GRAYMONT

SAFETY CHALLENGE

TOOL KIT

2017

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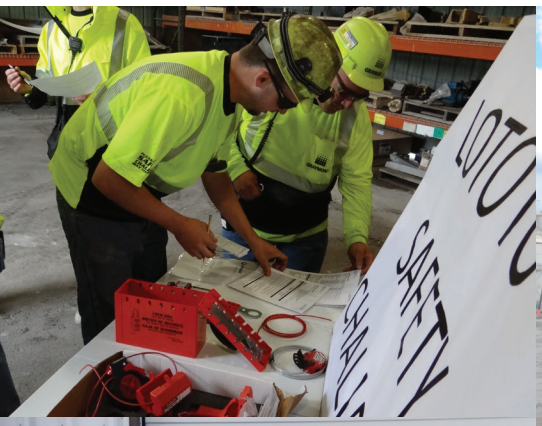
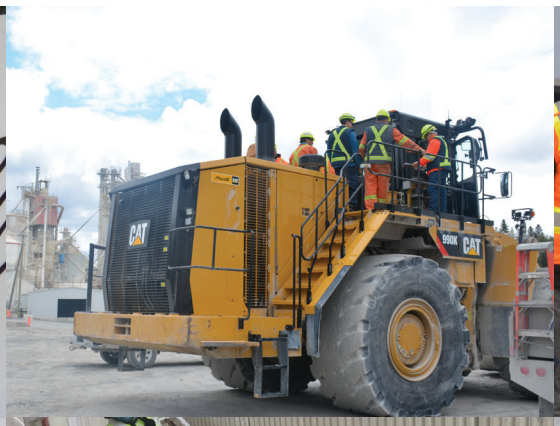
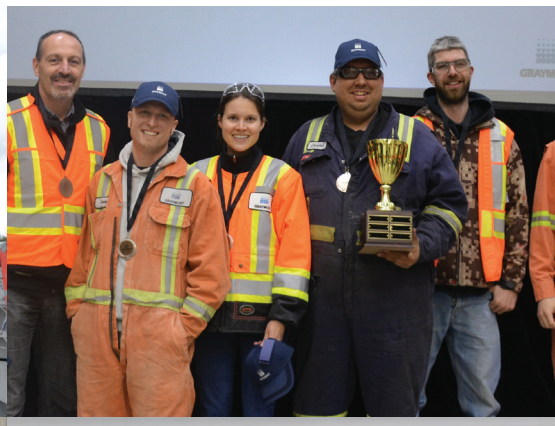
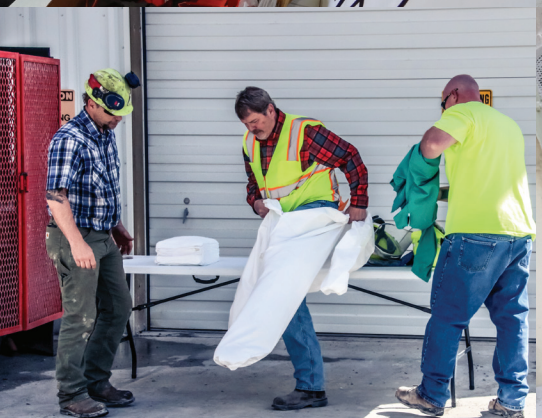
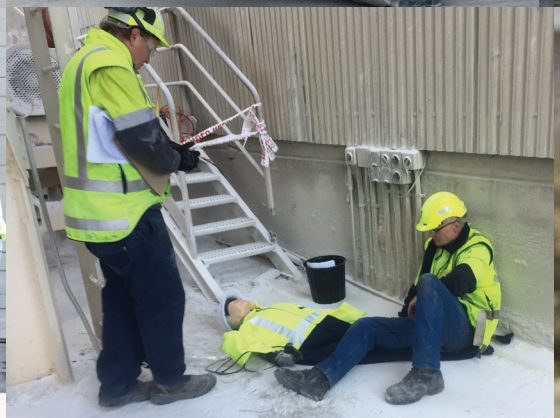
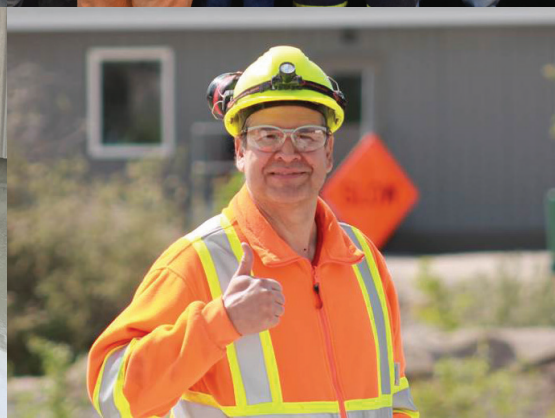
GRAYMONT
SAFETY
CHALLENGE

Background

The idea of the Safety Challenge sprang from Graymont's on-going search for innovative solutions to help combat complacency and promote a positive safety culture. Employees at the company's Bedford, Quebec lime plant came up with the notion of utilizing peer-led, hands-on simulations as a training tool. Furthermore, they reasoned, why not structure the simulation exercises as a competition, to make it even more fun for participants?

