology firm never provided the additional information relating to the subcontractor's invoice.

Sixteen days after the fourth progress payment had been certified for payment, the information technology firm notified the airline in writing that it was terminating the contract because the airline was in default of its obligations to make payments within fifteen days pursuant to the express wording of the contract.

Was the information technology firm entitled to terminate the contract in these circumstances? In giving reasons for your answer, identify and explain the relevant legal principle, its purpose, how it arises, and how it would apply to the facts.

Professional Practice Examination -- Study Guide -- Part "A" -- August 10th, 2013

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The purpose of Part "A" is to examine a candidate's knowledge of PEO functions (question 1), and the Misconduct and Ethics Codes (questions 2, 3 & 4) as found in Regulation 941, sections 72. and 77.

These 2 code sections will be supplied at the examination but they should be carefully studied before the exam. Advance study will facilitate recognition of situations in the questions which may be matched to the codes, and the notating of exact code numbers and their sub-sections within the answers.

Answers should be given within about 20 minutes each. During study time, try practice writing, review and re-writing, to develop a timing skill. Also try answering without aids, even using the same questions.

This Study Guide may contain more material than would be expected in an answer within 20 minutes.

The references given below are from the PE Act, or Regulation 941 (R 941). These references are here for study purposes only, and are not anticipated in an answer, except for 72. and 77.

1(a) Complaints Committee, function - to review complaints about a PEng's professional practice and to determine if an issue can be resolved, or if it needs to go to the Discipline Committee, PE Act sect 24.(2)

1(b) Temporary License, requirements - 1) residence outside Ontario 2) qualifications equal to Ontario 3) 10 years experience 4) collaboration with an Ontario PEng unless exempt, Reg 941 sect's 43. & 44.

1(c) Certificate and seal, when license ceases - should be returned to PEO, Reg 941 sections 54. & 55.

1(d) Certificate of Authorization (C of A), can be held only by - PEng's and Temporary Licence holders, and not by any other licence holders, Reg 941 section 47.1. and PE Act section 40.(2).

Note: Limited Licences are proposed to be added, but not for this exam, see PE Act sections 15. & 17.

1(e) License not displayed, consequences - none. Endeavouring to display is in Code of Ethics section 77.2.iv., but a breach of ethics is not misconduct, section 72.(2)(g).

2(a) Sigma's obligations -

1) Out of loyalty to SoftSoap as employer, 77.1.i., Sigma should confer with management to consider the consequences of adding a carcinogen to the liquid detergent, 72.(2)(f), and the need to follow legal codes and rules for banned substances, 72.(2)(d), and to provide for the health of the public, 72.(2)(b).

2) If no agreement is reached, Sigma should report the situation to public health authorities, 72.(2)(c).

3) Although Sigma is obligated to regard an employer's information as confidential, 77.3., a report must be made, because public welfare is paramount, 77.2.i., and also to show fidelity to public needs, 77.1.ii.

2(b) Tau's actions - making racial jokes constitutes harassment, 72.(1), and violates 72.(2)(n). It is not showing courtesy and good faith towards another practitioner, 77.7.i. Neither is it fair to send the jokes to other members of Sigma's department, 77.1.i. Tau's conduct is disgraceful and unprofessional, 72.(2)(j).

Sigma did the right thing by first speaking with Tau, not just trying to maliciously injure Tau's reputation, e.g., with other jokes in return, 77.7.iii. But Tau acted incorrectly again and sent another racist email.

Sigma should review Tau's behavior with management and ask for a transfer, or consider resigning. Sigma could also complain against Tau, to PEO and to the Ontario Human Rights Commission, 77.8.

continued 2

3(a) My obligations to the public - the public interest is to reduce the illegal discharges into the river so that these are within legal limits, 72.(2)(d), and thereby to safeguard the health of the people who are being affected, 72.(2)(b). The public interest is also to maintain employment in the region. I should be sensitive to this interest and act where possible to show fidelity to public needs, 77.1.ii.

If my actions can control the illegal discharges this will impact the public interest positively and thereby fulfil my duty to regard the public welfare as paramount, 77.2.i. If the operation can be saved, this will contribute significantly to safety in the community and to the overall welfare of the workers in the company, 72.(2)(c). I will also have acted with devotion to high ideals, 77.1.iii.

