

H₂S Alive® Equipment List

The Authorized Training Provider shall ensure that the following equipment is on hand for each course delivery. All equipment must comply with OHS legislation and applicable standards.

Equipment Requirements	
SCBA	<ul style="list-style-type: none"> - Minimum of 1 SCBA unit (harness assembly, air supply and regulator assembly) per five students - Scott regulators must be properly cleaned between use (may not be shared in class)
Facepiece Assembly	<ul style="list-style-type: none"> - Minimum of 1 per student plus 1 for the instructor - Masks must be properly cleaned between use (may not be shared in class)
SABA	<ul style="list-style-type: none"> - Not required (however valuable to show and explain)
Gas Detection Pumps Tubes and Electronic Monitors	<ul style="list-style-type: none"> - 1 Piston-type detector tube device - 1 Bellows-type detector tube device - <i>Detector tubes must be specific for the device (recommend CO₂ tubes)</i> - 1 pair safety glasses - 1 tube breaker (if required) - 1 biohazard disposal container for broken tubes - 1 pair of gloves (recommended) - 1 Electronic Gas Detection Monitor (personal) calibrated and functional - 1 cylinder of bump gas (must not be expired) - 1 sensor cover with tubing or bump station with compatible gas (in case video malfunctions) <p><i>Note: Expired tubes may be used for in-class demonstration if box is clearly marked "For Classroom Training Only"</i></p>
Manikin	<p>Minimum of 1 manikin weighing under 50 lbs. with adequate size and flexibility to perform the rescue drag exercises. (empty coveralls are NOT adequate)</p>

All equipment must meet regulatory requirements and be in good working order.

Each course includes equipment that is required to supplement the content taught. The equipment may be used as part of a demonstration, practical exercise, or to facilitate PowerPoint and videos.

Authorized Training Providers are expected to maintain all course related equipment in good condition. This includes proper cleaning and regular inspections for damage or excessive wear.

It is not acceptable for an instructor to skip part of a course due to faulty or missing equipment. The correct response would be to engage the ATP for an immediate fix and then contact Energy Safety Canada for further advice. If neither party can be reached, then instructors may continue the course and document how the situation was dealt with. Energy Safety Canada will review the report and determine the course of action. Failure to notify Energy Safety Canada can be grounds for performance review.



H₂S Alive Blended Renewal Equipment List

The Authorized Training Provider shall ensure that the following equipment is on hand for each course delivery. All equipment must comply with OHS legislation and applicable standards.

Equipment Requirements	
SCBA	<ul style="list-style-type: none">- Minimum of 1 SCBA unit (harness assembly, air supply and regulator assembly) per five students- Scott regulators must be properly cleaned between use (may not be shared)
Facepiece Assembly	<ul style="list-style-type: none">- Minimum of 1 per student- Masks must be properly cleaned between use (may not be shared)
Manikin	<ul style="list-style-type: none">- Manikin, additional person or other means of demonstrating rescue methods.
<p>***All equipment must meet regulatory requirements and be in good working order.***</p>	

Detection and Control of Flammable Substances
Class Minimum Required Equipment

The Authorized Training Provider shall ensure that the following equipment is on hand for each course delivery. All equipment must comply with OHS legislation and applicable standards.

Equipment Requirements	
All classes	<ul style="list-style-type: none"> - Portable Catalytic Combustible Gas Monitor - One gas monitor for each four (4) students - Record logs and manufacturer's manuals for all monitors
For a class of 20	<ul style="list-style-type: none"> - Two (2) active monitors <i>(one motorized and one non-motorized with three (3) foot sampling hose) one (1) active monitor calibrated to methane or propane</i> - Three (3) passive monitors <i>(both calibrated to Methane or propane)</i> - One (1) hand aspirator sample draw pump and 3 ft. sampling hose - One (1) optional IR monitor calibrated to any of the above gases - Five (5) Record logs and manufacturer's manuals for all monitors - Appropriate calibration/function adapters for each monitor - Five (5) sample gas cylinders methane or propane <i>(see below)</i> - Five (5) Flow regulators with specific flow rate for monitor used <i>(Eg.) 0.3, 0.5 or 1.0. Sample hose adapters for each cyl reg</i> - Two (2) AC/DC monitor wall chargers - MSDS included for non-reactive gases <i>(must be up to date within 3 years)</i>
For a class size 12 or less	<ul style="list-style-type: none"> - One (1) passive monitor (calibrated to methane or propane and two (2) active monitors as described above) - One (1) hand aspirator sample draw pump and 3 ft. sampling hose - Sample gas cylinders methane or propane <i>(see below for specifics)</i> - Three (3) flow regulators with specific flow rate for each monitor used <i>(Eg.) 0.3, 0.5 or 1.0. Sample hose adapters for each cyl reg</i> - Appropriate calibration/function adapters
Function Test Gas Cylinder Information	
Methane	Test gas mix of 2.5 %/ 50% LEL Methane/balanced air
Propane	Test gas mix of 1.1%/50% LEL Propane/balanced air

