Week 6- Module 6

Risk Avoidance and Insurance

Law, Ethics and Professional Practice - ENGI3500

WINTER 2025

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Introduction

- Risk avoidance and insurance play integral roles in mitigating potential liabilities for engineers. Risk avoidance involves identifying and eliminating or minimizing potential risks before they materialize. Engineers must proactively assess projects, identifying potential hazards or vulnerabilities, and implementing strategies to avoid or reduce those risks. Engineers often secure professional liability insurance to protect themselves and their businesses from legal claims arising from errors, omissions, or professional negligence.

Project Structuring to Mitigate Risk

- Engineering projects are structured to avoid risk through comprehensive risk management strategies. This involves a systematic identification, assessment, and mitigation of potential risks throughout the project lifecycle.
- Engineers conduct thorough risk assessments to identify potential hazards, uncertainties, and vulnerabilities associated with the project. They implement preventive measures and controls to minimize or eliminate these risks. Project planning includes contingency plans and alternative strategies to address unforeseen challenges.

Project Structuring to Mitigate Risk

- Collaboration with various stakeholders, including clients, regulatory bodies, and experts, helps ensure a holistic perspective on potential risks. Engineers also adhere to industry standards, codes, and best practices to enhance project safety and reliability.
- Continuous monitoring and adaptive management further allow for real-time risk evaluation and prompt adjustments as needed. This structured approach aims to create resilient engineering projects that can withstand uncertainties and challenges while delivering successful outcomes.

Risk Assessment

- Parties entering agreements often approach with enthusiasm, but effective risk identification requires a temporary shift to a pessimistic mindset during contract negotiations.
- Contract professionals, including architects, engineers, and geoscientists, must anticipate potential issues by asking specific questions related to project risks and losses, such as delays, technological challenges, and defaults.
- Logical solutions, such as specifying insurance coverage, implementing performance bonds, and incorporating bonus or liquidated damages provisions, can be developed by discussing and addressing identified risks during the planning stage, allowing for informed decisions on risk allocation among contracting parties or third parties.

Risk Association with Common Law

- Courts generally view professionals in contract disputes as sophisticated parties, presuming fair negotiation and binding acceptance of terms agreed upon.
- The law presumes that if a risk is identified in the contract, parties have addressed the issue, and courts are reluctant to substitute their own risk allocation for the parties' choice.
- While clients may believe professionals guarantee results, the law does not presume such guarantees. Professionals must act with the expected competence and care of their field, and contractual language should avoid positioning them as guarantors or sureties. Contractual terms may modify legal presumptions about standards and responsibilities, such construction contract clauses modifying liability for errors discovered during review.

Forms of Contract

- Standard-form contract documents by the Canadian Construction Documents Committee (CCDC) are widely used in the Canadian construction industry, involving perspectives from various industry participants.
- The CCDC contracts primarily involve the owner and contractor, with the engineer playing a significant role as a contract administrator, even though not a party to the contracts.
- While the CCDC standard-form contracts include comprehensive general conditions, tailoring may be necessary based on project circumstances, preferences of experienced owners, or alternative project structures, and careful review of contract terms is essential for risk assessment and potential pricing adjustments. Construction contracts often include provisions limiting liabilities in terms of time periods and monetary claims.

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Allocation and Transfer of Risk

- Fair and even-handed contractual risk allocation involves considering the reasonableness of the risk assumed by the party best positioned to assess and manage it.
- The chapter explores the allocation of specific risks between the traditional owner and contractor, using the CCDC 2 stipulated price contract form as a reference for illustration.
- Engineers are typically hired for their specific expertise and skills in a particular field. Transferring certain risks to other parties, such as contractors or insurers, allows engineers to focus on their core competencies and rely on specialists to manage specific types of risks.

Project Financing Risk

https://www.ccdc.org/documents/

GC 5.1 of the CCDC form is intended to provide information and comfort to the contractor with respect to the owner's ability to fund the project, and thereby reduce the contractor's risk in that regard, by providing:

- GC 5.1 FINANCING INFORMATION REQUIRED OF THE OWNER
  - 5.1.1 The Owner shall, at the request of the Contractor, before signing the Contract, and/or promptly from time to time thereafter, furnish to the Contractor reasonable evidence that financial arrangements have been made to fulfil the Owner's obligations under the Contract.
  - 5.1.2 The Owner shall give the Contractor Notice in Writing of any material change in the Owner's financial arrangements during the performance of the Contract. (Marston, 2019).

Risk of Delays

CCDC Delay Provisions: The CCDC standard form acknowledges that if a delay is caused by the owner, consultant, or due to a stop work order by a court or public authority (not the contractor's fault), the contractor is entitled to both reimbursement and an extension of time under the contract.