Thus was born the Graymont Safety Challenge, first staged at Bedford in 2013. The program proved to be both popular and highly effective right from the start, and has since evolved into a key Graymont-wide training tool.

This Tool Kit is a comprehensive source of background information, instructions, tools and tips to help you plan and implement a successful Safety Challenge program.

Executive Summary

The Safety Challenge essentially involves rival cross-functional teams of employees competing to see which squad can best complete a series of hands-on, safety-related challenges. Each team's performance in the various exercises is scored by judges. Following every exercise, the judge and team members engage in a de-briefing to discuss what the team did well and where there might be opportunities for improvement. Crucially, the de-briefings routinely include a review of the key points of learning central to the particular exercise, thereby hammering home the lessons learned. At the end of the day, the teams' scores are tallied up and the side with the most points is declared the champion.

Main goals of the Safety Challenge program include:

- **Combatting complacency with respect to health and safety risks**
- **Providing a platform for peer-led safety training**
- **Enhancing information retention and employee buy-in with an innovative, hands-on approach (learn by doing)**
- **Promoting a positive and robust safety culture**
- **Building workplace camaraderie**
- **HAVING FUN!**

In addition to its proven effectiveness, the Safety Challenge strong points are that it is primarily peer-led and of a scope and scale well within the organizational capabilities of most operations. That said, however, adequate advance planning as well as strong support from senior management and Health & Safety Departments are prerequisites for success.

Step

Establish a timeframe and schedule

Determine a date (dates) on which the Safety Challenge is to take place, bearing in mind that you will essentially need to set aside a full day at each location to stage the exercise. The precise timeframe and schedule will, of course, vary, depending on the number of sites and employees involved. At Graymont, we have developed a coordinated approach that enables us to stage the Safety Challenges at approximately 20 sites over a one-week period each May.

For companies with several facilities, staging the safety challenges near simultaneously can help create a corporate-wide momentum on Safety, while enabling the planning committees and organizers at multiple sites to work together on some of the more-complex exercises in order to get the best value for the time and resources expended. For instance, a single video that challenges participants to spot unsafe practices can be developed and used at numerous sites.

Depending on the resources available, the number of sites involved and the amount of coordination required between the operations and the management levels of your organization, we suggest you start planning at least a few months in advance. At Graymont, we begin working in December of the year before on Safety Challenge communications and detailed planning for the May events.

Step

Spread the word

Very early in the process, it is important to start communicating all relevant information to key stakeholders who will be involved in the Safety Challenge, particularly facility managers and Health and Safety (HS) personnel.

As a starting point, you should:

- Approximately four months before the event, inform facility managers (by memo or other means) that the exercise will take place on a specified date, and invite them to attend an information session to learn more about the Safety Challenge concept and tools.

- Engage with members of the senior management team to ensure that they are well informed about – and supportive of – the Safety Challenge, and what resources will be required.

- Meet with local and/or regional HS resources, as may be the case, to explain their respective roles and responsibilities vis-à-vis the Safety Challenge.

Tip: Involving senior managers in the event as judges, observers or simply participants, is a great way to let them see first-hand what can be achieved with the Challenge, while demonstrating a strong personal commitment to safety.

Step

Build your team

The team structure outlined here corresponds to what is used at Graymont. It is tailored to the needs of staging the Safety Challenge at some 20 facilities during a single week, with the support of both corporate and regional HS resources. The way you build your team will obviously need to reflect the size and structure of your particular organization, and will no doubt differ in some respects from guidelines set out below.

Safety Challenge Coordinator

Begin by naming a Safety Challenge Coordinator, who will be responsible for leading the initiative across your organization. This is a crucial and demanding role, particularly during the first year of a program, in terms of providing the requisite guidance and oversight to the various sites involved. However, once the program is established and the teams at the facilities understand what is entailed, the Coordinator's role becomes less time-consuming.

Safety Challenge Regional HS resources

Depending on the number of sites involved, it might be necessary to provide additional HS resource(s) to support the facilities. At Graymont, this responsibility falls to regional HS employees, who help with Safety Challenge scheduling and co-ordination. Here again, this role –if warranted – should be tailored to the specific needs of your organization.

Facility Champions

A Safety Challenge Champion must be appointed at each participating facility. This person will be responsible for leading the local Planning Committee in the development of the scenarios, schedules and logistics required for the Safety Challenge at their site. In collaboration with committee members, he or she will also oversee the recruiting and training of qualified judges, exercise leaders, observers and other members of the event staff. Ideally, the Facility Champion's regular job function will be related to health and safety, and he or she will be employed at the facility in question.

