



Minerva Canada Safety Management Education Inc.

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# Case Study Summaries

## 1. Introduction and Terms of Use

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- **Permitted Use:** They can be referenced in periodicals, research papers, or textbooks for educational use.
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## 2. Case Study Categories

1. Actual Case Studies
2. Minerva-ICBC Business Student Competition
3. Minerva-CIAC Engineering Student Competition
4. Short Case Studies (Actual or Fictional Incidents)
5. Other Case Studies
6. Minerva Case Study Competition (CIAC, Service Hospitality)

Minerva Canada may also provide individual case studies to universities and colleges who do not have a licensing agreement for its e-learning courses for a small nominal fee.

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# 1. Actual Case Studies

## 1. Lafarge Cement


*Focuses on "Developing a Social License" for low carbon fuel systems and community engagement.*

Warren Mabee – Queen's University

### Case Summary

This case study describes how Lafarge Cement Canada's Bath Plant approached the issue of social license when developing a low carbon fuel system which would offset consumption of fossil fuels and provide an alternative to address GHG emissions associated with cement production.

The purpose of this case study is to teach students strategies for managing public relations in the implementation of new technologies within a company's operations, and to highlight the importance of engaging with the community when undertaking these types of projects.

 *Keywords: occupational health and safety, strategic management, Business ethics, corporate social responsibility, community engagement, change management*

## 2. SNC-Lavalin T&D

*A model in SHE (Safety, Health, and Environment) management, detailing hazard control and safety leadership.*


Anis Hague and Palash Bagchi --University of Calgary

### Case Summary

This case is a detailed account of the award-winning safety, health, and environment (SHE) program at the Transmission and Distribution (T & D) division of the Montreal based SNC-- Lavalin. Detailed reports are found on the following: major hazards and control; safety management and leadership; and risk management and human resource development.

The scope of this case is to understand SNC--Lavalin T&D's SHE management practices, and how these have enhanced:

- Improvement in labour management relations
- A reduction in lost time accidents
- A Product quality and production efficiency Profitability

 *Keywords: SHE management; business strategy; labour relations; human resource management; electric transmission; engineering; safety leadership; best practices*


### **3. General Motors**

*Documents the turnaround in safety culture at the Oshawa Truck Plant to achieve world-class performance.*

Marc Rosen - University of Ontario Institute of Technology

#### **Case Summary**

Based on actual archival data and interviews, this case documents the turnaround in occupational health and safety at GM's Oshawa Truck Plant. Given a relatively poor record in occupational health and safety, management developed a new leadership approach based on creating a safety culture. Key features of the new health and safety system are presented. Data on the improvements to world class levels of performance are also included. The case concludes with lessons learned.

 *Keywords: occupational health and safety; turnaround; safety culture; safety climate; leadership; automotive industry; SHE management systems*

### **4. Canadian Pacific Railway**


*Introduces best practices for occupational disability management and early & safe return-to-work programs.*

Paul Gallina – Bishop's University

#### **Case Summary**

Using examples from the award-winning program at Canadian Pacific Railway Company, this case introduces the process and best practices of occupational disability management. From an ethical, legal and cost perspective, returning the worker to early and safe work is essential to managing occupational health in the post-accident phase.

The case concludes with recommendations by a joint management-labour return to work committee. Readers are asked to assess a variety of managerial issues that arise from this account.

 *Keywords: disability management; occupational health and safety; early and safe return to work; labour relations; best practices; corporate social responsibility; duty to accommodate*


### **5. Dofasco Inc.**

*Introduces Incident Investigation.*

Karlene Harry, et al. – McMaster University

### Case Summary

This case deals with a delivery truck worker who was reported as speeding and crossing activated railway crossings while delivering parts for the company. Such activity does pose a serious health and safety risk, and could endanger members of the community. From the worker's perspective, this was done in order to help the company. The material being delivered was in urgent need by the maintenance staff. The issues in this case are who is at fault and what discipline might be appropriate.

 *Keywords: occupational health and safety; discipline; trucking; driving*

## 6. Wellness Institute at Seven Oaks Hospital

*Focus on Health and Safety Services.*

Sue Bruning and Carol Deckert \_ University of Manitoba

### Case Summary

This case study summarizes the development of the Wellness Institute at the Seven Oaks General Hospital. Part of the Institute's mandate is to provide health and safety services to organizations outside the hospital. The history of the Wellness Institute is provided along with a summary of external outreach activities. The focus of the case is on the challenges on developing strong demand for the Institute's programs and services in the general community. Experiences from three clients are summarized to provide ideas for market development.

