Week 10- Module 8

Health/Safety & Environmental Law

Law, Ethics and Professional Practice - ENGI3500

WINTER 2025





Introduction

- Engineers are responsible for designing, implementing, and overseeing projects that directly impact public welfare and environmental sustainability. A sound knowledge of HSE regulations ensures that engineering endeavors adhere to established safety standards, minimizing the risk of accidents and potential harm to both workers and the surrounding community.
- Environmental laws guide engineers in incorporating eco-friendly practices, fostering sustainability and compliance with conservation initiatives. Understanding HSE regulations also shields engineers and their organizations from legal repercussions, as non-compliance may result in severe penalties and damage to professional reputations.



Overview of Occupational Health and Safety (OHS) in Canada

- Workplace health and safety is a fundamental concern and a significant legal issue in Canada.
- Increased vigilance by health and safety regulators emphasizes the importance of OHS for companies, considering human, economic, and reputational consequences.
- OHS obligations are governed by federal and provincial laws, including the Criminal Code, Canada Labour Code, and provincial OHS statutes.

Overview of Occupational Health and Safety (OHS) in Canada



Legislation enacted into Law by the Ontario Government in 1979. This legislation was a significant development in workplace safety for the province, replacing the previous Industrial Safety Act. The OHSA established a comprehensive framework for workplace health and safety in Ontario, introducing the internal responsibility system where both employers and workers share responsibility for workplace safety.

Applies to 90% of employment places in Ontario

- excludes transportation and banks which fall under federal jurisdiction not provincial jurisdiction.
- They are regulated by the Canada Labour Code, Part II which serves as the federal version of OHSA





OHS Legal Framework and Responsibilities

Federal and Provincial Law

- Legislation at both federal and provincial levels protects workers and imposes duties on employers, supervisors, and employees.
- The Criminal Code includes a legal duty to ensure the safety of workers, with penalties for breaches, including criminal negligence causing bodily harm or death.

Responsibility for Health and Safety

- OHS legislation places duties on owners, employers, supervisors, and workers, with fines escalating for repeat offenses.
- Prime contractors or constructors are designated to take overall responsibility for OHS on project sites, with defined obligations.





OHS Legal Framework and Responsibilities

The Prime Contractor (or Constructor):

- Designated party responsible for OHS on project sites, with specific obligations defined by OHS legislation.
- Owners may contractually designate a prime contractor or constructor, subject to qualification and training requirements.

When an Accident Occurs:

- Prescribed procedures for reporting and investigating accidents, cooperation with OHS regulators, and submission of reports.
- Importance of legal advice, preservation of evidence, and internal investigations to determine causes and prevent future accidents.





OHS Legal Framework and Responsibilities

The OHS Regulators:

- OHS regulators possess regulatory and investigatory powers, with tools such as stop-work orders, compliance orders, fines, and penalties.
- Significant consequences for non-compliance, including immediate and long-term effects on companies and individuals.

Common Interests:

- Emphasizes the shared interest in promoting occupational health and safety.
- Encourages active participation in education and the implementation of safety measures for the common benefit.





OHSA – Employer Duties

OHSA section 25 defines some of the responsibilities of the employer. Employers participate in the IRS in part by:

- Posting a copy of the OHSA in the workplace
- Establishing a functional JHSC, (or health and safety representative)
- Creating and maintain occupational health and safety policies and programs that implement the policies
- Providing and maintaining equipment, materials, and protective devices that workers require to be safe.
- Following the measures required by the OHSA and applicable regulations.
- Acquainting workers or supervisors with all work-related hazards.
- Taking all precautions reasonable in the circumstances to protect a worker, (general duty)





OHSA – Supervisor Duties

OHSA section 27 defines the responsibilities of the supervisor. Supervisors participate in the IRS by:

- Ensuring workers use the provided equipment, materials, and protective devices they require.
- Ensuring workers follow the measures required by the OHSA and applicable regulations.
- Informing the workers about the potential hazards.
- Taking all precautions reasonable in the circumstances to protect a worker, (general duty).



OHSA – Worker Duties

OHSA section 28 defines the responsibilities of the worker. They contribute to the IRS by:

- Using or wearing the provided equipment, materials, and protective devices that the OHSA, applicable regulations or employer requires.
- Working in compliance with the OHSA and applicable regulations.
- Reporting hazards, including incidents, and safety concerns.
- Not removing or making ineffective any protective device (like guards on machines) without putting equivalent alternative protective measures in place.
- Working in a manner that does not endanger themselves or others





Worker's Compensation: Workplace Safety & Insurance Board (WSIB)

- WSIB legislation establishes a no-fault compensation scheme for jobrelated injuries, applicable to all types of workers and funded by employer payments calculated per employee.
- Employers, including those with varying safety records, benefit from immunity against worker lawsuits for work-related injuries under the WSIB scheme, extending protection to all registered employers and their employees. Claims in contract or tort are generally not available for injured workers against employers.
- WSIB protection for employers is not valid outside of Canada, meaning employees working abroad can potentially sue their employer without Canadian WCB immunity. Insurance options exist to cover such situations and Canadian workers temporarily abroad for a Canadian company may have coverage based on local WSIB rules, requiring a careful check of availability and terms.