Planning Committee

Each site has a Planning Committee, chaired by the Facility Champion, which is charged with carrying out detailed on-the-ground planning and co-ordination for the Safety Challenge at their location. The committee's responsibilities range from developing the required exercise scenarios, scoring sheets and schedules to coordinating logistics on the day of the event, welcoming visitors, organizing lunch and choreographing the awards ceremony. As well, committee members often take on key supporting roles as judges, exercise leaders or even actors during the exercises, and are also tasked with taking photos and/or videos of the competitions. Although Planning Committee members can come from different departments, at Graymont most are drawn from the ranks of the facility's Health and Safety Committee.

Tip: Planning Committees from two or more sites can pool their resources and work together to develop some of the more complex Safety Challenge scenarios, which may involve, for example, shooting videos or developing theatrical-type props.

Step

Detailed planning

Once your team is in place, we recommend that detailed planning for the Safety Challenge commence approximately two months before the event(s) are scheduled to take place.

Choosing the exercises

A logical starting point is choosing which exercises will be included in the Challenge events at each site – decisions that are left primarily to the local Planning Committees, working in collaboration with the Safety Challenge Coordinator and other HS resources.

Although the number of exercises/ scenarios can vary, in Graymont's experience we have found that including five different scenarios provides a good balance in terms creating a high level of interest and sustaining teams' competitive spirit throughout the event, while being manageable from a cost and logistics perspective.

The exercises can take many different forms and focus on just about any safety issue imaginable, time and resources permitting. Commonly featured topics include; Hazard Identification and Mitigation; Lock-out/ Tag-out and Working in Confined Spaces scenarios; and Emergency Responses to sudden fire, accident and health threats, to mention just a few examples.

The key here is to choose the scenarios and exercises that are most relevant to your organization's particular HS aims and objectives, and which address priority issues at the location in question. Exercises can be as simple or as complex as you see fit to ensure optimal learning.

Tip: Bear in mind that the Safety Challenge is also meant to be fun – providing an opportunity to learn in a lively, non-conventional environment. Don't be afraid to think outside the box!

Having decided which scenarios will be included in their particular event, the Planning Committee must also ensure the availability of appropriate scorecards or scoresheets for use by the judges in rating the performance of the teams in the various exercises. Every exercise needs its own scoresheet.

(A comprehensive list of scenarios – and the relevant scoring systems – can be found in Appendix 1 at page 14)

Selecting participants

The facility Planning Committees must decide early in the process which personnel – and how many – are going to participate in the Safety Challenge at their respective sites. The aim is to involve as many employees as possible, while ensuring that critical production operations can continue.

Wherever feasible, we recommend that you halt the main operations for a few hours to enable the majority of employees at a given facility to participate. Of course we are aware that, as is the case for lime production, it is sometimes simply not possible to completely shut things down for a short period of time: this means, for example, that kiln operators scheduled to be on duty on the day of the exercises will have to remain at their work stations. Accordingly, at Graymont we ensure that the operators on duty rotate each year, so they all have an opportunity to participate in the Safety Challenge every second year.

Safety being everybody's business, it is important to involve as many people as possible, including office and administrative employees. If some of your locations or facilities have too few employees to warrant staging their own Safety Challenge, invite them to participate at another location.

As mentioned elsewhere, the involvement of members of upper management is also essential: it brings added credibility and a higher profile to the event.

Once the Planning Committee has determined the approximate number of participants at its location, this information should be passed along to the appropriate HS resource person, so they can plan accordingly with respect to procurement needs, e.g. catering and the acquisition prizes and trophies.

Procurement

Based on our experience at Graymont, organizers of the Safety Challenge will find that, with respect to the exercises themselves, they will need very little material that is not already available at your facilities.

However, there are undoubtedly areas where you will need to contract with outside suppliers. Accordingly, we suggest that you assess your procurement needs and act well in advance to secure the required goods and services.

For the awards ceremony, you will need trophies for the Safety Challenge winner teams at each site and, possibly, other tokens of recognition for participants. At Graymont, this practice varies somewhat from site to site. Some facilities like to award individual medals to members of the winning team in addition to the trophy, while others distribute small gifts or mementos to all participants – typically an embossed t-shirt, cap or mug commemorating the event – to emphasize the team-building aspect of the Challenge.

In any case, when it comes to prizes and trophies, it is generally more efficient and less costly to make a single purchase for the whole organization – which also ensures a degree of uniformity across facilities.

Tip: At Graymont, we use the kind of trophies on which you can add plaques each year bearing the names of the winning team and team members.

Event schedules

Precise, carefully constructed scheduling is crucial to ensuring that your Safety Challenge event runs smoothly and on time, for maximum impact.

At Graymont, we generally adhere to a tried-and-true formula that includes five different 45-minute sessions, each focused on a different scenario, as shown in the Sample Schedule table.