 *Keywords: wellness; occupational health and safety; services; marketing; outreach*


## 7. Seven Oaks General Hospital

*Focus on Integrating wellness into Health and Safety.*

Sue Bruning - University of Manitoba

### Case Summary

This case study summarizes the development of Seven Oaks General Hospital approaches to employee health and safety as well as workplace wellness. The history of the hospital and the Wellness Institute are provided. The focus of the case is on a middle manager's decision-making role in deciding upon a strategy to integrate wellness initiatives with health and safety.

 *Keywords: health care; wellness; hospitals; occupational health and safety*


## 8. Seven Oaks General Hospital (Shortened Version)

*Focus on Integrating wellness into Health and Safety.*

Sue Bruning - University of Manitoba

### **Case Summary**

This case study summarizes the development of Seven Oaks General Hospital approaches to employee health and safety as well as workplace wellness. The history of the hospital and the Wellness Institute are provided. The focus of the case is on a middle manager's decision-making role in deciding upon a strategy to integrate wellness initiatives with health and safety.

 *Keywords: health care; wellness; hospitals; occupational health and safety*


## **9. INCO Levack Mine**

*Focus on Health and Safety Incident in Mining.*

Julie Barr - Laurentian University

### **Case Summary**

This case first describes the operations nickel mining at the Levack Mine when it was in operation and owned by Inco. In 1987 it was considered one of the safest mines in the world and was awarded the highest rating according to the "5 Point Safety System". Nonetheless there was a fatality the same year that resulted in the deaths of four miners. Details are given of the fatality, and the health and safety experience at the mine. The problem posed is: how could these fatalities occur in what was considered such a safe mine?

 *Keywords: mining; occupational health and safety; human resource management; fatality; health and safety management system*

## **10. Cover Shield Failure and Falling Incident**

*Focus on Health and Safety in Engineering.*


Marc Rosen - Ryerson University

### **Case Summary**

Based on an actual situation, this case deals with a high-risk incident at a power plant. A cover shield on a bay door weighing 5.5 pounds fell 70 feet and almost injured two workers. This was deemed a high-risk incident, the area of the plant was immediately closed down, and a root cause investigation was undertaken.

It was determined that the root cause of the incident was poor "equipment design". Contributing factors were poor maintenance and problems with the safety bar on the

bay door. Among other issues, this case underscores the critical importance of good engineering design for a safe work environment.

 *Keywords: engineering; product design; incident investigation; health and safety; electric power plant*

## 11. Noble Corporation Project Windmill


*Focus on USA SHE Issues from Company Acquisition.*

Brooks Holtom - Georgetown University

### Case Summary

This case deals with Noble's acquisition of Nedrill. The former is a leading US based shallow water petroleum driller and is considering the international acquisition of the Dutch based deep-water driller Nedrill. Corporate strategies and operations of both companies are presented.

Cultural, social, governance, valuation, and health and safety issues loom large as risks that could derail the deal. Can Noble's core competencies in operational excellence and SHE management be extended to such an acquisition?

 *Keywords strategic management; acquisitions; SHE management; petroleum drilling; occupational health and safety*


## 2. MINERVA – ICBC Business Student Competition

### 1. Cannabis at Construction

Dr. Deborah McPhee (Brock University and Stephanie Brydges (Windsor)

### Case Summary

This case will look at the Canadian legalization of cannabis in the high-risk industry of construction. It will look at the General Manager of a small-medium sized enterprise's attempt to eliminate the use of banned substances in the business. It will examine the company's zero tolerance policy to substance use, and ask the question, how can the General Manager, Tyler, better handle the recent legalization of cannabis in his high-risk workplace, above and beyond simply having the zero-tolerance policy.


 *Keywords Human Resources, Occupational health and safety, incident investigation, project management, change management, H&S management systems, H&S regulations, leadership practices, business case for H&S, Alcohol and Drug policy management*

### 2. Beating the Odds

Dr. Deborah McPhee (Brock University and Stephanie Brydges (Windsor)

### **Case Summary**

Officer Timothy Martins beat the odds and became a source of inspiration when he persevered to become a decorated police officer after a crash that almost killed him. But his road back to work kept being hampered by bureaucratic red tape from the human resources department. This case will ask how the Police Commissioner should proceed when he hears that Timothy is going to file a grievance regarding his negative experience with Marta, the Health and Safety Manager.

