



**Attendant Draft Safety Training Standard: Mobile**

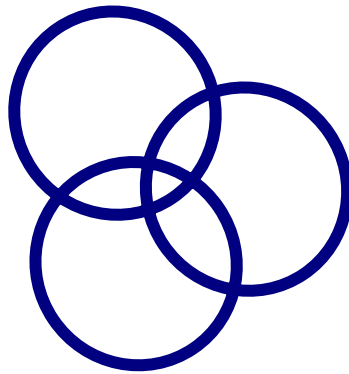
Revision No: 3 Revision Date: 29/03/11

**Equipment/Supplied Air/ Hot Work: CON-TRN2.053**

Creator: Shelley Brown Approver: CSE SME Team

Effective Date: 29/03/11 Origin Date: 3/12/10 Page 1 of 10

## **SAFETY PARTNERSHIP SAFETY TRAINING STANDARD**



### **SAFETY ATTENDANT TRAINING: MOBILE EQUIPMENT/ SUPPLIED AIR/HOT WORK**



**Safety Attendant Draft Safety Training Standard: Mobile Equipment/ Supplied**  
**Air/Hot Work: CON-TRN2.053**


Revision No: 3 Revision Date: 03/29/11

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## Training Standard Design Template Worksheets

### NEEDS ANALYSIS

Training design begins with identifying opportunities or problems, what is/what should be, resulting gaps, gaps in standards among IEC member companies, the purpose of planned instruction, and how the instruction or training will resolve the initial problem/realize the opportunity. Needs analysis also includes information about the proposed target audience, their characteristics and demographics


|                        |  |
|------------------------|--|
| <b>Element</b>         | <b>Business Needs/Performance Goals - What is the opportunity or problem? What is the current state of affairs? What's the desired state of affairs? What's the gap? What level of performance/competency/behaviour is needed?</b>   |
| <i>Needs Analysis</i>  | The <b>opportunity</b> is to standardize training across the Valley so that attendants for supplied air (i.e. bottle watch), hot work (i.e. spark watch), and mobile equipment signaling (i.e. mobile equipment watch) are operating under the same rules. The problem with the <b>current state of affairs</b> is that there is no standardized training program, so people's actual attendant training may vary greatly including content of the training, program length, and the targeted behaviours/performance as a result of the training program. The <b>desired state of affairs</b> is a common standard for these duties/functions delivered in a consistent fashion regardless of the delivery agent/trainer. The training for these various "safety attendant" positions will be an "add-on" to the Confined Space Entry/Safety Attendant Training Program to satisfy the needs of different organizations for flexible workforce skills. |
| <b>Element</b>         | <b>Learner characteristics/demographics – What are their characteristics? What about other workers? Level of readiness?</b>  |
| <i>Target Audience</i> | The target audience ranges from new/inexperienced workers (i.e. people performing the duties of safety attendant which is considered an entry-level position in construction) all the way to experienced tradespeople. The challenge will be to present information to learners in such a way that it doesn't bore the more experienced members of the audience; at the same it doesn't overwhelm inexperienced workers.   |

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## OUTCOMES OF THE NEEDS ANALYSIS: CONTENT FOR TOPICS

Needs must be translated into descriptions of desirable outcomes (**learning objectives**). To prepare for writing objectives, a **task/topic analysis** is done to flesh out the necessary knowledge/skill/attitude components. Focus on the most critical components and consider: legislative protocols/requirements, hazards and safety conditions, definitions/physical characteristics/examples, etc.


| <i>Content/Topic</i>                     | <i>Knowledge Component – What do you want people to know?</i>   | <i>Required Training Aids</i> |
|--|---|-------------------------------|
| <b>Mobile Equipment Safety Attendant</b> | <ul style="list-style-type: none"> <li>• Competent worker definition; dedication to tasks; situations requiring escort</li> <li>• PPE required for the job (including special precautions for night-time work)</li> <li>• Stay clear of the intended path of travel; stay in view of the operator; maintain a clear view of the intended path of travel</li> <li>• Act as another set of eyes for the operator (i.e. watch part of the vehicle whose path of travel the operator cannot see); help plan the path of travel with hazards in mind</li> <li>• Give instructions to the operator to maneuver through areas and ensure no part of the mobile equipment comes into contact with anything or anyone</li> <li>• Requirement to maintain clear and continuous visual contact with the operator at all times while the vehicle or equipment is moving; be able to communicate with the operator using clearly understood standard hand signals (telecommunication systems may also be used)</li> <li>• Safe working distances for operation of mobile equipment near live electrical equipment</li> <li>• Ensure that no overhead loads pass over workers</li> <li>• Be familiar with the site's emergency procedures</li> <li>• Requirement to report incidents/damages for necessary corrections/prevent re-occurrence</li> <li>• Plan for control of interface between any pedestrian and vehicular traffic</li> </ul> | PPP<br>OHSA<br>Case Study     |
|  | <i>Skill Component – What do you want people to be able to do? N/A</i>  |                               |
|  | <i>Attitude Component- What attitudes do you want to instill/change; how should people feel?</i> <ul style="list-style-type: none"> <li>• Appreciation for the critical role of mobile equipment safety attendant to safeguard the health and well-being of other workers</li> </ul>  |                               |