Proceedings typically get under way at 7:45 a.m. with a welcoming meeting attended by all the participants, event staff and guests, to review the day's program and remind everyone of the safety rules that apply. Some facilities also like to seize this opportunity to conduct group stretching exercises, to ensure that everyone is feeling fit and ready to start the day strong. Teams then proceed to the first stations at 8:00 a.m. and the games begin. At 9:30 a.m., following completion of the first two sessions, we take time out for a 15-minute coffee break. The competition resumes at 9:45 a.m., with back-to back Sessions 3, 4 and 5, and winds up at approximately 11:30 a.m. The Awards Ceremony and lunch follow.

Sample Schedule	
7:45 am	**Welcome Meeting**
8:00 am	**Teams proceed to first stations**
8:00 am	**Session 1**
8:45 am	**Session 2**
9:30 am	**Coffee break**
9:45 am	**Session 3**
10:30 am	**Session 4**
10:45 am	**Session 5**
11:30 am	**Awards ceremony**
12:00 pm	**Lunch**
12:30 pm	**Back to work**

While planning the exercises and working out your schedule, keep in mind the following key considerations:

- Make sure the actual exercises are shorter than the 45 minutes allotted for each session, in order to allow ample time for de-briefing and questions, which are a crucial element of the learning experience.

Tip: Identify in advance a couple of relatively quiet and easily accessible spaces where de-briefings can be held.

- Remember that if any one exercise runs too long, you risk delaying the schedule for all the competing teams. On the other hand, exercises that are too short can result in lengthy waiting periods that can cause participants to lose interest.

- Don't forget to also build into your schedule the time necessary to move from one exercise to the other – and make it clear to participants that the rotation between exercises has to be done simultaneously by all the teams at the time stipulated to avoid bottlenecks.

- Try to ensure that exercise locations are dispersed throughout your facility, so that the teams are not distracted by another squad doing a different exercise nearby.

- To avoid confusion and unnecessary delays, provide all participants with printed single-sheet schedules clearly indicating the time and location of each exercise (see example in appendix 2 at page 25).

Site preparation

In order to facilitate optimal participation and ensure that the Challenge exercises can be carried out safely and smoothly, we recommend adhering to the following procedures:

- All non-critical production as well as shipping and receiving operations should be shut down during the Challenge.
- Suppliers, customers and freight contractors ought to be informed in advance that they will not have access to the site during the Challenge.
- Select and prepare an appropriate space – lunch rooms and cafeterias often work well – where everyone will gather for the Welcome Meeting at the beginning of the day, at coffee breaks, at lunch and for the Awards Ceremony.
- If visitors and guests will be participating in the Challenge, be sure to post signs directing them to parking and to the location of the Welcome Meeting.
- Make sure that 'absence messages' for critical voicemail and email communications are arranged in advance.

Tip: No learning on an empty stomach! Ensure that an ample supply of food and beverages is available throughout the day for participants and event staff.

Step

Let the Competition Begin!

Pre-Challenge huddle

On the day of the event, immediately prior to the Welcome Meeting, the Facility Champion, Planning Committee members, judges, emcees and other event staff should meet briefly to make sure that everyone is aware of and thoroughly understands their respective roles.

Welcome meeting

All participants and members of the event staff gather at a predetermined location for the Welcome Meeting, where the emcee explains the Safety Challenge rules and reviews the agenda for the day.

Participants are then divided into teams (whose rosters are determined in advance by the Planning Committee) and asked to choose a team name. Even the picking of names can be made part of the competition, with teams awarded bonus points for originality, relevance to safety issues, etc.

Tip: Some facilities like to kick off the Challenge with a surprise evacuation exercise, as an effective means of getting participants to proceed to the assembly point for the Welcome Meeting. It also helps put participants in a 'safety' mindset.

Each team – and, ideally, every member – is issued a sheet of paper listing the names of team members and setting out the schedule for the day. The schedule contains the list of the various scenarios and stipulates the precise time and location of each exercise for the team in question, in order to avoid confusion and delays (see example in appendix 2 at page 25).

At the appointed start time, participants are dispatched to the first exercise location indicated on their schedules, where they will be met by an exercise leader, one or more judges and, possibly, observers.

The competition

Upon arrival at each location, an Exercise Leader will explain the object of the exercise in question, describe the scenario (where required) and make clear what is expected of the competitors. The team is then given the green light to perform the assigned task to the best of their collective abilities, within the allotted time.

Given that the teams are composed of employees from different departments and hierarchical levels, the level of knowledge and experience with the subject of an exercise can vary widely among team members. Of course, that is all part of the game: the idea is to encourage participants to share their knowledge to help achieve the best

performance possible as a group. Questions from less experienced employees can often trigger novel ideas or bring a fresh perspective to the Challenge.

Throughout the exercise, the judge(s) carefully observe events and grade the participants on a scoresheet against criteria tailored specifically to the scenario in question. Upon completion of an exercise, the judges engage in a de-briefing session with team members, pointing out what they did well and where they might have performed better, thereby reinforcing key learning points. A thorough de-briefing that encourages questions and facilitates a lively exchange of ideas and views is critical to the success of the Safety Challenge, in terms of identifying best practices and driving continuous improvement in safety performance.

