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2018

# SCNC

SKILLS CANADA  
NATIONAL COMPETITION

# OCMT

OLYMPIADES CANADIENNES  
DES MÉTIERS ET  
DES TECHNOLOGIES



SkillsCompétences  
Canada  
Edmonton2018

TEST PROJECT / PROJET D'ÉPREUVE

# WORKPLACE SAFETY SÉCURITÉ SUR LE LIEU DE TRAVAIL

SECONDARY /  
NIVEAUX SECONDAIRE



## Overview:

The purpose of this document is to provide competitors with the additional details of the three activities that make up the 2018 Workplace Safety National competition.

There are three activities in the Workplace Safety competition:

1. Hazard Identification
2. Hazard Control Search
3. Occupational Health and Safety (OHS) Research / Presentation

The activities have the following weight:

- |                                  |     |
|----------------------------------|-----|
| 1. Hazard Identification         | 48% |
| 2. Hazard Control Search         | 32% |
| 3. OHS Research and Presentation | 20% |

This document contains an outline of the expectation of each activity and how they will be scored.

### ***What might competitors do to prepare for these activities?***

To prepare for these activities, competitors may wish to:

- Use this link [http://www.ccohs.com/oshanswers/hsprograms/hazard\\_risk.html](http://www.ccohs.com/oshanswers/hsprograms/hazard_risk.html) 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?” “What is a hazard control program?”, “What are the main ways to control a hazard?”, and “What are some of examples of these controls?”
- Do an online search of “workplace hazards” and “workplace controls”.
- Talk to parents and other experienced workers about hazards and what controls can be used for those hazards in their workplaces.
- Talk to a member of the Occupational Health and Safety Committee at their school or workplace.

### **Assistance / Questions:**

Should competitors have further questions, please contact the Skills/Compétences Canada national secretariat for any questions or concerns: Marilou Leduc (mariloul@skillscanada.com).



## Activity 1: Hazard Identification

Value: 48% of final mark

### Overview

- Each competitor will receive a mock workplace orientation prior to starting this activity.
- Each competitor will be provided with a Hazard Identification activity answer booklet.
- Competitors will be given sixty (60) consecutive minutes to complete this activity.
- The competitor must identify twelve (12) hazards found in the mock workplace which will be revealed at the time of the competition.
- There will be more than one competitor in the mock workplace at any one time.
- No electronic devices may be used for this activity.
- Competitors are required to wear CSA grade 1 safety boots or shoes, hard hat, safety glasses, safety vest, hearing protection, and long pants covering the ankle with their provincial / territorial competition shirt.

### How will competitors be marked?

For each hazard identified, the competitor will earn:

- Up to 2 marks for correctly identifying the hazard.
- Up to 1 mark for correctly explaining why it is a hazard, or “what could happen.”
- Up to 1 mark for correctly describing what must be done to control the hazard, thus preventing injury or illness.

Example:



<b>What is the hazard?</b> Use of a consumer food bottle for a chemical and not a proper WHMIS label.	/2
<b>What could happen?</b> Worker could mistake bottle, chemical could melt plastic.	/1
<b>What needs to be done to control the hazard?</b> Retrain workers on WHMIS and what information needs to be on a workplace label.  Ensure proper containers are available to decant hazardous liquids into a proper container.	/1



## Activity 2: Hazard Control Search

Value: 32% of final mark

### Overview

- Each competitor will be provided with a Hazard Control activity answer booklet.
- Competitors will be given three (3) consecutive hours (180 minutes) to complete the hazard control activity.
- More than one competitor will be participating in the hazard control activity at any one time.
- The competitors will be escorted to observe four (4) competitions, pre-determined by the NTC.
- Judges will ensure that each competitor has their allotted time.
- Clipboards will be provided for use during this activity.
- Competitors are required to wear CSA grade 1 safety boots or shoes and long pants covering the ankle with their provincial / territorial competition shirt.

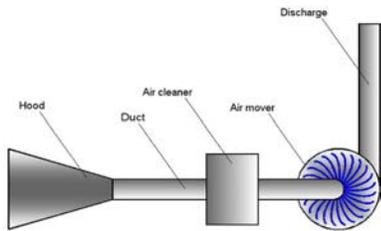
### How will competitors be marked?