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|--|---|---|
| <b>Content/Topic</b><br><b>Supplied Air System Safety Attendant Duties</b> | <b>Knowledge Component – What do you want people to know?</b> <ul style="list-style-type: none"> <li>● A supplied air system attendant or attendants shall be assigned when individuals are working with an air line supply system. The air supply system attendant shall: <ul style="list-style-type: none"> <li>○ Remain alert and fit for work; ensure all respiratory equipment is in proper working order and deployed in accordance with CAN/CSA-Z94.4; be familiar with CSA Z180.1 (standard for sampling/testing breathing air) manage the air lines to ensure they do not become entangled or otherwise compromised; ensure the air supply is uninterrupted</li> <li>○ Requirements for audible alarms on equipment; understand meaning of alarms</li> </ul> </li> <li>● Determine the location of equipment and workers on the system</li> <li>● Be familiar with the site’s emergency procedures</li> <li>● Cordon off the air supply system area in congested zones</li> <li>● Ensure only authorized individuals are allowed on the system (i.e. must be trained in and fit-tested for the equipment they’re using and be listed on the permit)</li> <li>● Take instruction from the CSE Attendant if applicable in an emergency until the rescue team arrives</li> <li>● A supplied air system safety attendant has the authority and responsibility to suspend work if a condition/behaviour/action is observed that makes the task unsafe to continue</li> <li>● A supplied air system attendant may only perform CSE safety attendant duties if he or she is competent and the assignment does not interfere with all assigned air supply tasks</li> </ul> | <b>Required Training Aids</b><br>PPP<br>CSA Standard Z1006-10,<br>Section 5 |
|  | <b>Skill Component – What do you want people to be able to do N/A?</b>  |   |
|  | <b>Attitude Component- What attitudes do you want to instill/change; how should people feel?</b> <ul style="list-style-type: none"> <li>● Appreciation for the importance of the supplied air system safety attendant role in safeguarding the health and well-being of other workers</li> </ul>  |   |

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|--|--|---|
| <b>Content/Topic</b><br><b>Supplied Air Operations</b> | <b>Knowledge Component – What do you want people to know?</b> <ul style="list-style-type: none"> <li>• Management of multiple breathing bottles</li> <li>• Air supplied from a special breathing air compressor</li> <li>• Number of users, jobs, amount of air needed</li> <li>• Pressure gauges, regulators, and fitters</li> <li>• Supplied air breathing pressure regulations</li> <li>• Switching/swinging bottles including bumpless transfer</li> <li>• Ensure site specific training is conducted before shutting off and identifying used (“MT”) bottles</li> <li>• Requirements for carbon monoxide monitoring and periodic air quality check (every six months as per CSA Standard Z180)</li> </ul> | <b>Required Training Aids</b><br>Actual air supply system (i.e. pressure gauges, regulators) to show/pics of the same PPP |
|  | <b>Skill Component – What do you want people to be able to do? N/A</b>   |   |
|  | <b>Attitude Component- What attitudes do you want to instill/change; how should people feel?</b> <ul style="list-style-type: none"> <li>• Appreciation for the need to closely monitor the system, pressure gauges, and regulators</li> </ul>  |   |

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| <b>Content/Topic</b>             | <b>Knowledge Component – What do you want people to know?</b>   | <b>Required Training Aids</b> |
|----------------------------------|---|-------------------------------|
| <b>Hot Work Safety Attendant</b> | <ul style="list-style-type: none"> <li>• Definition and types of hot work</li> <li>• Requirements for hot work safety attendant to be established/maintained when a source of ignition is introduced into a work chamber and/or in the vicinity of combustible materials</li> <li>• Be aware of requirements for protection against sources of ignition noted on the permit; maintain the conditions/requirements listed on the hot work permit</li> <li>• Confirm that gas testing has been done prior to starting work</li> <li>• Ensure area is sufficiently protected (i.e. barricades, roped/cordoned off/posted) to prevent other personnel from inadvertently walking into the hazardous area</li> <li>• Ensure use of fire blankets to contain sparks</li> <li>• Know location of fire extinguishers</li> <li>• Check fire extinguisher(s) is full, has been inspected/maintained</li> <li>• Be in a position to spot any potential sparks that could create a hazard; ensure sparks do not cause a fire; monitor through spark containment and controls</li> <li>• Be trained in atmospheric monitoring equipment if required</li> <li>• Be familiar with the site’s emergency procedures</li> <li>• Be prepared to stop a job if conditions are observed that are hazardous/of concern</li> </ul> | PPP<br>Video                  |
|                                  | <b>Skill Component – What do you want people to be able to do? N/A</b>  |                               |
|                                  | <b>Attitude Component- What attitudes do you want to instill/change; how should people feel?</b> <ul style="list-style-type: none"> <li>• Respect for, and confidence in the role of the Hot Work Safety Attendant to safeguard the health and well-being of other workers</li> </ul>   |                               |