**Fall Protection
 Training Devices and Equipment List**

In addition to the manufacturers' equipment requirement, the Authorized Training Provider (ATP) shall ensure the following equipment is available for each course delivery. All equipment must comply with OH&S legislation and applicable standards.

Equipment Requirements	
Equipment Type	Quantity
CSA approved Harnesses- Type A	Minimum of 1 harness per 2 students
CSA approved Harness- Type D, E, L and P	Minimum 1
Anchorage Connectors Below is a list of examples: 6 ft Cable 4 ft Web Beam Clamp Engineered D-Ring Concrete Connector	Minimum of 4 anchor connectors
Telescopic Tripod or Davit Arm or Engineered anchors point in conjunction with SRL/SRD-R or an appropriate pulley system.	Minimum of 1, 8 ft man rated tripod with Retrieval system
Snap Hooks	Minimum 4 (different shape/size)
Carabiners	Minimum 4 (different shape/size)
Lanyards	
Energy Absorbing Lanyard	Minimum 2
Rope Lanyard 6 ft	1
Webbed Lanyard	1
Steel Cable Lanyard	1
Adjustable Lanyard	1
Twin Leg Lanyard	1

Deployed Energy Absorber E4 or E6- or new CSA Standard EA's	1
Energy Absorber E6 energy absorber E4 energy absorber New CSA Standard	1
Self-Retracting Life Line/ Self Retracting Device	1
Vertical Rope Life Line 16mm	Minimum 10 ft
Rope Grab AD, MDP	Minimum of 2
Cable Grab	1
Cable that is compatible to Cable Grab	2-10 ft
Formal Inspections log book	Inspection of fall equipment must be completed by a competent person

IMPORTANT: Mark this equipment **DANGER DO NOT USE**. Ensure equipment is numbered and accounted for at the end of each training session. Place damaged equipment in a locked environment to ensure it is not used.

Samples of damaged equipment for inspection for the following minimum (10)

- Soft Goods
- Hard Goods

Soft Goods:

- Discoloration UV ray exposure, Chemical or Heat
- Pulled stitching
- Excessive **wear**
- Cuts, holes, tearing, fuzzy
- Welder splatter burns, fused fibers, melted
- Knots or kinks

Hard Goods:

- Discoloration
- Excessive wear
- Splicing and thimbles loosening
- Swaging crimps
- Knots or kinks
- Corrosion
- Bent closures
- Latch mechanism broken or misaligned
- Missing or damaged manufacturer labeling
- Load indicator deployed



ENERGY SAFETY CANADA

Course Equipment Requirements

Fall Protection for Rig Work Training Devices and Equipment List

In addition to the At-Grade Training Device and At-Height Training Device, the Authorized Training Provider shall ensure that the following equipment is on hand for each course delivery. All equipment shall comply with OHS legislation and applicable standards.

Equipment Requirements	
At-Grade Training Device Travel Restraint Anchors	<ul style="list-style-type: none"> - Robust (anchorage looks like 5000 lbs) - Bolted or welded on D-ring - One (1) inch eye bolt or pad eye - Minimum of waist high - Two or three (2-3) separate locations - D-ring plates/ bolts
At-Height Training Device 2 Fixed Ladders Fall Arrest Anchors Monkey Board	<ul style="list-style-type: none"> - Minimum of eighteen (18) feet - Ladders certified - Spaced a minimum of six (6) feet to prevent contact between students (or a barrier between ladders). Spacing must permit adequate supervision of students on both ladders - Certified by professional engineer or uncertified to 5,000 lbs per person - Two (2) separate anchor connections above each ladder - one (1) for student SRL, rope or cable system (depending on lesson) and one (1) for SRL/ rescue or another means to accomplish rescue - SRL, rope and cable systems to be installed and used in accordance with manufacturers specifications - Two (2) separate anchor connections above monkey board - Minimum of ten (10) feet high - A means to ensure ground level monkey board training
Means of Suspension	<ul style="list-style-type: none"> - A davit arm or tripod with manufacturer's specifications or professional engineer's certification