My estimation of the substantial investment required, should be reviewed with specialists in the field, to see if a way could be found at less cost to control the discharges. I would also suggest trying to find investors willing to help upgrade equipment. The object is always to be faithful to public needs, 77.1.ii.

3(b) My obligations to the company - I have taken a correct first step in being loyal to my employer, by conferring with the vice-president, 77.1.i. Although I have an obligation to keep company information confidential, 77.3, I have a greater obligation to regard public welfare as paramount, 77.2.i.

I should report the discharges to the government authorities, 72.(2)(c), and ask for a temporary stay of legal charges, for failing to comply with applicable regulations, until the matter can be resolved, 72.(2)(d).

3(c) My obligations to my predecessor - to inform that PEng, that the negligence while operating the paper mill has been discovered, and to give that person a fair opportunity to respond, 77.1.i. and 77.7.i. Although I do not wish to injure the reputation of another practitioner, 77.7.iii., I will further advise if the response is not favourable, I intend to expose the behavior before the proper tribunals, 77.8., and to proceed with a charge of unprofessional conduct, for the time of employment at the mill, 72.(2)(j).

If I do not take the actions in 3(a), 3(b) and 3(c), I could be charged with negligence, 72.(2)(a).

4(a) Working arrangement, weekends and evenings (W & E) - this is 'moonlighting'. I should -

- 1) satisfy myself the outside work will not interfere with my employment at ProTestCo
- 2) confer with my daytime employer to ensure there is no objection
- 3) give a written document to the W & E employer about my status as a daytime employee
- 4) give a written document to the W & E employer about limitations on my outside work, 77.5.
- 5) recognize if I do not do these things, it is a breach of ethics but is not subject to discipline, 72.(2)(g).

4(b) New Product, how to test - I should decline this assignment because of a conflict of interest, which could be construed as prejudicial to my judgment as an employee of ProTestCo, 77.3. and 77.4. To decline would also be fairness and loyalty to the client, 77.1.(i).

Perhaps there is another employee at ProTestCo who could do it. As an option, my supervisor might oversee the full test with me involved, and be satisfied no conflict of interest has taken place, 72.(2)(i),

4(c) PEng Licence, is more needed? - a PEng licence by itself is not sufficient since the outside services are essentially being offered to the public. I should apply for and hold my own Certificate of Authorization (C of A), PE Act section 12.(2), otherwise I would breach the Act and be subject to misconduct, 72.(2)(g). Alternatively, an outside employer may have a C of A and I might perform services under that C of A as a contract employee. However, it would be better to have my own C of A.

Professional Practice Examination -- Study Guide -- Part "B" -- August 10th, 2013

ppeStdyGdeB2013Aug10

The purpose of Part "B" is to examine a knowledge of elementary law as it may apply to an engineer's work experience. Question 1. is definitions with 8 options but answer only 5.

Questions 2., 3. and 4. are case studies. Each answer should include the names of relevant legal terms and principles, and how each term or principle applies to one or more elements of the case.

This Study Guide may contain more material than could be given in an answer within 20 minutes.

Page numbers as given below are for the Marston text, 4th edition. Page references are for study purposes only, and are not anticipated in an answer. Case precedent examples can benefit an answer.

Note: answer only 5 of the 8 options given here.

1.(i) Fraudulent misrepresentation - is a deceptive statement made by a party -

1) knowingly, or 2) without belief in its truth, or 3) careless of whether it is true or false.

The deceived party may rescind the contract, claim compensation for costs and sue for deceit, page 109.

1.(ii) Dispute resolution - one way is mediation, to resolve a dispute through voluntary negotiation.

Another way is arbitration, where a dispute is resolved by one arbitrator, or board or panel, and where the determination will bind both parties. The difference is arbitration will be binding, pages 30 and 239.

1.(iii) Equal entitlement - means employment without discrimination because of (list only 5 of 15 here) race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, age, marital status, family status, record of offences, handicap, and without sexual harassment, page 322.