 *Keywords Human resources, public sector, management shortcomings, reintegration, accommodation, disability management. incident management and investigation*


## **3. Tragedy at the Terminal:**

Dr. Deborah McPhee (Brock University and Stephanie Brydges (Windsor)

### **Case Summary**

It was noon on September 20th when Joel Williams, CEO of Supreme Transit sat at his desk sifting through stacks of papers. Folders, letters, reports and correspondences directed towards him had been accumulating faster than he was able to keep up with since the recent fatal shooting. The tragic incident involving countless Supreme Transit employees, including the killer Carter Smith, had occurred exactly six months ago, and the fallout had been immense.

Joel knew there was a report titled “Urgent Recommendations” in the stack somewhere, it was just a matter of finding it. Now that many of the short-term issues had been addressed and most employees were back to work, Joel felt it was time to look into these recommendations that an independent consultant had provided several months ago. The recommendations were mainly aimed at improving the workplace environment at Supreme Transit. Joel had worked at Supreme Transit in various roles for the past five years so he was aware that implementing intense changes would not be an easy feat. It seemed that every time he got a handle on one issue, another would arise. Joel regretted not attempting to implement change earlier, before Carter’s rampage, but he thought it better late than never.


 *Keywords Human Resources, Organizational Development, Change Management, Risk Management, Business Continuity, Emergency Planning, Labour Relations*

## **4. Tragedy at Clearly Convenience – A Young Worker’s Dilemma**

Dr. Deborah McPhee (Brock University and Stephanie Brydges (Windsor)

### **Case Summary**

This case will analyze Bonnie Tourig's experience working alone in a local convenience store. Bonnie was an 18-year old high school student working for pocket money when four thieves broke into the store to commit a robbery. The bandits shot her, resulting in her being paralyzed from the neck down. The men were arrested, convicted and jailed. This case will ask how the situation could have been prevented, expectations for small businesses in terms of safety precautions and the varying responsibilities of each party in regard to health and safety in the workplace.


 *Keywords Human Resources, Organizational Development, Labour Relations, Business Ethics, Disaster Avoidance, Change Management, Risk Management, Workers Compensation/Accident Benefits, Business Case for H&S*

## 5. Harvesting Disaster at River Rock Farm

Dr. Deborah McPhee (Brock University) and Stephanie Shaw (Univ. Windsor)

### Case Summary

This case investigates the working conditions surrounding Pablo Lopez, a Mexican migrant laborer on a government sanctioned farm workers program. The worker, employed at a local British Columbia farm was injured after slipping into a potato-harvesting machine. This case discusses the working conditions migrant workers face, the importance of health and safety training and the tragic effects of misconduct. This case can be used in the curriculum in areas such as Occupational Health and Safety, Labour Relations and Risk Management.

 *Keywords Migrant Workers, Incident and Injury Management, Medical Repatriation, Occupational Health and Safety, Human Resources and Organizational Development Production Management and Productivity, Labour Relations and Business Ethics, Disaster Avoidance and Risk Management*

## 6. Greenbelt Trucking

Dr. Deborah McPhee (Brock University) and Claire K. McCarthy, European Business School, Ostrich-Winkel, Germany

### Case Summary

For a few minutes Anthony was transfixed, staring at the pictures on Josta's phone. A dump truck with "Greenbelt Trucking Inc." emblazoned across the back was tangled in a mess of smashed bridge trusses and scaffolding. It was reported that the driver was under the influence of alcohol and a construction worker had been injured. Anthony felt like he was going to be sick. As the office manager of Greenbelt Trucking, he was in charge when the CEO of the company was out of town. Greenbelt had been a successful, short-haul trucking start-up for the past two years, and if it was continuing its prosperous growth in the Golden Horseshoe of Ontario, Anthony had to figure out how to handle this accident. He was not sure what he should do about the driver. As Anthony was responsible for HR, he knew the CEO would turn to him for options on

how to handle the driver. This could have a detrimental effect on the business. And what about the injured worker? Anthony was at a loss of what to do next.