Following the de-briefing, the team moves on to the next exercise station, as set out in their schedule.

Tip: Be sure to task several members of your event staff with responsibility for shooting photographs and video. They make very good souvenirs to share with Challenge participants, and can also be used for future training purposes and safety-awareness campaigns.

Closing and Recognition

Once all the exercises have been completed, competitors, event staff and guests re-assemble at a predetermined location for the Awards Ceremony and anxiously await word as to which team came out on top. The judges add up the scores accumulated during the day by each team and the side with the most points is declared Safety Challenge Winner.

The presentations of trophies and/or other tokens of recognition follow.

In Graymont's experience, a group lunch can be a great way to conclude the event in a congenial environment, providing an opportunity to celebrate the winners and show recognition and appreciation for all the participants. Some facilities like to add a poignant note to the proceedings, by inviting a speaker to recollect their memories of a serious workplace accident or incident and how it impacted his or her life and family.

The entire activity typically lasts from five to six hours.

Step

Post-mortem

This step can be accomplished right after the Safety Challenge or when you start planning for next year's program

The idea is for facilities to share with others what went well, what exercises were the most appreciated and what they plan on doing differently next time. Facilities are also encouraged to make available their best scenarios, along with related scoresheets etc., for other facilities to use.

SCENARIO EXAMPLES WITH SCORESHEET
APPENDIX 1

GRAYMONT SAFETY CHALLENGE

The scenarios provided in the following pages were developed for specific Graymont facilities. Given that regulations and standards vary from location to location and operation to operation, it is important to adapt the scenarios and scoresheets most appropriate for your particular facility.

GRAYMONT SAFETY CHALLENGE

Confined Space/Lockout-Tagout (LOTO)

Activity Judge: _____

Team Name: _____

Scenario:

1. You are working in the mortar plant and need to enter the blender to clear a sizeable amount of built-up material.
   a. The material got wet and there is a sizeable amount of material build-up on the side walls.
   b. You must enter the confined space to clean out the build-up.
   c. All members of the team will be working together on this task.
2. You need to take all necessary steps to perform the task safely.
3. What is the first thing you should do?

(**N.B.** All supplies and paperwork to properly complete this challenge are located on a nearby table.)

Equipment required: Paperwork for confined space and LOTO (permits, procedures, etc.), individual locks, harnesses (including one with a defect), lifelines and gas detectors

Scoresheet:

Description	Points Available	Score	Judge's Notes
Confined Space ID Sheet ● Reviewed Confined Space ID Sheet as a team **(5 pts)** ● Determined that permit was required for entry **(5 pts)***	10		*If they determined no permit was needed, team should be redirected to the Confined Space ID Sheet. (Cleaning out a large build-up of material *does* require a permit.)
Machine-specific LOTO ● Machine-specific written procedure reviewed and followed **(5 pts)** ● All team members put on locks ○ **(5 pts)**** ● Team members reminded others to apply locks (**Bonus 1 pt)** ● Keys properly controlled **(5 pts)** ● Relieved air pressure according to LOTO procedure **(5 pts)**	21		**If all team members did not put on a lock as required, ask 'why not'? Putting on a lock before entering a confined space is crucial to reduce risk.
Confined Space Permit ● All applicable sections filled out properly **(2 pts)** ● All team members knew their assigned roles (attendant if required, entrant(s), entry leader) **(2 pts)** ● Harnesses and lifelines properly donned and attached **(5 pts)** ○ Performed harness inspection **(3 pts)** ○ Spotted broken buckle on defective harness **(3 pts)** ● Talked about needed paperwork and procedures **(5 pts)**	20		Ensure all elements of the permit are complete before the team moves on.

Air Monitoring ● Bump test completed **(5 pts)** ● Pre-entry reading completed **(5 pts)**	10		Entrants do not need to enter the space: once pre-entry testing is complete, the job is done.
Task Completed ● All team members removed their locks **(5 pts)** ● All tools and materials put back in place for next team **(5 pts)**	10		Whenever a task is complete, all tools used should be returned to proper storage location for the next worker.
FINAL SCORE	**71 (max)**		

Working from Heights

Activity Judge: _____

Team Name: _____

Scenario:

The Working from Heights scenario involves proper use of a high-lift to retrieve a team flag. Time permitting, this activity will also address calculating fall distance and deciding on the proper equipment.