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## EVALUATION

Evaluation strategies should be defined at this stage as evaluation helps drive program content/design - an appropriate evaluation strategy determines if:

- 1) Level One - the learners liked the training
- 2) Level Two - they learned and acquired the desired behaviours
- 3) Level Three - learners applied these behaviours in the field/on the job
- 4) Level Four - the training had the desired impact

For the learning level evaluation, will assessment be on a pass/fail basis, or will a certain percentage be required?

| <b>Element</b>           | <b>Level One: Reaction – <i>Did they like it? What was their reaction?</i></b>  | <b>Level Two: Learning - <i>What did they learn? How will you assess that? Give a test? A practical demonstration?</i></b> | <b>Level Three: Field Audit – <i>Can learners demonstrate new behaviours/competency on the job?</i></b>                      | <b>Level Four: Impact – <i>Were gaps closed? Was the problem solved? Or opportunity realized?</i></b> |
|--------------------------|---|--|--|---|
| <b><i>Evaluation</i></b> | <ul style="list-style-type: none"> <li>• Participants will complete a course evaluation/feedback form at the conclusion of the program</li> </ul> | <ul style="list-style-type: none"> <li>• Written quiz based on learning objectives</li> </ul>                              | <ul style="list-style-type: none"> <li>• Random sampling between 3-6 months post-training using an audit protocol</li> </ul> |   |

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## ADDITIONAL INFORMATION

|                             |   |
|-----------------------------|---|
| <b>Recertification</b>      | What is the recertification method? What is the frequency?<br><b>Recertification every three years via training program completion</b>  |
| <b>Trainer Requirements</b> | What specific background/experience/skills does a potential trainer require to deliver the training?<br><b>A working knowledge* of all aspects of safety attendant training for mobile equipment, supplied air operations, and hot work</b> |
| <b>References</b>           | OSHA and Regulations<br>CSA Standard Z1006-10   |
| <b>Exemptions</b>           | Are there any exemptions from any or all of this training? What is the basis for the exemption?<br><b>No exemptions</b>   |

\* **Working Knowledge Definition:** Possessing sufficient fundamental understanding and skills to perform required tasks; possessing good knowledge of related concepts, theories, principles, standards, frameworks, procedures, etc.



# Gap Analysis

| Topic  | Needs Analysis  | Company A   | Company B | Company C |
|--|---|---|-----------|-----------|
| <b>Use Topic Structure from Needs Analysis</b> | <ul style="list-style-type: none"> <li>Bullet point form</li> <li>Define the need</li> <li>What does the trainee need to understand/perform/ behave like</li> </ul> | <ul style="list-style-type: none"> <li>Analyze Gaps from Company against needs</li> <li>Add additional companies as needed</li> </ul> |           |           |
| Sub topic titles, topic specific               |   |   |           |           |
|  |   |   |           |           |

This table may be used to identify gaps in standards between/among IEC member companies

Additionally, the SME teams may want to do this in excel and then import into report

**Revision History: CON-TRN2.053**

| Rev. Date | Rev. No. | Reason for Rev.     | Rev. Description                                 | Person Revising | Rev. Approval   |
|-----------|----------|---------------------|--|-----------------|-----------------|
| 03/12/10  | 0        | Document required   | Develop original                                 | Shelley Brown   | CSE/SA SME Team |
| 01/04/11  | 1        | SME Team Review     | Deletions/additions as per SME TEAM requirements | Shelley Brown   | CSE/SA SME Team |
| 01/03/11  | 2        | Document Completion | Finalization of Trainer Qualifications           | Shelley Brown   | CSE/SA SME Team |
| 03/29/11  | 3        | Stakeholder Review  | Suggested changes                                | Shelley Brown   | IEC Executive   |

Following Revision, forward 'Revised Document Awareness Notification' to relevant persons