

Contractor Safety and Health Awareness Overview

Raytheon Intelligence and Space (RI&S)

December 2021



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Agenda

- Our Commitment to Safety
- Cardinal Rules
- OSHA Voluntary Protection Program (VPP) Information
- Overview of RI&S and OSHA Contractor Safety and Health Requirements when performing work on site
- Quiz



Commitment to Safety

- We embrace the ideals and principles of the OSHA Voluntary Protection Program (VPP)
- We strive for Environmental, Health, Safety & Sustainability (EH&S) excellence by adopting best practices that often exceed regulatory compliance standards to promote worker safety
- Our larger sites are expected to achieve VPP Star Certification status
- Contractors play an essential role in safety excellence
- Contractors performing work at our sites are expected to:
 - Comply with all applicable laws and regulations
 - Adhere to EH&S standards
 - Support safety excellence to protect contractors, our employees, property and the environment





What Is OSHA's Voluntary Protection Program (VPP)?

- VPP recognizes employers and workers in private industry and federal agencies who have implemented effective safety and health management systems, and maintain injury and illness rates below national averages for their respective industries
- In VPP, management, labor and OSHA work cooperatively and proactively to prevent fatalities, injuries and illnesses through a system focused on: hazard prevention and control, worksite analysis, training, management commitment, and worker involvement
- As a contractor, you have a role to play, whether or not the site is a VPP site:
 - We expect contractors to perform their work safely to prevent harm to themselves and others
 - You are expected to comply with site safety requirements, and report hazards to your supervisor, Project Manager, or site EH&S personnel
 - You should be aware of emergency procedures at the site. If you don't know, ask the Project Manager or EHS&S staff
- Just like our employees, we want our contractors to go home in as good a condition as when they showed up to work

OSHA Rights

- You have the right to a safe workplace
- You have the right to contact OSHA
- You have a right to obtain your medical or exposure records
- You have a right to see any citation given to your company for your worksite



Contractor Safety Management

- We require a prequalification screening through ISN to ensure that contractors brought on site meet RI&S and OSHA requirements
- Contractors must review the online Safety & Health Awareness Overview and successfully complete the accompanying assessment (80 score%) as part of the pre-badging process
- Contractors, Facilities and EH&S will work hand-in-hand to ensure that expectations are communicated and understood by contractors
- Contractors must ensure that employees brought on site have completed the required OSHA training for the jobs they are performing
- Evidence of this training may be requested by the Project Manager or by EH&S at the site where the work is done



Contractor Safety Management

- Contractors must perform Job Hazard Assessments (JHA) for high hazard work being performed on site, or when required by the local EH&S office
- Employees performing these tasks must be familiar with the JHA
- Contractors must use required Personal Protective Equipment (PPE)
- Contractors must conduct and document periodic inspections
- Contractors must correct safety issues immediately



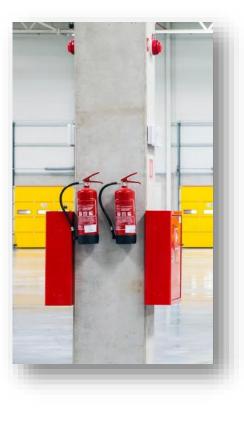
JOB HAZARD ANALYSIS FORM	
Job or Task being evaluated:Swing Grinding Operation_	
Date of evaluation:July, 2004	Page # _1 of4_
JHA Team participants:Jim Grinder, I.M. DeBoss	

Steps	Potential or Existing Hazards	Corrective Action Recommendations
1. Remove any potential fire hazards	1a) Body strain from lifting/twisting	1a1) Assure operator is trained in how to lift/twist without injury
and combustibles from the area		1a2) Assure operator has the strength/capability of operating the grinder
	1b) Potential fire if materials	1b1) Have a checklist or other system to assure
	are not moved	materials are moved to their correct distance or location. The operator must check off the items on
		the list prior to beginning the operation.
		(b2) Assure that materials to be ground are in non- combustible containers
2. Inspect the	2a) Operator getting caught in	2a1) Assure that pinch points are properly guarded.
grinder to assure it is in good operating	a pinch point	2a2) Assure that operator is aware of where pinch points are.
condition	2b) Body strain from lifting grinder	2b1) Assure operator is trained in how to lift/twist without injury
	-	2b2) Assure operator has the strength/capability of
		operating the grinder