 *Keywords* Human Resources, Incident Management, Alcohol and Drug Policy and Management, Labour Relations, Employee Assistance programs

## 7. Event Tent Rentals


Dr. Deborah McPhee (Brock University) and Stephanie Shaw (Univ. Windsor)

### Case Summary

It was early in the morning on July 3, 2013, when Amanda Wallis, the President and CEO of Event Tent Rentals stepped back into her office. She had just returned from the Bayshore Police Station where she had been all night speaking with investigators. Amanda had been informed that a second Event Tent Rental employee previously in critical condition had passed away. As she left the station, she was told the investigation was ongoing, being examined by both the Police and the Ministry of Labour. They had yet to determine whether criminal charges would be laid, but Amanda could be facing steep fines and even jail time.

As Amanda sunk into her oversized chair, she saw complete disarray around the office. There were company files and documents jumbled together on the desk and some flyaway papers on the floor. She had grabbed these folders quickly yesterday, as Police and Ministry of Labour representatives had been asking for a plethora of documents over the past few days. The past 48 hours had been a whirlwind; she barely had a second to breathe as she cooperated fully with the investigation.

Amanda had a terrible feeling that Event Tent Rentals could be closed as a result of its recent tragic and unforeseen fatal accident. The business was already facing financial challenges and she heard Event Tent Rental's fine could be upwards of \$100,000. Amanda picked up the phone to call her lawyer for an update on the situation. As it rang, she wondered to herself whether she was going to have a due diligence defense.

 *Keywords* Human Resources, Occupational Health and Safety, Incident Investigation, Leadership, Business Ethics, Organizational Safety Culture, Business Case for H&S


## 8. Amazonia Delivery Services

Robert Hickey -- Queen's University

### Case Summary

This case is a fictional account of a Vancouver-based Amazonia Delivery Services (ADS), which provides delivery for the online retailer, Amazon. It wishes to expand to four key markets – Calgary, Toronto, Montreal and Halifax.

The case describes operational issues facing ADS as it tries to expand including various Health and Safety concerns. Three technology options for growth are presented in the case including a large volume sorter and a micro sorter. Students are asked to assess these options and to outline a strategy plan to manage the change process.

 *Keywords Human Resource management, occupational, health and safety, change management, labour relations, strategic management, organizational structure*


## 9. San Jose Mining Company

Kent Keeler, William Crothers, Deborah McPhee - Brock University

### Case Summary

This case is based on a mining accident in 2010 at the San Jose Mine, a medium sized copper mine in Chile. At the time of the accident, the mine was marginally profitable, and had only recently reopened to take advantage of rising mineral prices. Furthermore, not all the safety recommendations had been completed at the time of the opening. Similar to other such small and medium sized copper mines in the region, the health and safety program at San Jose was spotty.

A rock burst left 33 miners trapped about 600 metres below the surface. Management response is the problem for this case. Management is concerned not only by the scrutiny of government authorities, but by members of the international community as well. However, an extensive mine rescue would threaten the financial solvency of the mine.

 *Keywords occupational health and safety; mining; strategic management; business ethics; corporate social responsibility*

## 10. Code Red – Health and Safety at Golden Horse General Hospital

Robert Hickey - Queen's University


### Case Summary

This case is a fictional account of the state of occupational health and safety management at the Golden Horseshoe General Hospital (GH<sup>2</sup>) In short; this hospital has an injury rate that is 50 per cent higher than the industry average.

Data and analyses include the following: accident rates; direct and indirect costs of workplace accidents; New Experimental Experience Rating (NEER); disability management, and leadership.

Students can act as consultants to the Board of Directors and make recommendations, along with costs, to ensure the following:

- The hospital has an effective process to address and correct unsafe conditions;
- Employees are trained about their responsibilities and are empowered to report unsafe conditions;
- Investigations of accidents and near misses involve the union, determine root causes, and take action to correct the root cause;
- A health and safety system audit is completed at least annually; and,
- Occupational health and safety goals focus on making improvements to the safety system and promote a safety culture (not just reduce costs).

 *Keywords human resource management; health care; direct costs; indirect costs; safety culture; leadership; legal compliance*


## 11. Recovering From SARS - Worker Health and Pandemic Planning

Robert Hickey - Queen's University

### Case Summary

This very popular case begins with a report on the extent of the SARS viral pandemic of 2003 that resulted in the deaths of 44 people in Ontario. Nearly half were health care workers.