Equipment required: High-lift, flag, harnesses and lanyards (at least one with a defect), a pre-used inspection document, guides for fall calculations

Scoresheet:

Description	Points Available	Score	Judge's Notes
High-lift Risk Assessment: ● Completed the risk assessment as a team	5		There should be a written task assessment.
Donning of Equipment: ● Pre-use inspection on harness and lanyard performed **(5 pts)** ● Found defective harness **(3 pts)** ○ Tagged defective harness out of service **(Bonus 2 pts)** ● Properly donned harness and lanyard, attached correctly **(7 pts)**	15 (+2)		If the team fails to perform a pre-use inspection, they should be prompted to do so. When prompting is required, no points should be awarded for this element.
Pre use inspection – mobile equipment: ● Pre-use inspection performed **(5 pts)** ○ Properly documented pre-use inspection **(3 pts)** ● Able to identify 7 main controls once in basket **(4 pts)**	12		Here again, if the team fails to perform a pre-use inspection, they should be prompted to do so. When prompting is required, no points should be awarded for this element.
Operating High-lift: ● Demonstrated proper technique	15		
Emergency lowering: ● Engine shut off ● Team members were able to use ground controls to safely lower the basket	10		Judge uses radio to call ground crew and tell them they must lower the basket with ground controls. Engine must be shut OFF…utilizing battery only!
Performed Fall Calculations: ● Scenario 1 – 3 pts ● Scenario 2 – 3 pts ● Scenario 3 – 3 pts	9		Provide guides to walk participants through the exercise, but team should be able to answer questions.
FINAL SCORE	**66 (+2) (max)**		

Fire Response

Activity Judge: _____

Team Name: _____

Scenario:

Participants are required to respond to a fire emergency in their department.

1. Walking through the plant, you come across a small fire. What is the first thing you should do?
2. Team members are urged to respond as they would in a real-life situation. (However, any radio communications are to be simulated).
3. Participants are required to recall and put into action their Emergency Response training.
4. Each participant will be given an opportunity to extinguish the fire.
5. An activity Judge will be at the scene describing events as they unfold. Participants who are unsure of the situation or have questions may seek clarification from the Judge.

Equipment required: radios, a container and sufficient fuel for a series of small controlled fires, fire extinguishers, stopwatch

Scoresheet:

Description	Points Available	Score	Judge's Notes
Activating the Alarm system ● Designate someone to call 911 **(5 pts)** ● Do an ALL CALL **(5 pts)** ● State the nature and precise location of incident **(5 pts)**	15		Ask if 911 should be called. If participants respond that they don't yet know, allow them ample time to assess the situation.
Assess the Situation ● Check to see if there are particular hazards that need to be addressed	5		
Individual members put out fire ● Team member 1 **(5 pts)** ● Team member 2 **(5 pts)** ● Team member 3 **(5 pts)** ● Team member 4 **(5 pts)** ● Team member 5 **(5 pts)** ● Team member 6 **(5 pts)**	30		Time each member to see how quickly they can extinguish fire. If they put out fire in under 5 seconds then they get 5 points – every second over 5 seconds deducts from the 5 points. ● If they can't put out the fire at all then they get minus 5 points.
Upon completion of the exercise, ask the following question: ● What must happen with the fire extinguishers after they have been used?	5		They need to be recharged **–** even if not empty.
FINAL SCORE	**55 (max)**		

Emergency Response

Activity Judge: _____

Team Name: _____

Scenario:

Information for Actors and Judges: In the scenario, Employee #1 (played by Actor #1) was performing some electrical work from a portable ladder in the coal mill building when he came in contact with live electrical wires. He is lying on the ground beside the ladder (unsecured, could fall off). Actor #2 will portray an electrician bystander (Employee #2), who will inform participants that Employee #1 was rewiring the screw conveyor and, when he asked the operator to bump-test the equipment, suddenly fell off the ladder to the ground. The wire is still live, so participants will need to request the help of the electrician (Employee #2) to disconnect power before proceeding with first aid.

Information for the team: As a team, you are about to take part in a scenario where someone will require first aid. Try to respond as you would in a real-life situation. An activity Judge will be at the scene describing the events as they take place. If you are unsure of the situation or have questions about what is happening, ask the Judge. And remember your First aid training! "CHECK, CALL, CARE".

As the scenario unfolds, the team is directed inside the coal mill room and encouraged to proceed with the task as they would in a real-life situation.

Equipment required: Electrical wires, fake AED (defibrillator), maintenance radios, portable ladder, fake blood, makeup

Scoresheet:

Description	Points Available	Score	Judge's Notes
CHECK - Check the scene (exposed wires beside the ladder/unstable): Check the patient: Ask for consent, check 'ABC's (Airway, Breathing, and Circulation) ● Look for hazards before attending to the patient **(5 pts)** ● Find the live wire before touching patient or structure. Finding unsecured ladder **(10 pts)** ● Call and wait for OK from electricians before attending patient. **(5 pts)** ● Ask for consent (Hi, I am … I am a first-aider, can I help you?) **(2 pts)** ● Check ABC **(2 pts)**	24		If in contact with live wire, participant becomes another patient. If walking under ladder, it falls on them and they become another patient.
CALL - The second critical step is to call for help: Designate someone to call 911**(5 pts)** ● Designate someone to meet EMS at the site entrance. **(2 pts)** ● Designate someone to fetch an AED defibrillator. (Ask the person who will retrieve it where it actually is.) **(3 pts)**	10		

CARE The patient will initially be unconscious but breathing, and with a pulse. After five minutes, the patient will gasp for air several times and stop breathing. CPR must be initiated and the AED will then be applied. CPR will continue until EMS arrives. ● If patient moved **(-2 pts)** ● Reassess ABC's after condition change (stop breathing) **(4 pts)** ● Start CPR, 30 compressions/ 2 rescue breaths until AED arrives **(3 pts)** ● Apply AED correctly when it arrives **(2 pts)** ● Restart CPR when prompted by AED. Continues until EMS arrives **(2 pts)**	11		
FINAL SCORE	**45 (max)**		

Hazard identification

Activity Judge: _____

Team Name: _____

Scenario:

The team will be challenged to review a series of images depicting unsafe conditions and identify and list all the hazards they can find, then come up with solutions to mitigate each hazard.