Raytheon Intelligence & Space

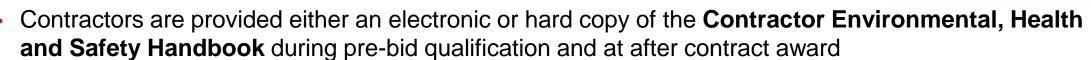
Contractor Safety Management

- Contractors are responsible for complying with all applicable OSHA regulations and RI&S EH&S requirements
- General contractors are responsible for ensuring that all subcontractors working on a our site understand and comply with OSHA and EH&S requirements
- Contractors are responsible for their actions, ensuring that work does not endanger contractor employees, our employees or visitors
- Compliance with safety rules and regulations is a condition of employment when working at our sites
- Contractor employees must
 - Work with the Project Manager or Sponsor to understand our requirements
 - Identify all job hazards and use the appropriate equipment or PPE to perform the job safely
 - Ensure work areas, particularly construction area boundaries, are clearly marked to prevent unauthorized access



Contractor Safety Management

- Safety communications are a key component of contractor safety.
- Contractors must:
 - Hold frequent safety meetings with employees and subcontractors
 - Encourage reporting of safety issues at safety meetings
 - Take action to promptly mitigate/correct any hazards or identified risks
 - Document safety meetings and attendance
 - Discuss safety issues with the PM and EH&S



- Contractors and their subcontractors must read, understand and follow procedures and requirements in the handbook
- Contractors must coordinate with ISN to meet all EH&S requirements, including any additional site specific EH&S requirements



Enforcement

- All contractors will be held accountable to work safely and adhere to applicable OSHA and EH&S requirements
- EH&S and the Project Manager may perform periodic or unannounced safety inspections of project sites contractor are working on
- There is zero tolerance for the following prohibited actions:
 - Willfully ignoring OSHA regulations and EH&S requirements established in the Contractor Environmental, Health and Safety Handbook
 - Horseplay, fighting, gambling, swearing, alcoholic beverage consumption, reckless driving, possession of weapons, narcotics, explosive materials and use of recording devices or cameras
- Failure to follow EH&S policies or Cardinal Rules can result in disciplinary action including removal from property and restriction from working on future projects
- Contractor safety infractions and near miss incidents must be reported to contractor's foreman, EH&S and Project Manager. Infractions will be tracked by EH&S
- All contractors are subject to Company Policy RP-SCM-011 Supplier Corrective Action Request (SCAR) Process

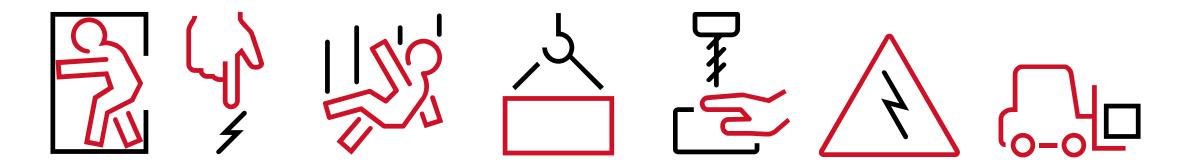


Cardinal Rules

- Because of their serious nature, Cardinal Rules apply to, and must be followed by, all Raytheon Technologies employees and contractors, regardless of position, location, or job title.
- Any contractor who violates a cardinal rule will be subject to disciplinary action which may include permanent dismissal from working on the Raytheon site or project.
- In the event of a cardinal rule violation, an investigation will be conducted by the contractor project lead, Raytheon Project manager and EHS who will determine appropriate actions are required.

Cardinal Rules

- Although all EH&S rules are important and must be followed, Cardinal Rules are rules that, if violated, have the potential for causing a fatality or serious injury.
- Contractor are required to follow these Cardinal Rules when working on Raytheon facilities or projects.



Workplace free of hazards

Cardinal rules

Confined spaces: Contractor employees must follow written procedures for entry into confined spaces.



Control of hazardous energy:

Contractor employees must follow machine/equipment specific energy control procedures to bring all forms of hazardous energy to a Zero Energy State and secure them prior to performing work on machines or equipment.



Fall protection: Contractor employees must use fall protection when exposed to a fall hazard (working at an elevated level of 2 meters / 6 feet or more).



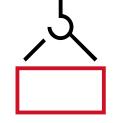
Hoist and crane: Contractor employees must use appropriately rated devices and safe lifting techniques for all rigging, hoist, and crane lifted loads.