The case then gives an account of the SARS experience at the fictional Ontario hospital GH<sup>2</sup>, and its limited current preparedness. Interviews with senior management and staff also suggest human resource management issues that need to be addressed. As part of the solution to these problems, references are made to the British Columbia experience, and to the health and safety recommendations of the Campbell Commission Report.

 *Keywords occupational health and safety; human resource management; change management; biological agent; health care; hospitals; pandemic planning; labour relations*

## 12. Putting Out Fires – Northern Lights Energy


Robert Hickey - Queen's University

### Case Summary

This case is a fictional account of the managerial problems at the petrochemical refinery of Northern Lights Energy. The company has an increasingly poor health and safety record that correlates positively with the use of contract workers.

The contract workers have been hired to cut costs and are almost equal in number to the unionized employees. There has been increasing friction between these two groups. For the unionized employees, the contract workers are a threat to job security,

and are not well trained in safety. There have been instances of employee sabotage, and an explosion on the site blamed on the union.

 *Keywords occupational health and safety; human resource management; labour relations; strategic management; contract workers; petrochemical industry*

### **13. The Long Haul – Sustaining Growth and Safety at Traxall**


Robert Hickey - Queen's University

#### **Case Summary**

Traxall Trucking Services has added to its operations in petrochemical hauling with the recent acquisitions of Hammel Hauling and Sarnia Chemical Haulage. These acquisitions have achieved the first goal of the growth strategy of achieving market share. However these newly acquired operations have not been effectively integrated into Traxall's existing structure of operations.

Outstanding issues in need of resolution include the following: union employee dissatisfaction over increasing use of independent operators; changes in calculating employee compensation; and, poor safety records with increasing workers' compensation costs.

The problem at hand is to identify the major employee relations and health and safety issues, and to develop a strategic human resource action plan that would make Traxall's growth strategy a success.

 *Keywords health and safety; labour relations; trucking industry; strategic human resource management*

### **14. Caesar Foundries Industries**

Deborah Zinni - Brock University


#### **Case Summary**

Fictional Caesar Foundries employs 200 people producing iron pipes and is located in an isolated small town in Northern Ontario. This case includes a detailed account of the foundry production processes, and interviews with management and production staff. The plant has some serious occupational health and safety issues that include evidence of workplace violence. There are other human resource management concerns.

One production worker who had been involved in a fight was soon after fatally injured. This has brought problems to a head. At the end of the case students are presented with the following questions:

- What are the underlying problems at CFII?
- What could have been done to prevent the fatality?

- Can they afford not to make changes? Why or why not?
- Is it reasonable to expect that a foundry will have more accidents and fatalities compared to any other industry? If so, what should be done about this?

 *Keywords occupational health and safety; human resource management; workplace violence; foundry; fatality*


## 15. China Lucky Star Mining Company

Deborah Zinni - Brock University

### Case Summary

This fictional case deals with the impact of a new partnership on a small family owned nickel mine in Sudbury Ontario. Mac Mine was having financial difficulties when it accepted a buy in from the China Lucky Star Mining Company. Management and mine foremen for the new venture were from both companies.

The Chinese were relatively lax about health and safety standards, procedures, and training. In the first year of the partnership the number of serious accidents quadrupled. Furthermore, there had been a serious underground accident with the possibility that the Ministry of Labour would shut down the mine for weeks. Given the need to address this deteriorating situation, the problem for students is to make recommendations to the Canadian CEO as to what should be done now, and in the future.

 *Keywords occupational health and safety; mining; new ventures; strategic management; Ministry of Labour*


## 16. Keefer Restaurants Inc. – Workplace Harassment

Sean Tucker - University of Regina

### Case Summary

This fictional case deals with customer abuse at a location of Keefer Restaurants, a chain that employs about 20 workers in each restaurant. A survey of employers has indicated a high level of customer abuse. Readers are asked to respond to the following:


- Is the customer---initiated workplace abuse and ethical issue?
- Propose specific measures to address the problem.
- Identify stakeholder interests that may be affected.
- Describe how conflicts among various stakeholders can be minimized.

 *Keywords occupational health and safety; restaurants; workplace violence; customer abuse*

## 17. Tosi Industries

### **Case Summary**

Fictional Tosi Industries employs 700 people and manufactures solar panels. It functions as a lean manufacturing operation and provides employee bonuses based on exceeding production and profit targets. It has just been announced that Tosi is about to receive a coveted industry safety award just as the company has experienced three serious incidents. Dave, the Operations Manager, is thrilled with the award. Andrew who has taken over responsibility for health and safety thinks otherwise. In addition to the incidents, he has discovered systemic errors in occupational health and safety at the plant. Given this situation, students are asked to explain what advice Andrew should give Dave, if any, and what further actions should Andrew take.