1. Flip through the PowerPoint slides, allowing sufficient time for the team to identify and catalogue the hazards.

2. Provide a solution to mitigate each hazard.

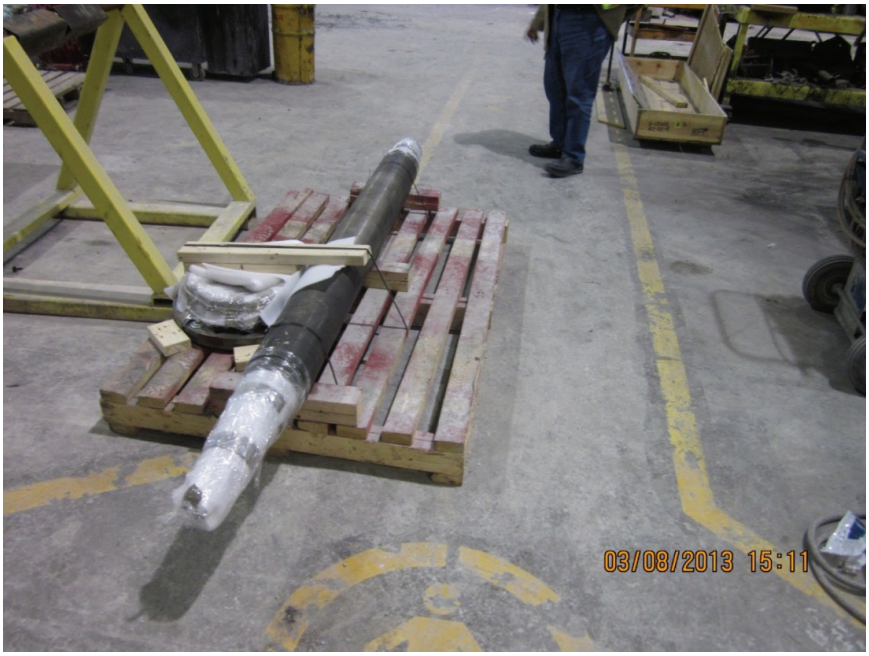
N.B. This activity requires a PowerPoint or video presentation to be prepared in advance, showing staged hazardous scenes where unsafe conditions can be picked out visually. A sample image is provided below. However, we strongly encourage you to use images of your own facility, depicting hazards relevant to your location and activity.

Equipment required: Computer with PowerPoint and or Video presentation, conference room

Scoresheet:

Description	Points Available	Score	Judge's Notes
1 Point for each hazard identified **1 Point for each mitigation**			
Slide 1	5		
Slide 2	3		
Slide 3	4		
Slide 4	4		
Slide 5	5		
Slide 6	2		
Slide 7	6		
Slide 8	4		
Slide 9	4		
Slide 10	5		
FINAL SCORE	**42 (max)**		

Example:



Hazards to identify: Equipment in walkway and no safety boots

Mobile Equipment

Activity Judge: _____

Team Name: _____

Scenario:

Forklift obstacle course: Two members from each team are required to navigate through an obstacle course carrying a full bucket of water on a pallet. At the end of the course, the water levels in each bucket are measured. The team with the most water remaining in their bucket receives the most points. Points are awarding on a sliding scale, with the 1st place team receiving 10 points. (See below) Note that this is not a race: drivers are urged to take their time and proceed safely through the course.

Teams are also scored with respect to the number of obstacles they hit and the drivers' adherence to safe practices, e.g. use of seat belts, horns etc.

Equipment required: two forklifts, 22 or more pallets (depending on what the course entails), two buckets, a nearby source of water to re-fill the buckets, a measuring device to gauge water levels at the end of the obstacle course (Traffic cones may be substituted for pallets if necessary.)

Scoresheet:

Description	Points Available	Score	Judge's Notes
Scoring – Water Levels: ● 1st place: **10 pts** ● 2nd place : **8 pts** ● 3rd place: **6 pts** ● 4th place: **4 pts**	10		
Scoring – Other Key Safety Aspects: (All teams start with 20 points.) **Deductions:** ● Obstacle hit **(-2 pts each time)** ● 3 points of contact **(-2 pts each time)** ● Seat belt use **(-10 pts each time)** ● Parking brake use **(-5 pts each time)** ● Failure to sound horn when reversing **(-1 pt each time)**	20		
FINAL SCORE	**30 (max)**		

Respiratory Protection

Activity Judge: _____

Team Name: _____

Scenario:

Teams are required to enter an area with an elevated airborne concentration of (*choose a relevant chemical*). The team must identify the correct respiratory protection to use and put the equipment on properly prior to entering the work area.