Machine guarding: Contractor employees must use and not tamper with or disable machine / equipment guarding while operating under normal conditions.

Electrical safety: Contractor employees must be qualified and follow documented electrical safe work practices when working with or when exposed to energized electrical circuits 50 volts or more AC/DC.

Powered industrial vehicles:

Contractor employees must not operate a powered industrial vehicle unless trained and must not use personal electronic devices while operating any powered industrial vehicle.









Not following a cardinal rule can lead to death or a serious injury.

Emergency Procedures

- First Aid and Medical Emergencies
 - Except when agreed upon in advance by contract, contractors are responsible for providing first aid, medical treatment and transportation of their injured employees to the contractor's designated medical facility
 - In the event of a medical emergency, contractors should immediately contact 911 to initiate emergency medical response
 - Then ASAP notify our Security so they can assist to direct emergency medical response to location where the medical assistance if required. Failure to notify our Security could delay medical response to the correct location
- Contractors shall provide at least one first-aid kit in a weatherproof container with first-aid supplies appropriate for workers performing work on a construction project. The minimum first-aid supplies shall be determined by an employer-authorized, licensed physician in accordance with OSHA
 - Contractors must also provide an inventory sheet on the first-aid kit and a sign-in roster for those receiving first-aid treatment on site



Emergency Procedures

- Accident/Incident Reporting
 - Contractors are required to report immediately, or as soon as practicable, any and all accidents involving their employees and/or subcontractors to their foreman, EH&S and responsible Project Manager (RPM)
 - Contractors are responsible for reporting all OSHA reportable injuries to the local OSHA office
- Scene Preservation
 - For contractor incidents that are likely to result in an OSHA reportable injury, the contractor and RPM must make every effort to preserve the integrity of the incident scene until otherwise notified
- Incident Investigations
 - The general contractor shall take the lead to investigate an accident or incident that involves a subcontractor
 - Contractors must perform an accident/incident investigation with root cause and corrective/preventive actions within 48 hours of the event's occurrence. A report must be provided to the RPM and EH&S department



Emergency Information - Important Instructions for Contractors

- Check with EH&S to verify the most efficient method to coordinate emergency responses
- Bypassing Security at a site could actually delay the emergency response to an area if not directed where to go
- Always report direct dialed 911 emergencies immediately to EH&S or Facilities point of contact
- Remember to provide the following information
 - Name
 - Type of emergency: fire, medical, chemical, crime
 - Location
 - Phone number
 - Other information as requested

Emergency Information

- Evacuation
 - Know two evacuation routes from your location
 - Adhere to all building evacuation alarms by evacuating to designated muster areas when either fire or smoke is visible, audible alarms are activated or visible alarms are activated
- Severe Weather/Tornados
 - If severe weather is approaching, listen for alarms and follow site specific instructions for finding the closest shelter Take care to stay away from windows and doors
- Power Outages
 - Remain in the work area until emergency power provides light
 - If emergency power does not come on within 15–20 seconds, an announcement will be made to evacuate
- Earthquakes (seismic locations)
 - Shelter in place during an actual earthquake
 - Find a solid piece of furniture (e.g., desk, table) and take cover
 - Evacuate building when safe and proceed to designated muster areas
 - Do not leave the site or go back into the building until instructed to do so by Security personnel

Where Do I Go?

 In case of an emergency that requires evacuation, each site has designated muster (assembly) locations



- Muster locations are the points where head count and other information is given or taken
- Follow evacuation signs and routes that are posted in buildings or around the campus, and proceed to the nearest designated muster or assembly area
- Ensure that you and other contractor employees are accounted for, and be sure to report any injuries or known safety issues

Tornado/Severe Weather

- Take cover in interior dry walled rooms or hallways
- Stay away from windows and skylights
- Do not move to lower floors of buildings
- If outside, come in
- Stay in shelter locations until an "all clear" is given
- Know your nearest shelter location



During an Earthquake - Duck, Cover and Hold On

- If you feel the ground shake, immediately take the following precautions
 - Move away from windows, tall file cabinets and bookshelves
 - Do not attempt to exit the building
 - Immediately take shelter under a sturdy desk or other solid object. Kneel down and protect your head
 - Be aware that the power may go off and the fire alarm/sprinkler systems may activate
 - If you are in an elevator, be patient. In a short time, emergency lights will come on but the car may not move. Pick up the phone, which is connected directly to the Security Console, and let the dispatcher know who and where you are. Emergency response efforts will be made to get you out as soon as possible
 - An earthquake may damage natural gas lines. Do not light matches or other flammable items
 - Be prepared for aftershocks
 - If you are outdoors during an earthquake, remain outside and move to an open area away from buildings, power lines and any other structures that could fall. Do not take shelter in parking garages

