Details Document 92 – Workplace Safety/Secondary

The purpose of this document is to provide competitors with the additional details they may need in order to prepare for the provincial competition. Should competitors have further questions, they are welcome to contact Jeremy MacEachern at jmaceachern@wcb.pe.ca

(1) Hazard Identification

45 minutes, worth 36% Essential Skills – 4, 6, and 7

What are competitors required to do for this activity?

- Each group of competitors (Group A and B) will have a set time slot in which to do their Hazard Identification.
- Competitors will be given a brief orientation to a mock workplace, and to the Hazard Identification activity.
- Once oriented to the activity, each competitor will be given 45 min to complete an inspection of the mock workplace, and to identify hazards. No electronic devices of any kind are allowed during this activity.
- Each competitor will be asked to identify **6 hazards**, and complete a hazard identification table, such as the one shown below:

Identified Hazard	Hazard Category	What could happen?	What needs to be done to control the hazard?
Tool with frayed electrical cord	Physical	Worker could get electrocuted	Tool needs to be removed from service and replaced with properly maintained tool
Poor housekeeping in shop – excessive sawdust on floor	Safety	Worker could slip, and fall into path of tools in operation. Worker could be injured by the fall or by the tool they may be exposed to.	Sawdust needs to be swept up, and shop tidied regularly

How will competitors be marked?

For each hazard identified, the competitor will earn:

- Up to 1 mark for correctly identifying the hazard
- Up to 1 mark for identifying the hazard category
- Up to 2 marks for correctly explaining why it is a hazard, or "what could happen."
- Up to 2 marks for correctly describing *"what needs to be done to control the hazard,"* thus preventing injury.

What might competitors do to prepare for this activity?

To prepare for this activity, competitors may wish to:

- Use this link <u>http://www.ccohs.com/oshanswers/hsprograms/hazard_risk.html</u> to check out "What are examples of hazards?" and "What types of hazards are there?"
- Use this link http://www.ccohs.ca/oshanswers/prevention/effectiv.html to check out "What type of hazards do we look for in a workplace?"
- Do an online search of "workplace hazards."
- Talk to parents and other experienced workers about hazards in their workplace.
- Talk to a member of the Joint Occupational Health and Safety Committee at their school or workplace.

(2) Hazard Control Search

90 minutes, worth 30% Essential Skills – 2, 3, and 7

What are competitors required to do for this activity?

- Competitors will be given a brief orientation to the Hazard Control Search, and a booklet to be completed and handed in by the end of the 90-min time slot.
- Competitors will visit at least <u>two</u> other competition sites of their choosing. They will use these two sites to answer the assigned questions on hazard control (found in the booklet).
- Competitors will observe, listen, take notes, and ask questions in order to gather information on hazard control at the competition sites.
 Note: Competitors should only ask questions at other competition sites when appropriate (i.e., do not be disruptive of other competitions/ competitors/ judges).
- Competitors will use the booklets to record both initial information gathered (notes, diagrams, etc.), as well as final responses to hazard control questions. Only final responses will be marked. Questions must be answered for each of the two sites visited.
- Competitors will be responsible for returning to the Workplace Safety competition site anytime within the 90-min time limit to complete and hand in their booklet.

How will competitors be marked?

- Competitors will be marked on their ability to gather information on hazard control, as demonstrated in the written answers they provide in their booklets.
- Marks will be awarded on the completeness of their answers, as follows:

Question	Potential Score (for each site)
1. What are four hazards associated with this type of	work? 4
2. What are three controls you observed at this comp	petition site? 3
3. Provide a detailed written description of one of the observed, explaining how it works to control the h	
4. Provide a detailed diagram of the control describe	d in Question 3. 2

5. Which type of hazard control is described in Questions 3 and 4 (e.g.,	1
Engineering control, Administrative control, or PPE)?	
6. List one challenge associated with the hazard control described in	1
Questions 3, 4 & 5	
Subtotal	15
Total (for 2 competition sites visited):	30

Example : Competition site observed is <u>Welding</u>

Question	Answer	Maximum Marks
1. What are four (4) hazards associated with this type of work?	Ergonomic (MSI), exposure to UV light, toxic fumes and gases, heat/ fire	4
2. What are three (3) controls you observed at this competition site?	Local exhaust ventilation, PPE, appropriate rest/breaks	3
3. Provide a detailed written description of one of the controls you observed, explaining how it works to control the hazard.	Local exhaust ventilation captures contaminants at, or very near, the source and exhausts them outside. It is used to provide a continuous supply of fresh outside air. It can maintain temperature and humidity at a comfortable level, reduces potential fire or explosion hazards, and removes or dilutes airborne contaminants. The system consists of a hood (also known as the air intake area), ductwork that is used to move air from one area to another, an air cleaner, an air mover (or fan) to bring in outside clean air and exhaust the indoor contaminated air, and a discharge stack to exhaust the contaminated air.	4
4. Provide a detailed diagram of the control described in Question 3.	Air cleaner Hood Duct Air mover	2
5. Which type of hazard control is described in Questions 3 and4? (Engineering control, Administrative control or PPE?)	Engineering	1
6. List one challenge associated with the hazard control described in Questions 3, 4 & 5.	If there is a buildup of contaminant in the system, particularly in the air cleaner, the system may not be as effective, and the worker may still be exposed to the contaminant.	1
		15

What might competitors do to prepare for this activity?