Scoresheet:

Description	Points Available	Score	Judge's Notes
Selection: ● Select the correct type of respirator for the task and contaminant **(2 pts)** ● Select the correct respirator cartridge for the contaminant, i.e. particulate, organic vapor, acid gas… **(2 pts)** ● Determine the maximum use concentration for each type of respirator for the contaminant (Provide resources to teams to perform calculations: PEL, assigned protection factor…) **(6 pts)**	10		
Pre-use inspection: **1.** Pre-use inspection performed **(2 pts)** **2.** 1 point for each defect identified during inspections **(max 6 pts)**	8		
Donning respirator: **1.** Employees selected to wear respirator may not have facial hair interrupting the respirator seal **(2 pts)** **2.** Respirator donned properly **(2 pts)** **3.** Positive-pressure user seal check performed properly **(2 pts)**	6		
Cleaning and storing: **1.** Respirator properly cleaned after use **(2 pts)** **2.** Respirators properly stored after use **(2 pts)**	4		
FINAL SCORE	**28 (max)**		

TEAM SHEET WITH SCHEDULE
APPENDIX 2

Date
Location

Team	Team Number / Team Name	1	2	3	4	5	6	7	8
	Participant 01	Team member 1.1	Team member 2.1	Team member 3.1	Team member 4.1	Team member 5.1	Team member 6.1	Team member 7.1	Team member 8.1
	Participant 02	Team member 1.2	Team member 2.2	Team member 3.2	Team member 4.2	Team member 5.2	Team member 6.2	Team member 7.2	Team member 8.2
	Participant 03	Team member 1.3	Team member 2.3	Team member 3.3	Team member 4.3	Team member 5.3	Team member 6.3	Team member 7.3	Team member 8.3
	Participant 04	Team member 1.4	Team member 2.4	Team member 3.4	Team member 4.4	Team member 5.4	Team member 6.4	Team member 7.4	Team member 8.4
	Participant 05	Team member 1.5	Team member 2.5	Team member 3.5	Team member 4.5	Team member 5.5	Team member 6.5	Team member 7.5	Team member 8.5
	Participant 06	Team member 1.6	Team member 2.6	Team member 3.6	Team member 4.6	Team member 5.6	Team member 6.6	Team member 7.6	Team member 8.6
	Participant 07	Team member 1.7	Team member 2.7	Team member 3.7	Team member 4.7	Team member 5.7	Team member 6.7	Team member 7.7	Team member 8.7
	Participant 08								
	Participant 09								
	Participant 10								

Schedule	Start Time	Duration								
	9:15	10 m	Welcome and Rules Explanation							
	9:25	5 m	Teams Choose Their Names							
	9:30	50 m	Activity 1	Activity 1	Activity 1	Activity 1	Activity 1	Activity 1	Activity 1	Activity 1
	10:20	25 m	Activity 2.1	Activity 2.2	Activity 5A	Activity 5B	Activity 4	Activity 4	Activity 3	Activity 3
	10:45	25 m	Activity 2.2	Activity 2.1						
	11:10	25 m	Activity 3	Activity 3	Activity 2.1	Activity 2.2	Activity 5A	Activity 5B	Activity 4	Activity 4
	11:35	25 m			Activity 2.2	Activity 2.1				
	12:00	30 m	Dîner							
	12:30	25 m	Activity 4	Activity 4	Activity 3	Activity 3	Activity 2.1	Activity 2.2	Activity 5A	Activity 5B
	12:55	25 m					Activity 2.2	Activity 2.1		
	13:20	25 m	Activity 5A	Activity 5B	Activity 4	Activity 4	Activity 3	Activity 3	Activity 2.1	Activity 2.2
	13:45	25 m							Activity 2.2	Activity 2.1
	14:10	20 m	Recognition and Lunch							

Observers	
	Observer 1
	Observer 2
	Observer 3
	Observer 4

Official Points Tally	
Photograph	

	Exercise leader	Subject	Venue
Activity 1	Exercice Leader 1	Group Activity - Accident Testimony	Location 1
Activity 2.1	Exercice Leader 2	Blind Spots - Vehicle 1	Location 2
Activity 2.2	Exercice Leader 3	Blind Spots - Vehicle 2	Location 3
Activity 3	Exercice Leader 4 Exercice Leader 5	Quiz	Location 4
Activity 4	Exercice Leader 6 Exercice Leader 7	Confined Space/Lockout-Tagout (LOTO)	Location 5
Activity 5A	Exercice Leader 8	Lifting and Rigging	Location 6
Activity 5B	Exercice Leader 9	Lifting and Rigging	Location 7

GRAYMONT

Safety Challenge tool kit