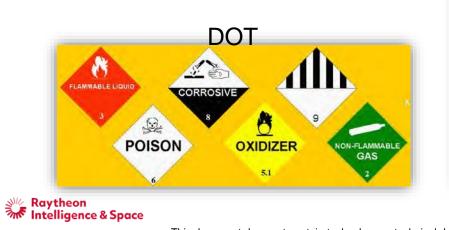
After an Earthquake

- Immediately assess your area for hazards or structures that have been damaged. Stay away from items that may fall or tip over, items that show physical damage, or any exposed electrical lines or conduits
- Check for injured people and anyone requiring medical attention; call the appropriate emergency number. If the phone lines are down, notify one of our emergency team members, evacuation team member or supervisor
- Do not move injured people unless they are in immediate danger
- Do not use elevators
- Wait for and follow instructions from supervisors, evacuation team members and/or Emergency Services Response Team personnel
- If a building evacuation is initiated, follow normal evacuation procedures and proceed to your assembly area. Remain at your assembly area until further instructions are provided



Signage

- Many of our sites have signage outside of build and test areas that cover hazards in the work area and the use of personal protective equipment in the work area
- Signs may vary, but look for signs with WARNING, DANGER or CAUTION statements and comply with their requirements
- Other common hazard signs include Department of Transportation (DOT) and Chemical Hazards
- If you have questions, please contact the Project Manager or EH&S staff







Examples of Signage

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EH&S Requirements for Contractors Working at our sites

- Work Area Access
- Housekeeping
- Chemicals and Hazard Communication
- Asbestos
- Permit Required Confined Spaces
- Electrical Safety
 - Energized Work
- Lock Out/Tag Out (LOTO)
- Hot Work Permit (Fire Prevention)
- Fall Protection
 - Unprotected elevated locations 4 feet and above
 - Roof work within 15 feet of unprotected roof edge

- Mobile Lifts, Mobile Cranes
- Ladders/Scaffolding
- Excavations
- Personal Protective Equipment (PPE)
- Emergency Procedures
 - First Aid and Medical Emergencies
 - Accident or Incident Reporting



Work Area Access

- As a best practice, and where appropriate, it is a good idea to cordon off or barricade access to your work area with appropriate signage (e.g. Construction Area – Keep Out, Hazard Warnings, etc.)
- This minimizes pedestrian traffic and unauthorized personnel from entering your work area and helps keep the work area safe
- Work with the Project Manager or EH&S staff to come up with best approach to restricting access to your work area



Housekeeping

- Contractors are responsible for keeping their work areas orderly and neat
- If work areas pose tripping or slipping hazards to our employees, proper warning signs must be posted
- At the close of each workday, contractors must clean and free the work area of all trash, debris, tools, equipment, dust, extension cords and similar hazards. For extremely dusty work, sweeping must be done throughout the day using methods to keep dust from becoming airborne
- Consult with the Project Manager or EH&S for waste and trash disposal. Some contracts will require you to provide a construction waste container
- Use drip pans or mats for oily equipment (e.g., pipe thread equipment)
- Areas around fuse boxes, electrical switch panels, fire extinguishers and other emergency equipment shall be kept clear at all times



Chemicals and Hazard Communication

- Be sure to coordinate with your Project Manager and EH&S when bringing chemicals onto our site. Contractor must provide EH&S with a list of chemicals and their Safety Data Sheets (SDS) for review and approval before bringing any chemicals on site Check with your local site EH&S for any additional requirements such as Use Authorization form
- All chemicals used at our sites have Safety Data Sheets (SDSs) available online and EH&S will provide SDSs, at your request
- All chemicals must be properly labeled and must be stored correctly (i.e., with closed lids, appropriate storage containers, etc.)
- All unused chemicals must be removed from our property
- You will receive a briefing from EH&S or your Project Manager when working near or around chemicals or hazardous work processes



Asbestos Labels

- If you are required to work around asbestos or perform asbestos abatement, EH&S will provide you with the proper requirements
- Insulation materials at the our facilities that are known to contain asbestos will be appropriately marked
- Consult with the Facilities Project Manager or EH&S for any questions concerning asbestos containing materials (ACM)