Worker's Compensation: Workplace Safety & Insurance Board (WSIB)

- The Workers' Compensation Board of Ontario was renamed to the Workplace Safety and Insurance Board in 1998 when the Workplace Safety and Insurance Act replaced the previous Workers' Compensation Act. This name change reflected a shift in focus toward prevention and return-towork initiatives, not just compensation for workplace injuries.
- Despite the official name change to WSIB over 25 years ago, many people in Ontario still occasionally refer to the organization by its former name (WCB) out of habit or familiarity.
- The WSIB continues to administer Ontario's no-fault workplace insurance system, providing wage-loss benefits, medical coverage, and rehabilitation support to workers who are injured on the job or develop an occupational illness.

Ethical Considerations within Health and Safety Law

- Professional engineers may encounter safety concerns during their duties, and pressure to overlook such issues can arise from employers or clients.
- Ethical codes mandate prioritizing safety, even in cases where clients may be displeased with potential delays due to safety inspections, emphasizing the duty to protect the safety of others.

Environmental Site Assessments (ESAs)

- ESAs, conducted per Canadian Standards Association (CSA) guidelines, assess properties for contamination, often requested by property sellers, buyers, lenders, and developers.
- Divided into phases, a Phase I ESA determines contamination likelihood without physical sampling, while a Phase II ESA involves sampling soil and groundwater to characterize contamination.
- If remediation is recommended, a Phase III ESA provides detailed contaminant information, a remediation plan, confirmatory sampling, and assesses the remediation's success.
- Confidentiality is crucial in ESAs, but legal and ethical obligations to report contamination may override confidentiality clauses; consultants should consider including provisions authorizing reporting.



Environmental Audits

- Corporate environmental audits, guided by CSA Guideline Z773, serve various purposes, including protecting health, reducing liability, establishing due diligence defenses, and ensuring property marketability.
- An environmental audit is defined as a systematic process of obtaining and evaluating evidence regarding verifiable assertions about an environmental matter, communicating results to the client.
- Goals of environmental audits include protecting employees' health, preventing liability claims, establishing due diligence defenses, reducing remediation costs, and ensuring property marketability.
- Compliance with CSA guidelines is crucial, with other standards like ISO 14000 also applicable in some cases. Environmental audits may encompass ESAs based on project needs.



Governmental Regulation and Legislative Jurisdiction

- Governments focus on environmental matters to offload remediation costs and protect the environment from future contamination.
- Environmental regulation is complex and confusing, with federal and provincial governments having constitutional authority.
- Federal legislation often addresses fisheries, oceans, and toxic substances, while provincial legislation covers diverse areas like air quality, hazardous goods, and land use.
- Municipalities derive environmental regulation authority from provincial governments, contributing to a challenging landscape for professionals.



Legislative Concepts, Environmental Offences, and Cleanup Liability

- Common legislative concepts across governments include regulating harmful conduct, creating administrative systems for pollution prevention and cleanup, information requirements, environmental assessments, and establishing offences.
- Environmental offences cover a broad spectrum, targeting corporations and individuals. Criminal liability rules were established in 2004, allowing for jail sentences.
- Environmental offences are generally strict liability, requiring due diligence as the only defense. Professionals can reduce risks by implementing environmental auditing, establishing policies, ensuring familiarity with responsibilities, and actively monitoring compliance.
- In contamination cases, the principle is "polluter pays," but additional parties, including owners, license holders, and past owners, can be held responsible. Legislation in some provinces imposes liability on all parties connected to a property, emphasizing the need for pre-purchase environmental site assessments (ESAs).

Environmental Assessment Process Overview

- Certain projects require environmental assessments to evaluate their impact on the environment, considering long-term effects and potential risks to human health.
- The federal Canadian Environmental Assessment Act provides four assessment types: screening, comprehensive study, mediation, and panel review, based on project nature. Federal assessments are mandatory for projects with federal implications or affecting navigable waterways.
- Modest projects typically undergo screenings or comprehensive studies, while larger or controversial ones opt for mediation or panel review. Federal and provincial jurisdictions collaborate to avoid duplication in assessments.

Challenges and Outcomes of Environmental Assessments

- Environmental assessments, mandated by federal or provincial statutes, may cause significant project delays and uncertainties.
 While viewed as an additional cost, they offer benefits, including environmental protection and reduced future regulatory complaints.
- Assessments may result in project restrictions, conditions to minimize environmental harm, or even project cancellations.
 Parties might need to incorporate extra stages or perform additional work, potentially unrelated to the project site. The outcome varies, impacting project feasibility and requiring adherence to assessment recommendations.



Homework Before Next Class

- Complete assigned chapter readings in the Critical Path.
- Bookmark the various acts noted in the slides so you have quick access to them for future readings and activities.



THANK YOU.





References

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