ENERGY SAFETY CANADA

Course Equipment Requirements

Defective Equipment	<p>Examples of defective equipment are required. At minimum:</p> <ul style="list-style-type: none"> - Web stiches - Chemical/ UV burns - Rope - Wire rope - Harness (grommets & buckles)
Web Pass Thru Adaptor	<ul style="list-style-type: none"> - Minimum of one (1) web pass thru adaptor
Cable Choker	<ul style="list-style-type: none"> - Minimum of one (1) cable choker
Cable Anchor Sling	<ul style="list-style-type: none"> - Minimum of one (1) cable anchor sling
Web Choker	<ul style="list-style-type: none"> - Minimum of one (1) web choker
Snap Hooks	<ul style="list-style-type: none"> - Two (2) scaffold or ladder snap hooks - Two (2) standard snap hooks <p>Note: Not all snap hooks have to be integral</p>
Carabiners (Locking)	<ul style="list-style-type: none"> - Two (2) standard carabiners - Two (2) large scaffold
Lanyards	<ul style="list-style-type: none"> - One (1) wire rope with energy absorber - Two (2) 4ft ropes - One (1) (1 X 3') shock absorbing web - One (1) (1 X 6') fixed rope - One (1) (1 X 6') adjustable web lanyard - Two (2) double leg lanyards with ladder snap hooks - One (1) tie back lanyard - One (1) cable - One (1) double leg lanyard with heavy duty hooks
Full Body Harness (Extra Small)	<ul style="list-style-type: none"> - Minimum of one (1) extra small full body harness
Full Body Harness (Small)	<ul style="list-style-type: none"> - Minimum of three (3) small full body harnesses
Full Body Harness (Medium)	<ul style="list-style-type: none"> - Minimum of eight (8) medium full body harnesses
Full Body Harness (Large)	<ul style="list-style-type: none"> - Minimum of six (6) large full body harnesses
Full Body Harness (Extra Large)	<ul style="list-style-type: none"> - Minimum of two (2) extra-large full body harnesses
Vertical Rope Lifeline System C/W (2)	<ul style="list-style-type: none"> - Rope lifeline attached to appropriate anchorage - Tensioning device for the lifeline - Fall arrestor designed for use with the lifeline - Lanyard as specified by manufacturers; length to allow a maximum six (6) foot freefall at any time (three (3) foot fixed length shock absorbing lanyard)



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Course Equipment Requirements

Additional Requirements:	<ul style="list-style-type: none"> - Permanent cable ladder system - Minimum of one (1) temporary cable ladder system - Three (3) displays of SRL's - 1 of each type (1, 2 and 3) - Two (2) SRL's (minimum) one (1) above access ladder and one (1) above monkey board for student training - Separate fall arrest system for instructor at monkey board - Certified Instructors must have access to a ladder and fall arrest system if required, to perform rescues as necessary - Decent fall arrest system for alternate decent ladder. Can include: <ul style="list-style-type: none"> - Permanent ladder cable system - Temporary ladder cable system - Additional SRL - Taglines for each SRL on the climbing device - Emergency First aid Kit - Fall Protection Plan for each exercise
Specific Facility Requirement	
Basic Classroom	- Basic classroom setting with projector and screen
Space for Practical Exercises	- Adequate space performing all exercises
Instructor Requirements	
Appropriate Personal Protective Equipment	- Hard hat, safety glasses and gloves
Student Requirements	
Capable of Physical Activity	- Participants should be physically capable of safely execute a suspension exercise
Appropriate Personal Protective Equipment	Authorized Training Providers must have available PPE for students who are not properly equipped including: <ul style="list-style-type: none"> - Hard hats - Safety glasses - Gloves
Class Standards	
Maximum Students	Fifteen (15)
Mandatory Instructional Hours	Thirteen (13)

Fall Rescue for Rig Work Training Devices and Equipment List

In addition to the At-Grade Training Device and At-Height Training Device, the Authorized Training Provider shall ensure that the following equipment is on hand for each course delivery. All equipment must comply with OHS legislation and applicable standards.