DO NOT DISTURB ANY ASBESTOS WITHOUT OUR KNOWLEDGE

Confined Spaces

- All contractors whose employees may enter "Permit Required" confined spaces must submit their Confined Space Program to the Project Manager and EH&S representative for review and approval prior to commencing work. All "Permit Required" confined spaces have been identified and labeled at point of entry. A completed copy of the permit must be submitted to the Project Manager or EH&S
- All employees must be included in the contractor's confined space entry program and trained in compliance with OSHA standards
- Training records must be provided prior to entry



Electrical Safety

- All contractor equipment must be properly grounded and in a safe, operable condition
- No space heaters are permitted unless approved by Facilities
- No electrical cords may be "repaired" using electrical tape, or be missing a ground prong
- Ground Fault Circuit Interrupter (GFCI) protection must be used in all outdoor locations, rooftops, wet locations and construction areas where portable powered tools are used
- All power tools must be maintained in safe working order
- Do not block electrical disconnects or circuit breaker boxes
- All contractors performing electrical work must have training in electrical safe work practices, lock out/tag out (LOTO) and arc flash, as applicable. They must wear appropriate PPE and will be provided with appropriate LOTO equipment
- Any work on energized electrical equipment will be coordinated through Facilities and EH&S for approval

Lock Out/Tag Out

- All contractors performing lock out/tag out must have a written LOTO program which includes training requirements and type of locks to be used. LOTO program and training documentation must be provided to EH&S
- Contractors must provide their own locks, tags, labels and LOTO procedures if not provided by the Project Manager
- Tags must identify name, date, equipment locked out and the reason for lock out
- All applicable procedures must be reviewed with the Project Manager or EH&S prior to startup



Hot Work/Open Flame Permits

- All work involving open flames and spark generation requires a hot work permit (e.g., welding, cutting, brazing, burning, grinding and soldering operations)
- Permits are issued by Security, Facilities or EH&S. Check with the Project Manager or EH&S for local site requirements
- Suitable and serviceable fire extinguishers must be available at the location of the work and properly placed on wall, carts or stanchions. Contractors must have fire extinguisher training
- There must be a 60-minute minimum fire watch after the work in completed
- Hot work is prohibited in areas where there are combustibles or flammables unless additional precautions have been taken



Roof Work

- Roof Work within 15 feet of unprotected roof edge requires approval from EH&S or Facilities
- Contractors performing work within 15 feet of an unprotected roof edge shall use engineering controls such as guardrail systems in lieu of fall protection systems whenever possible
- Contractors must submit a Fall Protection Plan and training records to EH&S prior to commencing work





Fall Protection

- Fall protection systems are required when working within 15 feet of an unprotected roof ledge or when working on unprotected platforms 4 feet above grade
- Only full body harnesses are allowed for use on our property. Nonengineered systems must provide a 5,000-lb anchorage point for each employee. Engineered systems can be designed to twice the anticipated load per person
- Contractors must meet applicable fall protection regulations and our unique requirements that must be followed
- Fall protection is **NOT** required when working inside the confines of ladders, rolling ladders or properly erected scaffolding with guard rails



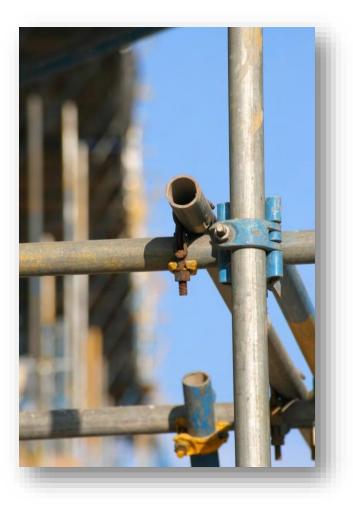
Mobile Lifts and Cranes

- All mobile lifts, including forklifts, man lifts and scissor lifts must be in good working condition with inspection certificates up to date when required
- Only trained and authorized personnel can operate these vehicles. Training documentation must be maintained on site or readily available to EH&S. Fall protection systems are to be used as required
- Contractors must formally inspect aerial lifts using a checklist to document inspection
 prior to use on each shift
- Contractors using scissor lifts and man lifts must implement procedures, barricades, signs, spotters, etc., to protect employees working below from falling objects
- All mobile crane lifts on site must be coordinated through the Project Manager and EH&S. Check site requirements on mobile crane lifts
- Contactors are not permitted to operate any site owned equipment unless authorized in the PO/Contract prior to the use of the equipment in question