1.(iv) Discoverability concept - relating to a time limitation period within which any claims against an engineer or contractor must be filed. The basic limitation period is 2 years from when a defect is discovered or ought reasonably to have been discovered. The ultimate limitation period is 15 years from when work was completed, e.g., when a building was built. If a defect were discovered in the 14th year, filing for action is needed within 1 year. An action not filed within these periods will be 'statute barred'. Parties to business agreements may specify periods that are different from the above, pages 71 - 73.

1.(v) New York Convention - an agreement signed by over 135 nations including Canada, that in case of a dispute, a court of each nation would enforce an arbitration award made in another signing nation. The agreement was made in 1958 in New York under the auspices of the United Nations, to minimize the costs of foreign litigation. Foreign work contracts should only be with signing nations, page 30.

1.(vi) Dispute resolution board (DRB) - a panel to recommend solutions to disputes as these arise and thereby avoid the expense of litigation. A DRB is formed by the contracting parties before work begins. A panel of 3 neutral individuals is selected, who have expertise in the applicable industry, page 31.

1.(vii) Secret Commission - something of value, offered as a bribe or kickback, to a party to a contract, to secretly defraud another party to the contract. The person offering the secret commission, or a party accepting the commission, is in violation of the Criminal Code of Canada, text pages 179 and 180.

1.(viii) Common law - law based on court decisions (precedents) which establish legal principles. It is judge-made or court law, as opposed to laws passed by legislatures or parliaments, pages 1, 2 and 3.

2. Tort, potential liabilities - a suit would be in tort because Acquisitions Inc. (Acq Inc) did not have a contract with E Inc. The purpose of tort law is to compensate an aggrieved party as far as money may relieve a loss. All three principles of tort law can be proven relevant here, and these are -

1) a duty of care

2) a breach of that duty and

3) damage or loss as a result of the breach, text page 32.

Tort principle 1) applies because Acq Inc expected a duty of care from E Inc, even without a contract. There had been contracts between XYZ Ltd and E Inc, and between XYZ Ltd and Acq Inc.

Tort principle 2) applies because hazardous substances were found by another environmental consulting firm, who gave 'expert testimony' as confirmation, thus a duty of care was breached.

Continued 2

Tort principle 3) applies because there was damage and extra expense needed to cover the losses.

Acq Inc may obtain damages from XYZ in contract, if the clauses cover this but if not completely, then in tort. If this were the case, XYZ would be sued in tort and in contract.

XYZ and E Inc would be concurrent tortfeasors. As professionals in this technology, E Inc should have taken more time to look for hazardous substances and to be aware of the potential for problems.

A primary area of negligence was the limited amount of time the Vice-president could spend on the audit. The recently licensed engineer could have asked more questions but in any case the employer is 'vicariously liable' for the actions of the employee, which assumes the employer has more ability to pay.

Because E Inc had a clear and valid qualifying statement in their reports, they have no liability. This is a principle established in the case of Hedley Byrne, and in Wolverine Tube vs. Noranda Metal, page 43.

A related tort case precedent is Unit Farm Concrete vs. Eckerlea Acres, page 46.

3. Contract tender changes, liabilities - the consultant PEng (CPE) should say 'sorry, no' to the prominent Council member (PCM). The Owner's Tender Documents (OTD) represent an agreement in the formation of a 'Contract A'. The Contract A concept is from the Ron Engineering case, page 121.

Any change in treatment of the OTD instructions or specifications, would be a breach of the Contract A.

Contract A is formed when each bidder submits a bid, and 5 Contract A's have been duly formed.

When the final contract is signed with a bidder, one 'Contract B' is formed.

If a signing were 'outside' the OTD with the lowest local bidder (LLB) then the other 4 bidders could sue the owner municipality (OM) for breach of their Contract A's. The potential liabilities could include bid expenses and lost profits. The total expenses to OM, could come in well over OM's budget.

If CPE does go along with PCM and recommends the award to the LLB, then CPE is open in turn to a suit by OM for breach of trust and damages. Furthermore, CPE is open to a charge of misconduct by Professional Engineers Ontario (PEO), Regulation 941, section 72.(2)(j).