Equipment Requirements	
Either a Drilling Rig, Service Rig or Rig Simulator	If utilizing a simulator, it must meet the minimum guidelines as outlined on the following page
Traverse Stretcher	Traverse Stretcher must be man rated with adjustable 4 point bridle and securing straps
Backboard (1)	- Minimum of 1, must have 3 restraint straps
<i>Harnesses for students must be APDL and come with approved shock absorber. CEN, CSA or ANSI approved only.</i>	
Full Body Harness (Extra Small)	- Minimum of 1 extra small full body harness
Full Body Harness (Small)	- Minimum of 3 small full body harnesses
Full Body Harness (Medium)	- Minimum of 8 medium full body harnesses
Full Body Harness (Large)	- Minimum of 6 large full body harnesses
Full Body Harness (Extra Large)	- Minimum of 2 extra-large full body harnesses
By Pass Lanyard System	- Minimum of 2 first climb by-pass lanyard systems
Taglines	- Minimum of 3 taglines 8mm (3/4 in.) or larger in diameter - Minimum 30m (100 ft.) c/w auto lock carabiner and rope bag
Carabiners	- Minimum of 2 scaffold carabiners - Minimum of 10 auto locking, steel carabiners rated by Manufacturer
Anchor Connectors	- Minimum of 4 approved anchor connectors
Pulleys	- Minimum of 2 pulleys sized for main line
Fall Arrest Systems	- Minimum of 3 fall arrest systems, retractable lifelines or rope grabs per CEN, CSA or ANSI standards
First Aid Kit	- Minimum of 1 emergency first aid kit per provincial regulations
Sliding Anchor Device	- Minimum of 1 sliding anchor device - 1,400 kg (3,000 lbs) Anchor
Web or Rope Lanyards	- Minimum of 2 1.8 m (6 ft.) web or rope lanyards
Adjustable Lanyard	- Minimum of 2 1.8 m (6 ft.) or longer adjustable lanyard



ENERGY SAFETY CANADA

Course Equipment Requirements

Rescue System	<ul style="list-style-type: none"> - Minimum of 1 rescue systems. Additional rescue equipment required for a backup system. - Components to conform to strength requirements accepted by OH&S
Rope Grab	<ul style="list-style-type: none"> - Minimum of 1 rope grab
Lowering Devices	<ul style="list-style-type: none"> - Minimum of 2 different lowering devices (1 panic proof)
Progress Capture Devices	<ul style="list-style-type: none"> - Minimum of 2 different progress capture devices
Specific Facility Requirement	
Basic Classroom	<ul style="list-style-type: none"> - Basic classroom setting with projector and screen
Space for Practical Exercises	<ul style="list-style-type: none"> - Adequate space to perform all exercises
Minimum Guidelines for Rig Simulator	<ul style="list-style-type: none"> - Sufficient clearance for fall arrest protection system - Minimum size and configuration of a monkey board shall be representative of a single service rig or drilling rig - Man-rated tugger or winch system required for raising and lowering personnel shall have a manufacturer's specification or a professional engineer's certification for this purpose - The rig simulator shall be equipped to provide fall arrest for all personnel above 3m during Fall Rescue for Rig Work - The rig simulator shall have a manufacturer or a professional engineer's certification - At minimum, the simulator shall have 2 rated ladders with SRL type 2 for fall protection
Instructor Requirements	
Appropriate Personal Protective Equipment	<ul style="list-style-type: none"> - Hard hat, safety glasses and gloves
Student Requirements	
Capable of Physical Activity	<ul style="list-style-type: none"> - Participants should be physically capable of safely executing a Suspension exercise
Appropriate Personal Protective Equipment (PPE)	<p>Authorized Training Providers must have available PPE for students who are not properly equipped including:</p> <ul style="list-style-type: none"> - Hard hats - Safety glasses - Gloves
Class Standards	
Maximum Students	12
Minimum Number of People Required to Execute a Rescue	3
Mandatory Instructional Hours	6.5



ENERGY SAFETY CANADA Course Equipment Requirements

Oilfield Driver Awareness Class Minimum Required Equipment

The Authorized Training Provider shall ensure that the following equipment is on hand for each course delivery. All equipment must comply with OHS legislation and applicable standards.

Facility Requirements

1. Adequate student/staff parking
2. Muster point clearly visible
3. Fire extinguisher, fire exits and first aid equipment accessible
4. Emergency Response Plan posted
5. Emergency First Aid Kit
6. Washrooms
7. Classroom(s) - *sufficient student seating*
8. PowerPoint projection and display equipment
9. White board, chalk board, or flipchart



ENERGY SAFETY CANADA Course Equipment Requirements

Common Safety Orientation Class Minimum Required Equipment

The Authorized Training Provider shall ensure that the following equipment is on hand for each course delivery. All equipment must comply with OHS legislation and applicable standards.

Facility Requirements

1. Adequate student/staff parking
2. Muster point clearly visible
3. Fire extinguisher, fire exits and first aid equipment accessible
4. Emergency Response Plan posted
5. Emergency First Aid Kit
6. Washrooms
7. Classroom(s) - *sufficient student seating*
8. PowerPoint projection and display equipment
9. White board, chalk board, or flipchart