 *Keywords occupational health and safety; lean manufacturing; SHE management; business ethics*

## **3. MINERVA – CIAC Engineering Student Case Study Competition**

### **1. Human Factors in Manufacturing**

Irene O'Hara (automotive industry member) and Jason Grove and Steve Lambert (University of Waterloo)


#### **Case Summary**

A large automotive OEM<sup>1</sup> (original equipment manufacturer) designs and assembles a variety of vehicles.

Following the design of any new product, and prior to launching for full scale production, all parts, components, and assemblies are tested for safety, quality and manufacturability.

A critical stage in this process includes the manufacturing of pre-production sub-assemblies and/or vehicles to assess manufacturability and improve the efficiency and quality of the manufacturing process and final product.

Pre-production trials on one such car measured forces to install rear deck lid springs, which were found to exceed ergonomic design guidelines. Manufacturing and Product Engineering needed to work together to find a solution to this issue prior to the start of regular production.

 *Keywords Human Factors, Ergonomics, Risk Management, Hierarchy of Controls, Risk Evaluation Framework*


### **2. Employee Hand Thermal Burn Incident**

Chemical Industry member and Jason Grove and Steve Lambert (University of Waterloo)

### **Case Summary**

A division of a large multinational company makes a variety of polymer products. In addition to manufacturing existing products, this division also develops new products and processes. Three production technicians were working to start-up an extruder for an experimental product on the evening shift. As part of the process of starting up a new trial material, they purged the system and were cleaning out a key component, the water box, Figure 1. The technicians are required to wear specific personal protective equipment (PPE), including leather gauntlet gloves with an insulated palm. These gloves are typically used to handle hot metal parts during a turnaround.

One technician was using a long-handled spatula to scrape residual polymer from the component. A second technician noticed that some molten material was still present, and had begun to drip down or “drol” out, potentially entering the piping directly below. The technician instinctively reached in with their gloved hand to prevent contamination to the piping. The molten mixture stuck to the gloved hands, resulting in second-degree burns to the backs of the fingers on both hands. The worker was initially treated on site, and then transported to a local hospital. Upon release from hospital, they returned to work to brief their supervisor on the incident, and then went home. The Safety Health and Environment (SHE) leader at the site was required to investigate this incident and make suitable recommendations.

 *Keywords Risk Management, Hierarchy of Controls, Engineering Costing and Evaluation of Options, Cost Benefit Analysis, Risk Matrix, and Risk Register*


## **3. Risk Management for Cyanide Handling**

Mining Industry representative and Lyndia Stacey (University of Watrrloo)

### **Case Summary**

A mining company uses ore extraction, milling and smelting to produce main end products of nickel and copper. To extract and separate these base metals from the ore, cyanide solution (NaCN) is used in the concentrator process [1]. The company receives NaCN in the form of briquettes, which are concentrated, solid forms of NaCN that are 98% pure. They resemble charcoal briquettes used in BBQs in both form and weight.

The main teaching objective of this case study is to provide students the opportunity to practice risk management techniques as it applies to an authentic, real-world problem. This includes hazard identification, risk assessment, risk prioritization and risk management for the cyanide briquettes and mixing tank.

 *Keywords Risk Management, Hazard Identification, Risk Assessment Techniques, Risk Prioritization, Health and Safety Management Systems, Hierarchy of Controls, Incident Management, Initiation of an engineering project, Development*

## 4. MINERVA – Short Case Studies for Business and Engineering

The following 11 short case studies were prepared for Minerva Canada by the University of Calgary's Haskayne School of Business under the leadership of Dr. Robert Schulz. Based on real incidents or fictional scenarios, they draw on publicly available investigation reports and include discussion questions. Suggested answers are provided separately in the Instructor Notes.