An alternative is to reject all bids and issue a revised tender package without the 'limiting item', and also to clearly state that preference would be shown to local contractors. Then all previous bidders would be on a level playing field and could decide whether or not to bid. This has the possible exposure of reducing the number of bidders and the 'local contractor' could come in with a higher bid than before, especially if confidential information happens to be given to the local contractor through the PCM.

The PCM must have known well before the preparation of OTD, that water treatment facilities were to be updated and expanded. Representation to Council, and an agreement on preference to local bidders, should have been reached well before the preparation of the OTD.

4. Equitable estoppel - the information technology firm (ITF) was not entitled to terminate the contract. ITF was exposed to significant loss, and was trying to use the default of a 4th payment from the airline's finance department (AFD) within 15 days of certification, as an excuse to break the contract.

If ITF insists on the express wording of the contract, AFD could invoke the relevant legal principle or concept of "promissory" or "equitable estoppel", which is to ensure the result would be equitable.

A 'gratuitous promise' had been made by the ITF representative to AFD. The promise to AFD was, to be given additional information relating to an invoice from a subcontractor to ITF, before AFD would make the 4th progress payment. The contract was not amended, the promise was not in writing, and it was freely made. This makes the promise "gratuitous". AFD was clearly depending on the promise.

The contract stays in force and ITF takes the loss. Strict contractual rights are not followed because equitable estoppel is an 'exceptional remedy' to those rights. Any other result would be inequitable.

A similar case precedent is Conwest Exploration vs. Letain, page 92.

For the section references below, 'A' means Professional Engineers Act (PE Act), and 'R' means Ontario Regulation 941 (O. Reg. 941). Please refer to these sections for more comprehensive information.

Definition - practice of professional engineering - actions, principles, safeguards A 1. (13th item)

PEO - principal object - regulate the practice, to serve and protect the public interest A 2.(3)

- additional objects - knowledge, practice standards, ethics, public awareness, other A 2.(4)

PEO main functions - enforce requirements for licences and Certificates of Authorization (C of A)

under authority of the PE Act - penalties for offences are in A 40. A 12.(1), A 12.(2)

- issue licences and C of A's - a C of A is a permit to offer services A 14., A 15., A 18

- receive complaints re conduct or technical competency - discipline, if referred A 24., A 28

PEO organization and processes - Council, Committees - regulate the practice A 3., A 10., A 12., A40.

Requirements / conditions for -

- PEng licence - 18 years, academics, experience 48 mos 12 Cdn, PPE, good character A 14.(1), R 33

- Provisional licence - all of A 14.(1) except experience, valid 12 mos. A 14.(7), A 18.(1), R 44.1.(1)

- Temporary - specific work/client, PEng collaborator, 12 mos., qualifications A 18.(1), R 42., R 43., R 44.

- Limited licence (LL) - specific services, tech. diplm, 13 yrs exper, PPE, good char A 18.(1), R 45., R 46.

- Certificate of Authorization - PEng(s) responsible, 5 yrs after degree A 15., A 17., R 47., R48., R49

- Consulting Engineer - PEng, + 5 yrs, 2 yrs independent practice, 5 yrs valid R 56., R 57., R 59., R60.

- Liability insurance, conditions for a C of A - insurance limits / conditions R 47.3., R 74.

- Engineer's Seal - sign, date and seal documents - charges for misconduct R 53., R 72.(2)(e)

- Penalties for enforcement offences - when no licences or C of A's. A 40.(1), A 40.(2), A 40.(3)

- Complaints committee - consider and investigate, may act or otherwise refer A 24.(1), A 24. (2)

- Discipline committee - hear and determine allegations, impose penalties A 28.

- Fees Mediation committee - fee disputes; mediate, or arbitrate with consent A 32.

- Conflict of interest - must be disclosed, (5 conditions) if disclosed then not misconduct 72.(2)(i)

- Work other than employer - no conflict, status as employee, limits, inform employer R 77.5.

- Advertising - professional, factual, without criticism, without seal reference R 75.

- Code of 'misconduct', R72. - could lose licence but not for 'ethics', R 77. R 72.(2)(g)

- Competence - depends on judgment of individual practitioner, good character R 72.(2)(h), R 77.1.v.

For further information, please see Marston text, 4 th Edition, page(s) referenced here →	<u>Page</u>
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