To prepare for this activity, competitors may wish to learn about hazard control by exploring some of the recognized OHS websites. Such websites include (but are not limited to):

- Workers Compensation Board of PEI website <u>http://wcb.pe.ca/Workplace/Resources</u>
- Canadian Centre for Occupational Health and Safety <u>www.ccohs.ca</u>
 - o <u>http://www.ccohs.ca/oshanswers/hsprograms/hazard_control.html</u>
 - o http://www.ccohs.com/oshanswers/hsprograms/hazard_risk.html
- Canadian Society of Safety Engineering <u>www.csse.org</u>
- Associations for specific occupations (construction associations, electrical associations, etc.)

Competitors may also wish to look at the list of other competition sites that will be at the Holland College Waterfront campus on the day of competition, and research some of the types of hazard controls that those competition sites are likely to have.

(3) OHS Presentation (Toolbox Talk)

90 minutes (Preparation) + 5-7 minutes (Delivery), worth 35% Essential Skills – 2, 4, 5, 6, and 9

A Toolbox Talk (or Safety Share), is an informal meeting that focuses on safety topics such as workplace hazards and safe work practices. These meetings are normally conducted in person at the job site prior to starting a work shift.

What are competitors required to do for this part of the competition?

- Competitors will be assigned by random draw a workplace safety topic (topics provided on Competition Day)
- Competitors will develop a 5-7 minute Toolbox Talk (presentation) around their topic
- Competitors will do an internet search of the topic. They will use a template (provided on Competition Day) to outline the key points to be communicated during the Toolbox Talk. This template will be part of the overall marking for the OHS Presentation.
- The Toolbox Talk will cover:
 - Introduction (definition of topic, relevance/importance, content to be covered)
 - Common hazards associated with topic (& what could happen as a result of the hazards)
 - P.E.I. OHS Regulations (*discuss at least 2 Regulations that relate to topic*)
 - Recommendations (best practices for eliminating or minimizing hazards)
 - Conclusion (summary of key points/take-aways)
- Competitors will have the use of computers <u>only to research</u> their presentations; the talk itself will be delivered without presentation software/ technology (i.e., no Powerpoint, Googleslides, etc.).
- At their scheduled time, each competitor will present their 5-7 min Toolbox Talk to the judge(s) and a subgroup of fellow competitors so that it simulates a supervisor or OHS professional giving a toolbox talk to a group of employees.

How will competitors be marked?

- Competitors will be marked on the structure and content of the presentation they develop (including the information provided on their Toolbox Talk template).
- Competitors will be marked on how well they are able to communicate the information they have prepared.
- See Presentation Scoring Guide information, below.

Presentation Scoring Guide

[1–3]	UNSATISFACTORY/ NEEDS IMPROV	EMENI		[4–6] SA	TISFA	CTORY [7–9] GOOD [10] EXCELLENT
		1 – 3	4-6	7-9	10	COMMENTS
.e	Completed Toolbox Talk template (including list of reputable sources)					0 sources listed = unsatisfactory/ needs improvement 1 source listed = satisfactory 2 sources listed = good 3+ sources listed = excellent *Sources must be <u>in addition to</u> the P.E.I. OHS Regulations
Research	Consulted the P.E.I. OHS Regulations (2 Regulations mentioned)					0 Regulations mentioned = unsatisfactory/ needs improvement 1 Regulation mentioned = satisfactory 2 Regulations mentioned = good/ excellent
	Introduction (defined topic/ importance of topic, content to be covered)					
Content	Outlined common hazards & what could happen					1 hazard/consequence mentioned = unsatisfactory/ needs improvement 2 hazards/consequences mentioned = satisfactory 3 hazards/consequences mentioned = good/ excellent
Presentation Content	Outlined recommendations / best practices for eliminating or minimizing hazards					1 recommendation/best practice = unsatisfactory/ needs improvement 2 recommendations/best practices = satisfactory 3 recommendations/best practices = good/ excellent
Pres	Presented information in a sequential and organized manner					
	Conclusion (summary, key points, take-aways)					
	Spoke clearly and projected well					
Delivery	Made eye contact and engaged with audience					
De	Added content (statistics, personal stories, demonstrations, diagrams, other visual, etc.)					No added elements to enhance presentation content = unsatisfactory/ needs improvement One added element = satisfactory Two or more added elements = good/ excellent
Total						/ 100 pts [/ 34 pts]
L						[/ 34 pts]

What might competitors do to prepare for this activity?