Ladders and Scaffolding

- Contractors must provide their own ladders for the type of work being performed and store them properly when not in use
- Ladders must be placed in a position in which boot foot rails have secure footing and contact the ground evenly
- Standing on the top two rungs of a ladder is prohibited. Always use the right size ladder
- Nonconductive ladders will be used when working near electrical energy sources
- All scaffolding must be constructed in accordance with OSHA requirements Contractors must be licensed to erect and dismantle scaffolding. Scaffolding taller than 4 feet must be provided with standard guardrails and toe boards (our added requirement)



Excavations

- All excavations 5 feet or more in depth that are to be entered by workers must be protected by a system of shoring, sloping, benching or an alternate method that meets the requirements of OSHA Construction standards
- Appropriate means of entry and egress must be provided at all open trenches and pits for employee safe access. Entry and egress ladders must be positioned and secured properly in accordance with OSHA regulations
- Exposed rebar must be protected with a safety cap
- All excavations must have appropriate barricades and warnings to alert employees to the danger in the immediate area and physically stop them from coming too near to the opening
- Shoring, sloping and benching must be approved and designed by a contractor-competent person meeting all OSHA training requirements



Contractor Safety and Health Awareness High Hazard Tasks Requiring Authorization Permits/Plans

Task	Permit/Authorization Form	Plan
Mobile Crane Lifts	EH&S preapproval required. Check local site requirements	
Elevated work performed directly above an occupied area where people or space hardware may be present	EH&S preapproval required. Check local site requirements	
Hot work	Hot Work Permit – check with local Facilities or EH&S for permit	
Energized Work	Energized Electrical Work Permit –contractor to provide their own	
Entry into Permit Required Confined Spaces	Contractors provide their own entry permit	
Suspended scaffolds and scaffolds greater than 7.5 feet		Scaffolding Plan submitted by licensed contractor
Excavations		Excavation plan and drawings. Shoring, slpping etc. Must be designed by the contractor's competent person
Use of Chemicals	EH&S preapproval required. Check local site requirements	
Fall Protection		Contractor must submit a Fall Protection Plan to EH&S for review

Personal Protective Equipment

- Contractors must provide and wear appropriate PPE for the hazards of the job
- Steel-toed shoes or boots must be worn on construction sites
- No sandals or flip flops on property and no elevated heels on the production floor
- Safety glasses must be worn in all construction areas and work areas that require them and for tasks that present potential eye hazards
- Some of our sites may require high-visibility vests or clothing check local site requirements
- We do not assign, provide or approve PPE for non-Raytheon Technologies supervised contractors
- Contractors must provide medical surveillance for employees depending on PPE used
- Contractors must meet all applicable OSHA regulations regarding PPE



Heat Illness Prevention

Take these 4 steps to prevent heat illness

- Training Train all employees and supervisors about heat illness prevention
- Water provide enough freshwater so each employee can drink 1 quart per hour, or four 8 ounce glasses, of water per hour, and encourage them to do so.
- Shade Provide access to shade and encourage employees to take a cool-down rest in the shade for at least 5 minutes. They should not wait until they feel sick to cool down.
- Planning Develop and Implement written procedures, including high heat procedures.

For more information, refer to:

- Federal OSHA Heat Illness Campaign
- <u>Cal/OSHA T8 CCR 3395</u>.



Additional Information in Handbook

- Hazardous Materials and Waste
- Environmental Requirements
- Compressed Air and Gas Cylinders
- Overhead Work
- Cutting, Brazing and Welding
- Corrective Action Policy
- Occupied Areas
- Much More!



EH&S Points of Contact

Ensure contractor employees and subcontractors have the EH&S site Point of Contact's phone number readily available

- Contact EH&S after any injury or serious near miss
- We want your experience working with us to be a safe one, just as it is for our own employees
- Please ask your supervisor or our Facilities Project Manager or EH&S site contact if you have any questions
- You will be required to complete the assessment on the following page regarding the information contained in this presentation



Thank you for reviewing this safety briefing

Online Assessment

Please select the link below to begin the online Contractor Safety and Health Awareness Assessment: <u>https://cvent.me/0K3PEq</u>