Force Majeure Extensions: Force majeure provisions, encompassing events beyond the contractor's control (e.g., labour disputes, strikes, fire), allow for an appropriate extension of the contract time. However, in such cases, the contractor is not entitled to additional payment for costs incurred unless the delays result from actions by the owner, consultant, or their employed parties, aligning with the notion that both parties share uncontrollable risks.

Consistency in Risk Allocation: The distinction in entitlements between delay provisions and force majeure reflects a consistent approach in risk allocation. While the contractor can seek reimbursement and time extension for delays within certain specified scenarios, force majeure events, often unpredictable and uncontrollable, do not typically result in additional payment to the contractor unless linked to actions by the owner or consultant.

Risk of Dissatisfaction and Disputes

Client Dissatisfaction and Litigation: Client dissatisfaction is a significant driver of litigation, whether justified or perceived. Justified dissatisfaction may lead to a favorable outcome for the client in court, but perceived dissatisfaction can result in mutual costs and aggravations. Professionals can mitigate disputes by informing clients of choices, outlining advantages and disadvantages, and maintaining open communication to avoid misunderstandings.

Prevention through Communication: Professionals can often prevent disputes by providing explanations and keeping clients informed before outcomes. Explanations after the fact may be perceived as self-serving and carry less weight in legal proceedings. When clients pressure professionals into design choices, clear written communication is advised, specifying the decision, reasons, consequences, and costs, with room for reconsideration upon client dissatisfaction.

Risk of Dissatisfaction and Disputes

Claims and Unpaid Fees: Claims against professionals frequently stem from unpaid fees. Clients may demand fee reductions due to alleged errors, leading to counterclaims for negligence losses. To avoid such counterclaims, clear communication about project requirements, costs, and consultant services is crucial. Well-drafted retainer agreements specifying the scope of services can prevent misunderstandings, emphasizing the importance of transparent communication to maintain positive client relationships and prevent litigation.

Risk of Dissatisfaction and Disputes

- Some contracts incorporate exclusion, limitation, or waiver clauses, commonly known as disclaimers, aiming to restrict or eliminate the liability of one party. Examples include clauses related to consequential damages, no-damage-for-delay, and pay-when-paid. Bid invitations frequently feature disclaimers on information accuracy, prompting contractors to conduct independent investigations. While effective for risk shifting, disclaimers must be expressly communicated to the relevant party and carefully drafted for enforceability.

Importance of Concise Records

Importance of Accurate Records in Litigation

- Keeping detailed records enhances the chances of success in court proceedings, as written documentation provides substantive proof and aids witnesses in refreshing their memories.
- Accurate records can prevent litigation by countering false claims. Written documentation disproving alleged oral agreements, for instance, can significantly diminish the likelihood of legal action.
- It is crucial to maintain accurate diaries, minutes of meetings, and written confirmations of agreements to provide robust documentation for supporting or defending a claim.

Role of Non-paper and Digital Documentation

- Non-paper and digital documentation, including photographs and videos, are increasingly accepted as evidence in court.
- While photographs are routinely admitted as proof, digital photographs require authentication due to their susceptibility to editing. Maintaining a trail of the photo's history is essential.
- Authentication tests, as established by case law for paper documents and Evidence Acts for electronic documents, ensure the accuracy, genuineness, and authenticity of the evidence.

Importance of Concise Records

Authentication of Electronic Documents

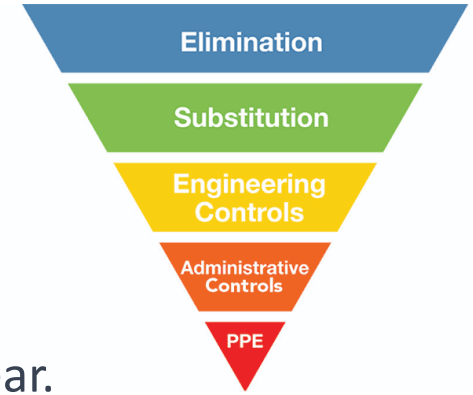
- Authentication of electronic documents involves proving the integrity of the system that created and stored the document.
- Witness testimony from the person who took the image or an expert on the camera system can establish authenticity.
- Organizations should establish standard operating procedures for digital photographs, outlining protocols for downloading, storing, identifying, and documenting the chain of possession to ensure admissibility in court.

Health and Safety Risks

- Professionals must prioritize the safety, health, and welfare of people and the protection of the environment in their endeavors.
- Hazards represent potential harm, and risks denote the possibilities of adverse outcomes.
- A comprehensive hazard log or risk register is fundamental for architects, engineers, and geoscientists in any undertaken activity.