To prepare for this activity, competitors may wish to:

- Familiarize themselves with Toolbox Talks/ Safety Shares by doing an internet search for examples
- Familiarize themselves with the <u>P.E.I. OHS Regulations</u> (follow link) & see attached Index (p.7-8)
- Practice carrying out online searches of various workplace safety topics (see attached Index for example topic areas)
- Practice developing a Toolbox Talk on a workplace safety topic, using the list of topics to be covered and/or scoring rubric (p.4-5)
- Explore some of the recognized, reputable OHS websites:
 - Provincial/territorial workers compensation boards <u>www.awcbc.ca</u>
 - Canadian Centre for Occupational Heal and Safety <u>www.ccohs.ca</u>
 - Canadian Society of Safety Engineering <u>www.csse.org</u>
 - Associations for specific occupations (construction associations, electrical associations, etc.)

Occupational Health and Safety Regulations

Access to Workplaces (Part 15)	30
Acids, Caustics and Hot Materials Protection (Part 45)	102
Agricultural Operations (Part 1)	4
Asbestos (Part 49)	
Bins and Hoppers (Part 14)	30
Bracing and Supports During Construction (Part 18)	
Chains, Slings and Wire Rope (Part 46)	104
Confined Space (Part 13)	27
Definitions and Applications (Part 1)	
Demolition (Part 27)	
Drinking Water (Part 3)	7
Dry Bulk Storage (Part 43)	
Electricity (Part 36)	69
Excavations, Trenches and Construction (Part 12)	
Explosive – Actuated Tools (Part 28)	50
Explosives (Part 26)	40
Extremes of Temperature (Part 42)	92
Eye and Face Protection (Part 45)	101
Fencing and Barricades (Part 20)	32
Fire Protection (Part 25)	39
First Aid (Part 9)	15
Foot Protection (Part 45)	102
Forest Operations (Part 41)	
Formwork (Part 19)	
General (Part 51)	123
Hand Tools and Portable Power Tools (Part 29)	50
Hand Protection (Part 45)	102
Handling and Storage of Materials (Part 43)	92
Hazardous Liquids (Part 43)	95
Head Protection (Part 45)	101
Hoisting Apparatus (Part 34)	65
Hoists (Part 35)	69
Housekeeping – General Provisions (Part 5)	
Illumination (Part 6)	10
Ladders (Part 23)	

pg.

Lifejacket – Personal Flotation Device (Part 45) 100
Lunch Rooms or Eating Areas (Part 4)8
Mechanical Safety (Part 30) 53
Noise (Part 8) 12
Non-ionizing Radiation (Part 10) 21
Personal Protective Equipment (Part 45) 100
Pile Driving Equipment (Part 32) 61
Platforms, Runways and Ramps (Part 21) 32
Powered Mobile Equipment (Part 33) 61
Repairs to Machinery (Part 31)60
Respiratory Protection (Part 45) 103
Stairs (Part 22)
Storage Battery Rooms (Part 44)
Tanks and Vessels (Part 40)
Temporary Heat (Part 7)
Toilet and Washing Facilities (Part 2)5
Traffic Control (Part 50) 120
Underwater Diving Operations (Part 48) 106
Ventilation (Part 11) 22
Violence in the Workplace (Part 52) 123
Welding (Part 37)
Work in Compressed Air Environment (Part 47) 106
Working Alone (Part 53) 124

Fall	Protection	129
	Definitions and Application	131
	General Requirements	133
	Fall Arrest Systems	
	Guardrails	137
	Safety Nets	139
	Body Belts	139
	Temporary Flooring	
	Measures Required Where Risk of Drowning	

	a.	
Scaffolding		143

Workplace Harassment Regulations	161
Interpretation and Application (Part 1)	163
Responsibilities of Workers and Employer (Part 2)	164
Investigation (Part 3)	165

Workplace Hazardous Materials Information System Regulations	s (WHMIS) 167
Interpretation	171
Application	173
Requirements	
Worker Education and Training	
Labels and Other Identifiers	
Workplace Labels	
Pipes, Vessels and Conveyances	
Placards	
Laboratories	
Safety Data Sheets	
Employer Safety Data Sheet	179
Availability of Safety Data Sheets	
Confidential Business Information	
Claim for Exemption	
Interim Exemption	
Exemption	
Confidentiality of Information	
Confidentiality of information	