1. **Offshore Drilling Incident:** Signs of a malfunctioning safety culture.
2. **Pipeline Incidents (A):** Carrying forward lessons.
3. **Pipeline Spill (B):** Cracks in the system.
4. **Railway Tragedy:** When safety goes off the rails.
5. **Marine Incident:** When Plans Go Off Course.
6. **Fortified Construction:** Signs of a Deficient Health and Safety System.
7. **Silver Valley Elementary School:** Going Off The Records.
8. **The Office Work Environment for Kamal:** Some Ergonomic issues.
9. **Safety and Student Sports for Pila, Part A and B:** Its Challenges and resources.
10. **First Year University Student Ella:** Mental Health Challenges and resources.
11. **International Exchange Student Tim:** Mental Health Challenges and resources.

## 5. Other Case Studies

### 1. National Rubber Company Part A


James Chisholm and Perry Banji - University of Toronto

#### Case Summary

National Rubber has over 700 employees in two Toronto locations that produce over 700 rubber products for the automotive industry. Currently only 80 of these products are profitable. The case provides begins with a discussion of a rubber industry as a whole, and the production processes at National Rubber. The newly hired CEO has some major issues to deal with that include the following:

- An antiquated management structure
- Outdated manufacturing technology
- A demoralized workforce
- A poor health and safety record

- Problems with product quality and timely delivery Where does the new CEO begin to turn this company around?

 *Keywords strategic management; human resource management; occupational health and safety; rubber; automotive parts*

## **2. Development of an Enhanced Ceiling Fan – H&S Considerations**

Marc Rosen - University of Ontario Institute of Technology

### **Case Summary**

From an engineering design perspective, this case study describes the development of an enhanced ceiling fan, highlighting, where appropriate, health, safety, and environmental considerations. This case is designed to provide instructors with a teaching aid that illustrates a holistic approach to engineering design, and how SHE factors can be incorporated.

 *Keywords engineering; design; SHE principles; ceiling fan*


## **3. Health and Safety Module For Students and Case Studies**

Marc Rosen - University of Ontario Institute of Technology

### **Case Summary**

This material has been designed as a health and safety module primarily for engineering students but also for business students. It begins with very good concise summaries of a variety of issues in health and safety management, the stakeholders concerned, types of hazards, and includes ethical dilemmas.

The material also includes a small case study dealing with an automobile engine plant and poses a variety of questions for students dealing with three different scenarios.

 *Keywords engineering; teaching module; health and safety; automotive parts plant; general management*


## **4. Automotive Plastics Part A**

David Carey, *et al.* - Queen's University

### **Case Summary**

This fictional case deals with a small plastics manufacturer for the automotive industry. Detailed descriptions and data are presented on automotive plastics, the fit with the automotive industry, and the plant operations in Belleville Ontario. There are three

outstanding issues that management needs to address as follows: maintaining quality production; health and safety; and, employee relations.

 *Keywords occupational health and safety; human resource management; employee relations; strategic management; plastics; automotive parts industry*


## 5. Storey Energy

Michael Manjuris - Ryerson University

### Case Summary

Storey Energy is a pipeline firm with a division that sells pipes, and a service division that does pipeline installation and maintenance. Storey employs 17 people full time and hires some 60 contract employees during the busy season. George Storey, the founder, is still the CEO and General Manager.

Mr. Storey has always valued his employees as his key resource and has had a hands-on approach to health and safety without a formal system being in place. A recent accident from a competing contractor has forced him to reassess this position. His chief engineer is promoting a system that has three components: showing in writing management commitment to safety; relating safety performance to a defined business need; and auditing worker behaviour to measure safety improvement and define corrective action. The problem for this case is this the system he needs and can successfully implement?

 *Keywords SHE management systems; pipeline contracting; occupational health and safety; strategic management*

## 6. Case Study Competition for Post-Secondary Students

This Minerva case study competition started in 2023 in partnership with the Chemistry Industry Association of Canada, Service Hospitality and Signal49 Research is open to all post-secondary students in Canadian universities and colleges and graduates from these Canadian schools in the last 2 years and now in the workplace.

### 1. Ruby's Restaurants

This is a shortened and modified version of the Keefer Restaurant case study found on page 14 and focused on workplace harassment and customer abuse and leadership issues.

### 2. Triple C Store

This is a shortened and modified version of the Tragedy at Clearly Convenience case study found on page 8 and focused on workplace violence and risk mitigation issues in dealing with it.

### **3. Mac Mines**

This is a shortened and modified version of the China Lucky Star Mining Company case study found on page 14 and focused on health and safety issues that can arise from mergers and acquisitions where organizations have different corporate and safety cultures.