National Institute for Occupational Safety & Health - Ranked Hazard Controls:

1. Elimination: Physically remove the hazard.
2. Substitution: Replace the hazard.
3. Engineering Control: Isolate people from the hazard.
4. Administrative Controls: Change the way people work.
5. PPE (Personal Protective Equipment): Protect the worker with appropriate gear.



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Quality Management Programs

Ensuring Project Integrity

- Quality management in engineering is vital for maintaining the integrity of a project by adhering to high standards and specifications.

Risk Mitigation and Prevention

- Robust quality management practices help identify and address potential risks early in the project lifecycle, preventing costly issues and setbacks.

Enhancing Stakeholder Confidence

- Consistent adherence to quality standards instills confidence in stakeholders, including clients, regulatory bodies, and the public, fostering trust and credibility in engineering projects.

Insurances

- The two most common types of insurances for engineering firms are General Commercial Liability and Professional Liability Insurance.
- General commercial liability insurance and professional liability insurance serve distinct purposes in mitigating risks for businesses. General commercial liability insurance, often referred to as commercial general liability (CGL) insurance, provides coverage for a broad spectrum of risks associated with bodily injury, property damage, and personal injury claims. It is designed to protect businesses from liabilities arising out of their general operations, such as accidents on the premises or damage caused by their products or services. CGL policies typically cover legal costs, settlements, and judgments related to these types of claims.

Insurances

- Professional liability insurance, also known as errors and omissions (E&O) insurance, is specific to professionals and their unique risks. This insurance is tailored to protect individuals and businesses offering professional services against claims of negligence, errors, or omissions in the performance of their duties.
- Professionals, such as architects, engineers, lawyers, and consultants, may face legal actions alleging financial loss or harm due to mistakes or failure to meet the expected standard of care. Professional liability insurance provides coverage for legal defense costs and damages, including settlements or judgments, related to these professional errors.

Insurances

- Individuals and firms holding a C of A from PEO must adhere to the professional liability insurance regulations required by the Professional Engineers Act.
- As stated in the Professional Engineers Act:

Liability insurance
34. It is a condition of every certificate of authorization that the holder of the certificate shall not offer or provide to the public services that are within the practice of professional engineering unless the holder is insured in respect of professional liability in accordance with the regulations. R.S.O. 1990, c. P.28, s. 34.

Insurance Policies and Exclusions

- Insurance policies will vary from company to company, and in some cases project to project. Engineers must be fully aware of all coverage elements in their policy and when to increase coverage to fill gaps in their area of practice, or contract value.
- Reviewing exclusions is just as important as reviewing inclusions to understand any limitations on the work the firm can take on, to ensure they are adequately protected in the event of a claim.

Operating Without Insurance

- Choosing to operate without insurance exposes professionals to the potential of bankruptcy in the event of a substantial claim.
- There is a common perception that the absence of insurance makes individuals or corporations less appealing targets for legal action, reducing the likelihood of being sued. While there may be some validity to this perception, it poses a significant risk for those seeking to protect their assets, as operating without insurance can have severe financial implications.

The Duty to Defend

Duty to Indemnify and Defend: Insurers under liability policies typically have both a duty to indemnify, involving the obligation to pay claims, and a duty to defend, entailing the payment of legal fees and defense costs.

Value of Duty to Defend: The duty to defend can be valuable, especially when the claim's success is uncertain, as insurers must appoint counsel and cover defense costs, even if indemnification may not be necessary.

Claim Framing and Insurance Coverage: Plaintiffs often structure claims to align with policy coverage, ensuring potential insurance availability. While the duty to defend and indemnify generally coincide, there are instances where only the duty to defend applies, and some policies deduct defense costs from the overall policy limits.

Claims

- Claims in engineering refer to legal actions or demands made against engineers, often stemming from alleged professional shortcomings or failures. Various types of claims can arise in the engineering field, each presenting unique challenges and potential legal consequences.
- Professional Liability Insurance is a safeguard for engineers, protecting them from client-initiated claims that general liability insurance may not cover, especially in cases of professional negligence.

Homework Before Next Class

- Complete assigned chapter readings in the Critical Path.
- Review the following article: How engineers reduce the risk of a claim - Canadian Consulting Engineer
- Summarize five (5) possible claims that an Engineer can be subjected to and list them in your logbooks.

THANK YOU.

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References

Marston, Donald L. 2019. *Law for Professional Engineers: Canadian and Global Insights*. 5th ed. New York: McGraw-Hill Education.