- Competitors will be marked on their ability to gather information on hazard control, as demonstrated in the written answers they provide in their booklets.
- When collecting information on hazard control, competitors will be expected to use a combination of observing and asking questions, always be respectful of the fact that a competition is going on, and that distractions to the contest competitors will not be permitted. Observation must be done from outside the competition site.
- Marks will be awarded on the completeness of their answers, as follows:

#	Question	Maximum marks
1	What are four (4) hazards associated with this type of work?	2
2	What are three (3) controls you observed at this competition site?	1.5
3	Provide a detailed written description of one of the controls you observed, explaining how it works to control the hazard.	1.5
4	Provide a detailed diagram of the control described in Question 3.	1.5
5	Which type of hazard control is described in Questions 3 and 4? Is it Engineering, Administrative or PPE?	0.5
6	List two (2) challenges associated with the hazard control described in Questions 3, 4, and 5.	1

### Example: Welding

Competition site observed is Welding.

#	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	2
2	What are three (3) controls you observed at this competition site?	Local exhaust ventilation, PPE, appropriate rest/breaks	1.5
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.	1.5
4	Provide a detailed diagram of the control described in Question 3.	 <p>The diagram illustrates a local exhaust ventilation system. It consists of a funnel-shaped hood on the left, connected to a horizontal duct. The duct leads to a rectangular air cleaner unit. From the air cleaner, the duct continues to an air mover (fan) represented by a blue circular fan. Finally, a vertical discharge stack extends upwards from the air mover to exhaust the air outside.</p>	1.5
5	Which type of hazard control is described in Questions 3 and 4? Is it Engineering, Administrative or PPE?	Engineering	0.5
6	List two (2) challenges associated with the hazard control described in Questions 3, 4, and 5.	<ol style="list-style-type: none"> <li>1. 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.</li> <li>2. Regular and routine testing is needed to identify problems early and implement corrective measures.</li> </ol>	1



### Activity 3: OHS Research / Presentation

Value: 20% of final mark

#### Overview

One method of communicating health and safety information is through presentations.

For this activity, the competitors will be assigned one hazard from the mock workplace by random draw at the time of the activity. A print and electronic copy of the hazard selected through random draw at the time of the activity.

Once the competitor has been provided with the hazard to complete this activity, the competitor will:

1. **Develop** a tool box talk using the template that will be provided,
2. **Prepare** a 5-minute oral presentation on the tool box talk, and then
3. **Present** the tool box talk to a panel of judges so that it simulates a supervisor or OHS professional conducting a tool box talk to a group of employees.

Please note: no presentation software will be used. Laptops/Tablets will only be used for research and preparation of the tool box talk.

This activity has **two parts**:

- Part 1: 2.5 hours (150 consecutive minutes) allowed for the random draw to determine which hazard they will research, complete the research, develop the tool box talk and then prepare their presentation.
- Part 2: 1.5 hours allowed for presentations of the completed tool box talk information.

Each competitor will be allowed to set up / prepare prior to their presentation.

Electronic devices are required for this activity – competitor's may use their own tablets / laptops to research and develop the tool box talk. Headphones / ear buds are permitted

Each competitor will be provided with the tool box talk template at the time of the activity.

Competitors will be using their own laptop / table to create their tool box talk. Refer to the Contest Description - section 4.2 Equipment provided by competitor for more information.

While each competitor will be developing a tool box talk individually, competitors will present their tool box talk to a panel of judges so that it simulates a supervisor or OHS professional conducting a tool box talk to a group of employees.

### Scoring

1. Tool Box Talk 10 marks
2. Presentation 10 marks

Total 20 marks

### Tool Box Talk 10 marks

Content	Possible Marks
Tool Box Talk completed	2
What is the hazard selected	1
Why is it a hazard / potential harm	1
Hazard rated	1
Training requirements identified	1
Legislation identified	1
Corrective Action identified	2
Resources referenced	1

### Presentation 10 marks

- Each competitor will deliver a 5-minute presentation on their tool box talk that has been researched and prepared on site.
- The order of presentation will be assigned by random draw at the time of the presentations.
- Competitors will be judged on how well they organize and communicate the key points of their tool box talk. Both content and delivery will be scored.

Criteria	Possible Marks
Content	2
Organization	1
Presence	2
Knowledge of subject	2
Speaking style / Delivery	2
Overall impression	1